

Math - Magic

Pawl - V Mathematics Zirlai Bu



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THE CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a ¹**[SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC]** and to secure to all its citizens :

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the ²[unity and integrity of the Nation];

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949 do **HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.**

1. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Sovereign Democratic Republic" (w.e.f. 3.1.1977)
2. Subs. by the Constitution (Forty-second Amendment) Act, 1976, Sec.2, for "Unity of the Nation" (w.e.f. 3.1.1977)

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An lehkhahu min hmantirtu NCERT chungah lawm thu ka sawi a, an zirlai bute hman phalna (copyright) leh Mizo tawnga lehlin phalna bakah kan ram mil tura siam danglam phalna min pek avangin a lawmawm em em a. RTE Act leh National Curriculum Framework 2005 te ngaihpawimawh hre reng chungah zirlaibute taima taka buatsaihtu, mi thiam leh ka thawhpuite chungah lawmthu ka sawi a.

Class IV & V zirlai naupangte hman tur zirlaibute hi ka thawhpui zirtirtute leh zirlai naupangte hman turin lungawi tak leh chhuang takin ka hlan a. A buatsaihtuten naupangte tana zir nuam zawng tak tura an buatsaih te chu, zirlaiten nuam ti takin an zir ngei ka beisei.

Aizawl
7th November, 2025


CAROLINE ZORAMTHANGI
Director, SCERT
Mizoram: Aizawl



CONSTITUTION OF INDIA

Part IV A (Article 51 A)

Fundamental Duties

Fundamental Duties – It shall be the duty of every citizen of India —

- (a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;
- (b) to cherish and follow the noble ideals which inspired our national struggle for freedom;
- (c) to uphold and protect the sovereignty, unity and integrity of India;
- (d) to defend the country and render national service when called upon to do so;
- (e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;
- (f) to value and preserve the rich heritage of our composite culture;
- (g) to protect and improve the natural environment including forests, lakes, rivers, wildlife and to have compassion for living creatures;
- (h) to develop the scientific temper, humanism and the spirit of inquiry and reform;
- (i) to safeguard public property and to abjure violence;
- (j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement;
- (k) who is a parent or guardian, to provide opportunities for education to his child or, as the case may be, ward between the age of six and fourteen years.



MATH-MAGIC

He lehkha bu chhunga awm te

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1

Sangha Thawnthu

Tuipui thûk taka
Lengngha mawi tak khu en teh
Hlim te'n a lêng zek zek.

He hla thu tlar thum ang chi hi Haiku
an ti a. Chutiang hla thu, leilung thil
awmte phuahna chu Japan ramah a
lar hle a. Heta hi Haiku dang pakhat
chu —

Dil tui cham diaiah
Lengnghate a zuang lim zek zek
Dil tuifawn dêl dêl

Sangha phuahna hla hriat in nei em le?

Heng hi naupangho lemziak a nih hi.

Sangha i han ngaihtuah hian eng
pianhmang nge i rilrua awm le?

* Square leh triangle hmangin
sangha lem ziah han tum teh.



Navyata Class I



Maya Class IV



In bul velah sangha pianhmang ang ziarâng nei han melh kual teh u - puanah te, lemziakah te, chhuatphah leh thil dangah te.

'Meen' chu sangha tihna a ni a, 'Meenakshi' tih chu sangha pianhmang ang mit nei hmeichhe naupang sawina a ni a. Chutiang mit nei tu emaw ngaihtuah chhuah in nei em?

* Sangha pianhmang ang mit nei hmai lem han ziaak teh u le.

Sanghate hi an insei hleih thei khawp mai a. Sangha te ber chu 1 cm vel chauha sei a ni. Sangha lian ber engtia sei nge ni a in rin? _____

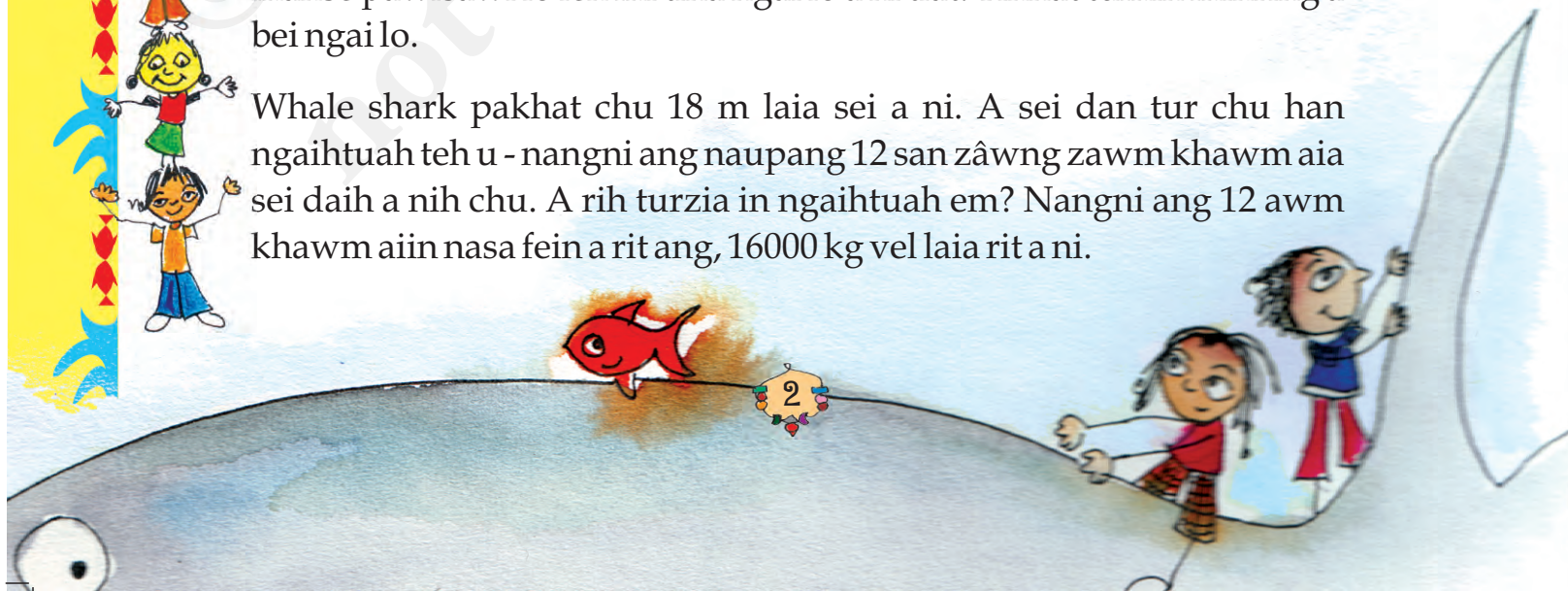
* Sangha lian pui ngaihtuah la, sangha tê ber lêt eng zâta sei nge ni ang?

Sangha lian ber chu **whale shark** a ni. Whale erawh a ni tak tak chiah lo va, lian em em mai a ni. Whale te hi sangha pangngai aiin an danglam a,



keimahni angin an hnârin boruak an hip ve a. Sangha pangngaite chuan thâwkna hnâr an nei ve lo, an samkhuih hmangin an thaw ve thung. Whale te chuan notê an hring a, sangha dangte chu a tuiin an tui thung. Whale shark hi lian pui mai, hlauhawm hmel zet a ni a, mahse pawisawi lo leh mi tina ngai lo a ni tlat. Tihnat tumin mihring a bei ngai lo.

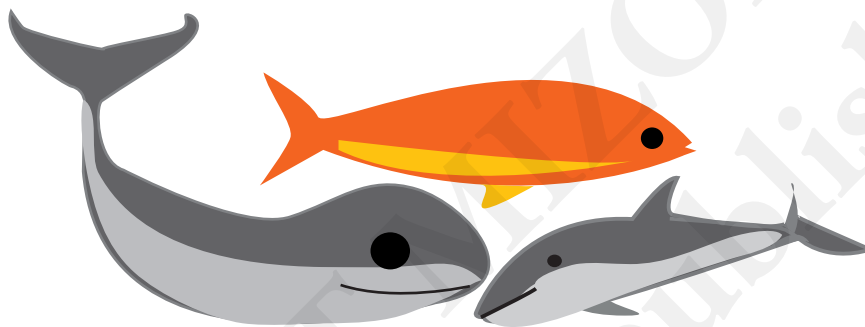
Whale shark pakhat chu 18 m laia sei a ni. A sei dan tur chu han ngaihtuah teh u - nangni ang naupang 12 san zâwng zawm khawm aia sei daih a nih chu. A rih turzia in ngaihtuah em? Nangni ang 12 awm khawm aiin nasa fein a rit ang, 16000 kg vel laia rit a ni.



- * Kilogram eng zat vela rit nge i nih ang le? _____
- * Tichuan nangmah ang 12 awm khâwm rih zâwng chu _____ kg vel a ni.
- * Nangmah ang 12 awm khawm aia whale shark a rih zâwkna chu eng zât vel nge ni ta ang le? _____

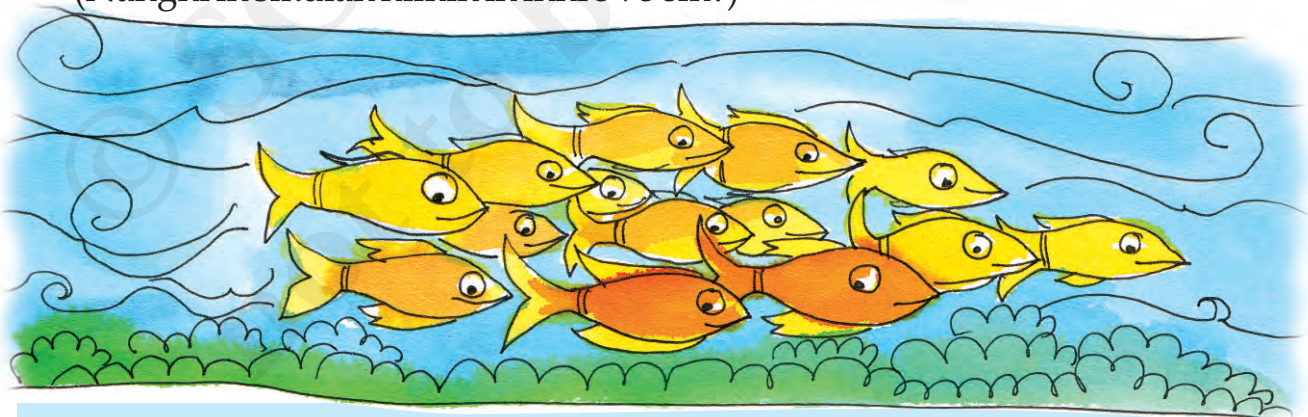
Sangha Mei

Whale leh sangha pangngaite danglamna hre turin an meite hi ngun takin en Chiang Teh. Sangha pangngai mei chu an taksa zulzuiin a khamphaiin a parh a, whale mei erawh a ke ni awm takin a lang thung. A lem atang hian sangha pangngai i hre hrang thei em?



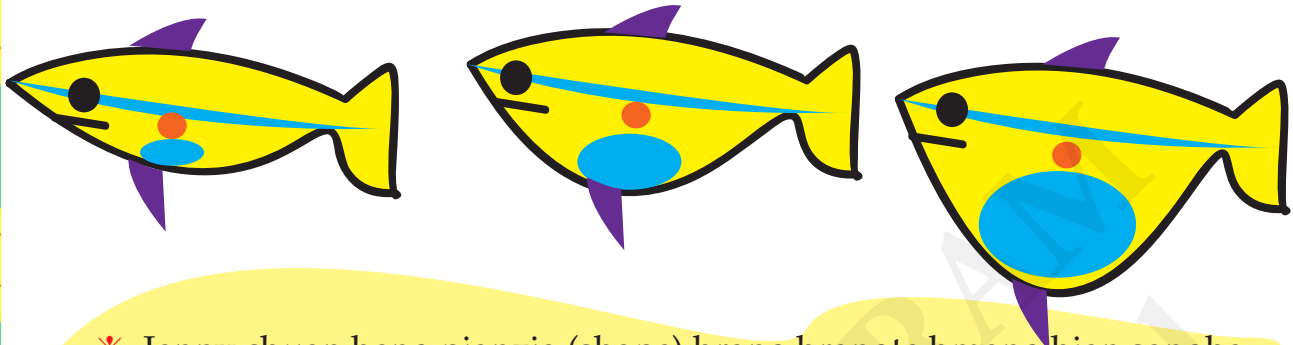
Sangha Rual Khat

Sanghate hian tuipuia hlawm lian pui puia tleh ho dûl dûl hi an ching a, chutianga an awm khawm chu "sangha rual khat" an ti a. A ruala an awm khawm hian sangha lian zawkte lakah himin an inhria a ni. (Nangni in sikulah himin in inhre ve em?)

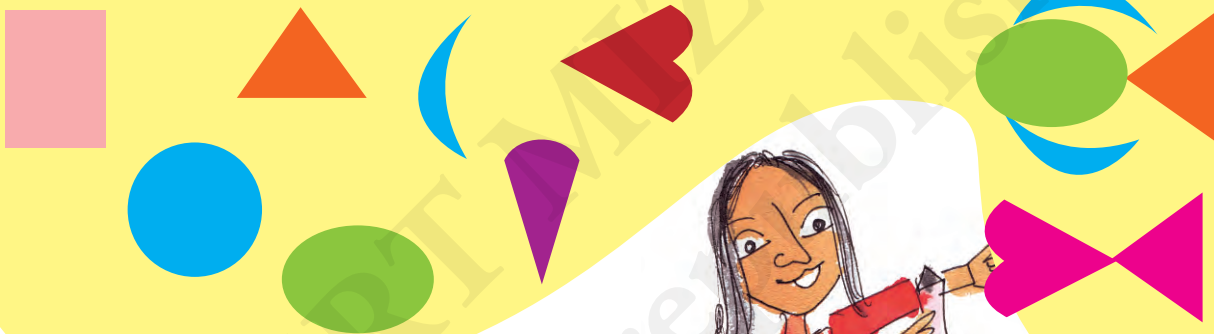


Thil chi hrang hrang chuktuah khawmin he chapter hi sanghate leh sangha hmanga ei zawngtute khawvel hman dan naupangte hnena awmze nei taka hrilhna a ni. Mathematics tukverh atanga thil pianhmang leh pianzia te, ngaihruat dan te, thil tam lutuk sawina nambar lian suanguah dan te, thil chhût chhuah dan mawl tē te te, thil kal chak zâwng leh t̃uan ran dan hisap te, puk leh hawh te, etc hi thil lo zir tawhte a t̃angkai zâwnga thlir kima nei turin ni tin nunah hmehbel a ni.

Nghate thenkhat chuan ngha lian zawkte tihthaiha um kian nan, tui an lem teuh va, an pum a lo puar lian vak a, an lo lang lian ta thin a ni.



* Jenny chuan heng pianzia (shape) hrang hrangte hmang hian sangha lem a siam a. Tunah nangni pawhin heng shape hrang hrangte hmang hian a hnuaia tuipui nungcha chi hrang hrangte lem hi han siam ve teh u le.



Sea urchin



Lobster



Eel



Red snapper



Octopus



Clam



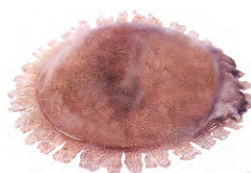
Parrot fish



Kaikuang



Cuttle fish



Jelly fish



Squid



Silver pomfret



Chakai

✱ Heng tuipui nungchate zingah hian eng engte hi nge in hmuh tawh le?

Sangha mantute an lawngah an chuang

Eng zatin nge tuipui hmu tawh che u? Khawiah nge in hmuh? A takin emaw movie-ah emaw in hmu tawh em? Tuipui chu engtianga thûk nge ni theia in rin?

Han ring chhin teh u.

Tui hleuh in thiam em? Tuipui fawn hlup hlupte in hlau em?

✱ Maimitchhing la, tuipui fawn hlup hlup lai ngaihtuah rawh.

✱ Tui fawn chu engtianga sânin nge invawrh theia i rin? _____



Log boat

Sangha mantute an lawngah awmin, tuifâwnah an lawng chu insêp lâwp lâwp angin mitthla rawh. Zing khawvar hma aṭangin tuipuiah an chhuak daih tawh a. Thenkhat chu thing tum phuar khawma pûm siam chawp, thing tum lawng (log boat)-ah an chuang a. Tui fawn a invawrh sân hle a, thli a tleh nasat bawk chuan heng sangha mantute tan hian a hautak thei hle ṭhin a ni.

Heng thing tum lawngte hi chuan tuipui hla leh ril tak an thleng ve ngai lo va. Thli thawt danin a zir chuan darkâr khatah 4 km velte an thleng ve thei.

✱ 10 km thleng turin engtia rei nge an thang angle?

✱ Chak takin kal ta la, darkâr khatah engtia thui nge kal theia i inrin?



Log boat

Sangha mantute chuan thli thawt dan leh ni lan dan aţangin khawi lam hawiin nge an kal ang tih an hre thei a. Keini zinga mi tam berte hi chu tuipui zauvah, han hawi vela khawmual hmuh tur awm lo, tui hlir, tui hlir cham pût naah chuan kan bo hma hle ang le.

Chhût chhuak teh le

Ni khi en la, khawi lam aţanga lo chhuak nge tih han chhût teh.

- * Tuna i awmna aţang khan khawchhak lamah thil hmuhnawm deuh engnge i hmuh?
- * I awmna aţanga khawthlang lama thil awm pahnih han sawi teh.

Sangha an man!

Sangha mantute chuan tuipui khawi laiah nge sangha man tur a tam ber ang tih an zawng thin a. Chutah chuan an lēnte an han zar a, sangha lo kal hun nghakin darkar tam tak an awm a tûl thin a ni.

- * Lawng chi hrang hrangte hi en teh.

Lawng thenkhat chuan tihkalna khawl (motor) an nei a, tuipui thui tak thleng an kal thei a. An thlen thui theih avangin sangha pawh an man hnem thei nge nge thin.



Oar boat



He sword-fish sei zia hi!

Chutiang lawng chu an kal chak thei hle a, darkâr khatah 20 km te a kal thei a ni.

- * Khawl hmang lawngte chuan darkâr thum leh a chanve chhûngin engtia thui nge an kal theih ang?
- * 85 km-a hla kal turin engtia rei nge hun an hman ang?



Motor boat



Motor boat



Lawngleng mei sei



Meilawng (trawler)

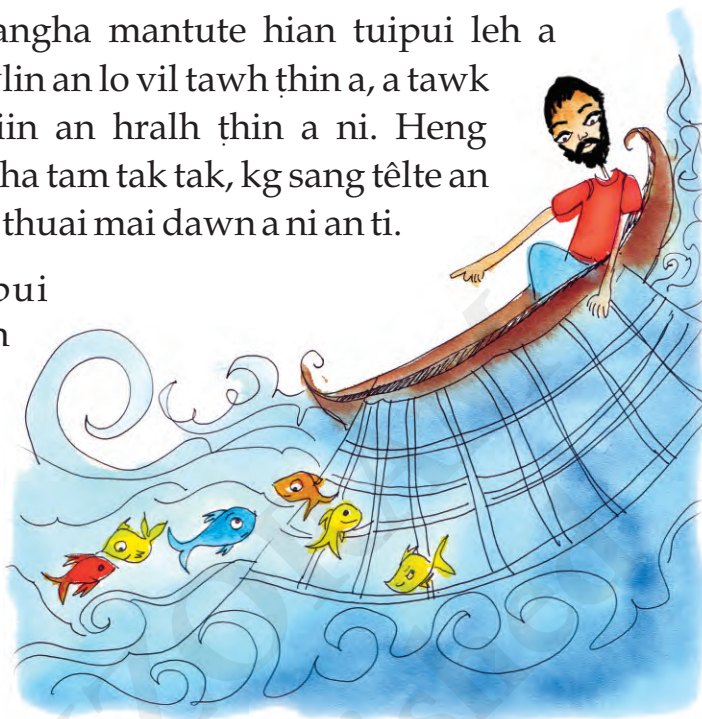


Thingtum lawng hmanga sangha mantute rilru pawh a hah ve thei hle. Sangha manna lawnglian eng emaw zât a awm a, tuipuah thui tak tak thlengin an lente tuipui thûk tak takah an zâr a, sangha tam tak tak an man thei thin a ni. An mite pawh tlêm tê chauh vaukamah an hnutchiah a, tuipuah ni tam tak tak an awm thei thin a ni.

Heng meilawngte hian sangha tê tak tê tê thlengin an man thin a, chung ngthatête chu la thang lian tur an ni. Lawng tê chi hmangtute chuan ngthatête chu tuipuah an chhuah leh thin a, sangha notête man lo va, sangha lian chin chauh man a, ngthatête man lo turin len awng zau chi an hmang thin a ni.

Kum za tam tak chung zet sangha mantute hian tuipui leh a chhûnga sanghate hi an lo enkawlin an lo vil tawh thin a, a tawk tē tēin sangha an man a, an eiin an hralh thin a ni. Heng meilawng liante hian ni tina sangha tam tak tak, kg sang tēlte an man thin chuan sangha hi an rem thuai mai dawn a ni an ti.

✱ Kan lui sanghate leh tuipui sanghate tana thil hlauhawm thleng thei engte nge tih chanchin thara tihchhuah tur (news report) han ziaak teh.

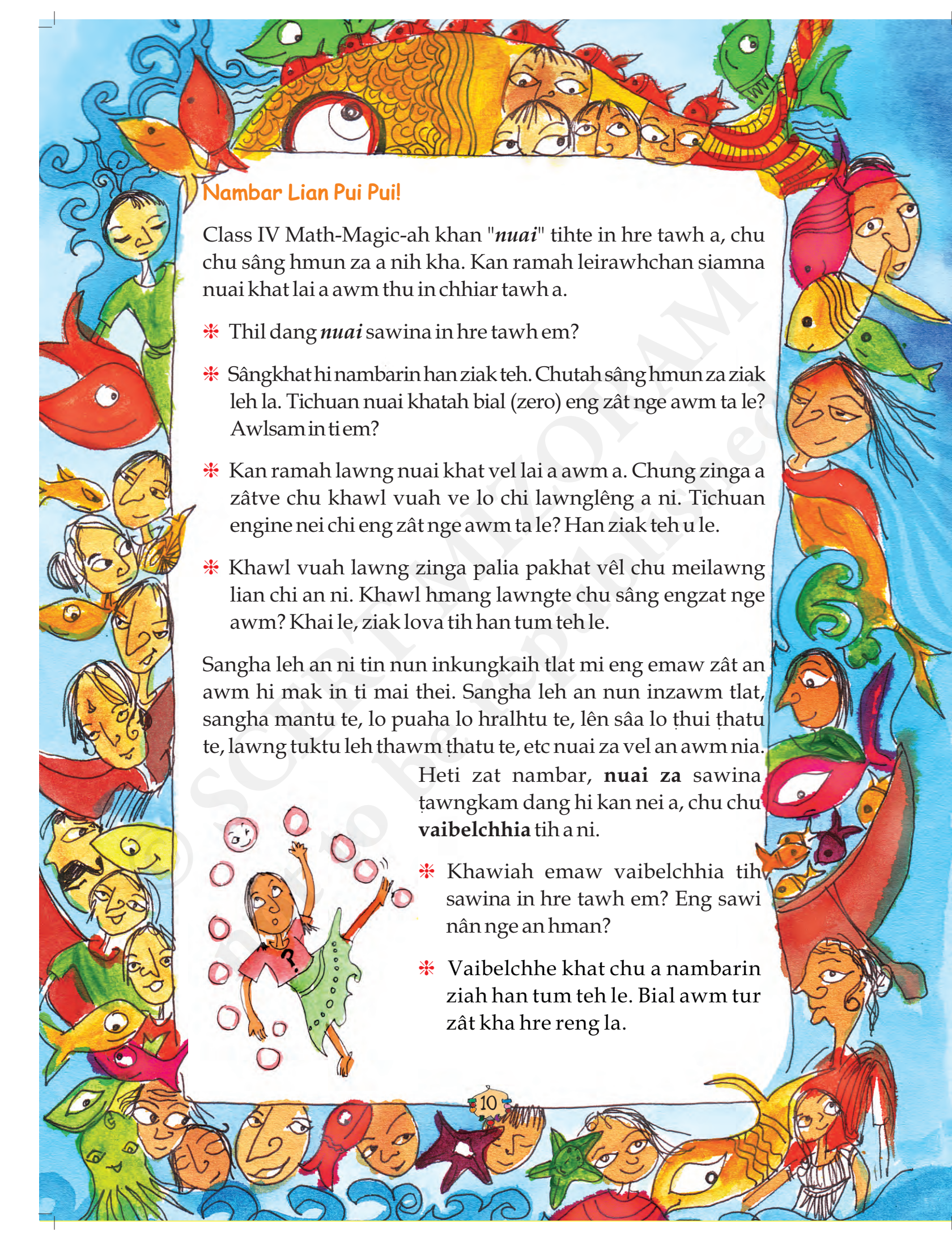


Lawng hrang hrangten sangha eng zât nge an man?

Thing tum lawng (log boat) hmangtute chuan ni khatah sangha 20 kg vêlte an man a. Lawng dangte chuan a hnuaia table-a tar lan ang hian an man tam thei hle thung. Table-ah hian lawng kal chak zâwng theuh, darkâr khat chhûnga an kal thui theih zâwng tar lan tel a ni. Table hi en la, hengte hi han chhût chhuak teh le —

- Ṭum sarih thawh chhuahah lawng hrang hrangte hian sangha eng zât vel theuh nge an man theih ang?
- Motor boat hian darkar ruk chhûngin engtia thui nge a kal hman ang?
- Lawnglêng mei sei hian 60 km kal thleng turin engtia rei nge a thang ang?

Lawng chi hrang hrangte	Vavikhat thawh chhuaha sangha an man theih zât (kg)	Lawng kal chak zâwng (darkâr khat chhûnga a kal thui theih zâwng)
Thing tum lawng	20	4 km
Lawnglêng mei sei	600	12 km
Motor boat	800	20 km
Meilawng	6000	22 km



Nambar Lian Pui Pui!

Class IV Math-Magic-ah khan "**nuai**" tihte in hre tawh a, chu chu sâng hmun za a nih kha. Kan ramah leirawhchan siamna nuai khat lai a awm thu in chhiar tawh a.

- * Thil dang **nuai** sawina in hre tawh em?
- * Sângkhat hi nambarin han ziaak teh. Chutah sâng hmun za ziaak leh la. Tichuan nuai khatah bial (zero) eng zât nge awm ta le? Awlsam in tiem?
- * Kan ramah lawng nuai khat vel lai a awm a. Chung zinga a zâtve chu khawl vuah ve lo chi lawnglêng a ni. Tichuan engine nei chi eng zât nge awm ta le? Han ziaak teh u le.
- * Khawl vuah lawng zinga palia pakhat vêl chu meilawng lian chi an ni. Khawl hmang lawngte chu sâng engzat nge awm? Khai le, ziaak lova tih han tum teh le.

Sangha leh an ni tin nun inkungkaih tlat mi eng emaw zât an awm hi mak in ti mai thei. Sangha leh an nun inzawm tlat, sangha mantu te, lo puaha lo hralhtu te, lên sâa lo thui thatu te, lawng tuktu leh thawm thatu te, etc nuai za vel an awm nia.

Heti zat nambar, **nuai za** sawina tawngkam dang hi kan nei a, chu chu **vaibelchhia** tih a ni.



- * Khawiah emaw vaibelchhia tih sawina in hre tawh em? Eng sawi nân nge an hman?
- * Vaibelchhe khat chu a nambarin ziah han tum teh le. Bial awm tur zât kha hre reng la.



Sangha Bazar

Sangha bazarah i kal tawh em? I kal tawh a nih chuan hmun bengchheng deuhte hi eng vanga *sangha bazar ang mai* ti thin nge an nih i hre thiam mai ang.

Sangha bazar hi chu a buai thei nuai nuai khawp mai.

Lawng tam takin sangha an rawn man hnem thei hle a. Sangha zuartu hmeichhiate chuan ring tak takin a dawrtute hriat turin an sangha man zâtte an aupui a.

Mini — Lo kal r'u, lo kal r'u. Sardine kg-ah ₹ 40-in ka lo pe ang che u.

Gracy — Hei aia tlawm a awm thei lo! Sword fish kg-a ₹ 60 chauh a ni e.

Floramma chuan kaikuang kg-ah ₹ 150-in a hralh a.

Karuthamma chuan squid kg-ah ₹ 50-in a hralh a.

En teh hei, Fazila-i hian kingfish lian pui mai a khai zo mang lo nia. "Hei chu 8 kg lai a ni, a pum hian ₹ 1200 lekin ka phal e," a ti lung lung a.



I tih ve hun

- 1) Fazila-in kg-ah eng zâtin nge kingfish a hralh?
- 2) Floramma-in vawiinah kaikuang 10 kg a hralh a, chêng eng zât nge a lei ang?
- 3) Gracy-in sword fish 6 kg a hralh a. Gracy-i pawisa lei chhuah ang zât hi Mini-i pawhin a dawng ve a. Mini-i chuan sardine kg eng zât nge a hralh?



- 4) Basheer-an ₹ 100 a nei a. A pawisa neih palia pakhatin squid a lei a, a bak palia pathumin kaikuang a lei leh a.
- Squid kg eng zât nge a lei?
 - Kaikuang kg eng zât nge a lei?

Hei hi rang deuhin han sawi teh le.

*Sangsangin Sangsiami sumin Sanga sangha a lei a.
Sangsangin Sangsiami suma Sanga sangha a leina sumin
Sangan sana a lei ve thung.*

Hmeichhe 'Meenkar Bank'

Meenkar Bank meeting an tan chia a, an President chu Fazila-i a ni. Sangha zuartu hmeichhe 20 intiam rualin anmahni pualin bank an hawng a. Mi tinin thla tin ₹25 khawlin, bank-ah chuan an dah zel a.

- ✱ An group hian thla tin sum eng zât nge an lak khawm?
- ✱ Kum 10 ah sum eng zât nge an khawl theih ang?

I tih ve hun

Gracy chuan lên leina tur pawisa a mamawh a. Jhansi-i leh a unaunu chuan thing tum lawng lei an duh bawk a. Tichuan an bank-ah pawisa an pûk ta a, pawisa chu a pung nena rulh leh tur a ni.

- Gracy-in len lei nan ₹ 4,000 a pûk a. Kum khat chhungin thla tin ₹ 345 zelin a rul a. A rulhna pawisa chu a vaiin eng zât nge ni?



b) Jhansi-i leh a unaunu chuan thing tum lawng lei nan ₹ 21000 an pûk thung a. Kum khat chhûngin ₹ 23520 an rul hman a. Thla khatah chêng eng zat zêlin nge an rulh le??

Tun hma chuan hmeichhiate hi sangha manin lawngah an chhuak ve lo va. Tunah erawh Jhansi-i leh hmeichhe thenkhat chu chhun lamah lawnga kal chhuah ve an ching ta a. Thil a danglam chho va, an bank pawhin anmahni a tanpui a. Bâwm khat thûra sangha an mante phurhna tur bik bus pawh an nei ta hial a ni.



Engah nge Sangha Repna khawl thar nei tura bul kan tan loh ang?

Meenkar Bank neitu hmeichhehote chuan sangha rêpna khawl bun an duh a. An khaw enkawltu Council (Panchayat) chuan ram a pe a. Kum tluanin sum an khâwl a, ₹ 74000 lai an khâwl thei a. Khawl bun tura an sum mamawh zat tur an chhut chhuak a.

Fazila-in a bul tan nâna thil tulte a ziaak chhuak a. An thil lei duh zât leh a man zât an chhût chhuah, table a tar lante hi en teh. Han belh khawm teh.

Item	Price of each	Number of items	Cost
Tuichhunchhuah	₹ 3000	1	
Mau chhuar (sangha rēpna)	₹ 2000	20	
Cement tuizēm	₹ 1000	4	
Thlêng leh chemtê	₹ 300	20	
Bucket	₹ 75	20	



Khawl bunna tur a sum ngai zât = _____

Sangha hring hi rēp ro hnuah a rih zawng hi 1/3 chauh a ni.
Thla khatah sangha tharlâm 6000 kg rēp ro an tum a.
Thla khatah sangha rēp kg eng zât nge an neih theih ang?



Floramma-i : Sangha hring 6 kg atan chhut hmasa phawt ila.

Sangha hring leina	Kg-ah ₹ 15
Sangha rēp hralhna	Kg-ah ₹ 70

Sangha hring 6 kg rēp ro aṭangin a ro ____ kg a chhuak ang

Sangha hring 6 kg lei nân $6 \times \underline{\hspace{1cm}} = ₹ 90$

Sangha rēp 2 kg kan hralhin $2 \times \underline{\hspace{1cm}} = ₹ \underline{\hspace{1cm}}$

Sangha hring 6 kg aṭangin $\underline{\hspace{1cm}} - 90 = ₹ \underline{\hspace{1cm}}$

6,000 kg kan rēp ro chuan ₹ ____ $\times 1000$ thla khatah kan hmu thei.





An ruahmanna chu tha an ti tlâng hle a, an hlim hle mai. An pawl chu hlêp neiin an lo awm ang a, hmeichhiate chuan an kut hnathawh hlawh an hmu theuh dawn a ni.

Jhansi-i: Sangha 6000 kg atan thla tin chi 1500 kg kan mamawh dawn tlat! A man kg-ah ₹ 2 a ni.

Thla tina sên ral :

a) Chi $1500 \times 2 = ₹ \underline{\hspace{2cm}}$

b) Fun man leh bus hman man = ₹ 3000

Tichuan thla tina sangha tih rona leh hralhna atana sên ral chu = ₹ $\underline{\hspace{2cm}}$

Fazila-i: A tha hlein ka hria. Kan chhût dan chuan kan bank-ah ₹ 44000 kan dah thei dawn a nih chu!

✱ An chhût chhuah ang chiah hi i hmu ve em tih han chhut ve teh le.



Han zawng teh

Sangha mantute hla sak chu a mawi asin. Chutiang hla thu awmna leh a thlûk chu zawng chhuak teh.

2

Pianhmang leh Angle-ṭe

Rohmingi leh Marami chu phir an ni a. Thil inang tih hi nuam an ti hle a. Ni khat chu nawhalh fung hmanga thil lem an siam laiin Sente-in tih tur a rawn tuk a.

Rohmingi hian thil lem a siam ang a, Marami hian a ang chiah a siam ve ang. En awih loh a ni a, zawhna erawh a zawt thei ang.

Chutiangte chu a awlsam lutuk tlat.

Rohmingi chuan hetiang pianhmang hi a siam a

Marami — Kualkhung pap a ni nge kualkhung pap loh?

Rohmingi — Kualkhung pap a ni.

Marami — Sir eng zât nge a neih?

Rohmingi — Sir 6 a nei.

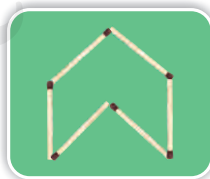
Marami chuan hetiang hi a siam a.

Han chhang teh le.

Kualkhung pap a ni em? _____. Sir 6 a nei em? _____.

Amaherawhchu Rohmingi siam nen chuan a inang lo va. Chuvangin Marami chuan a dang a han siam leh a.

Hei hi a thil siam leh chu a ni.



Kualkhung pap sir 6 nei a ni em?? _____

Rohmingi siam ang a ni em le? _____

Heng pianhmangte danglamna hi a sawi dan kawng dang a awm em le?

* Marami chuan a han siam leh pawh chuan pianhmang dang tho a siam chhuak leh a. Marami'n pianhmang dang pahni a la siam theihthe chu ring chhin la, siam ve ang che.

Marami chuan a siam nin tak deuh avangin Sentei chu eng nge tih tur a zâwt ta a.

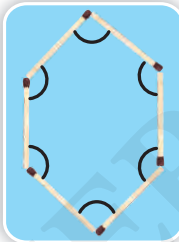


Nawhalh fungin a kil zuma angle a siamte kha zawt la, i siam thei mai ang.

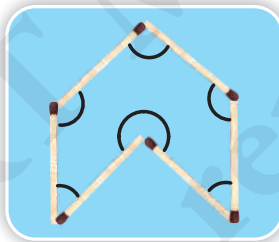
Chuti a nih chuan angle-te chu i en ang hmiang.



* Heng pianhmang-a angle chhinchhiahte hi en rawh. A danglamna i hmu em?



Rohmingi



Marami

Nawhalh fung te hmang angle te , angle lian leh angle lian leh zual siam dan hi en la.

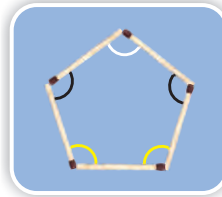


A va mak em! Angle a danglam hian pianhmang pawh a lo danglam nasa hle a nih hi.



A sir zat inang reng chung sia pianhmang danglam theihzia · zuk · ngaihtuah tura naupangte chawh phur thiam hi a pawimawh em em a. Hei hian angle-in pianhmangah kawngro a sut nasatzia a hriat fiahtir dawn a ni.

Practice Time



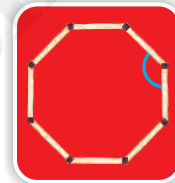
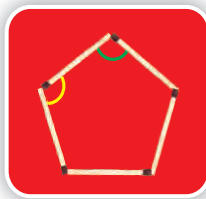
1) A lem hi en la chhang rawh.

* Rawng _____ a chhinchhiah angle hi angle lian ber a ni.

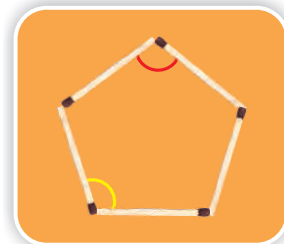
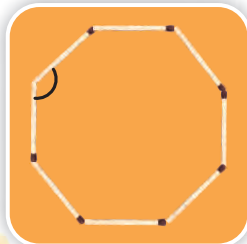
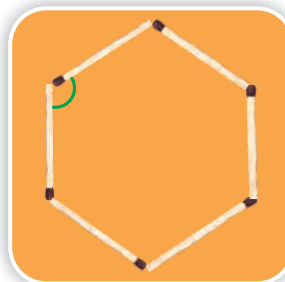
2) a) Rawng eng a chhinchhiah angle-te hi a intiat em? _____

b) Rawng hring a chhinchhiah angle-te hi a intiat em? _____

c) Rawng pawla chhinchhiah angle-te hi a intiat em? _____

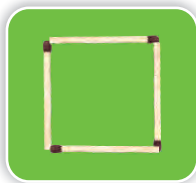


3) Angle chi hrang palite hi rawng chi liin chhinchhiah a ni a. Rawng sena chhinchhiah tiat chiah angle dang i hmu em le? A senin chhinchhiah la. Hetiang chiah hian rawng dangte pawh ti ve ang che.



4) Nawhalh fung inkara angle zau zâwng thlak danglamin pianhmang chi hrang hrang eng zat nge heng ațangte hian i siam theih? Han ti teh le.

a)



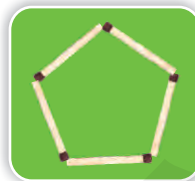
Nawhalh fung 4

b)



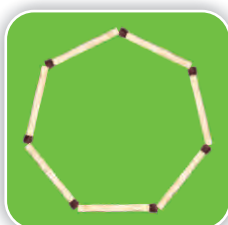
Nawhalh fung 8

c)



Nawhalh fung 5

d)



Nawhalh fung 7

e)

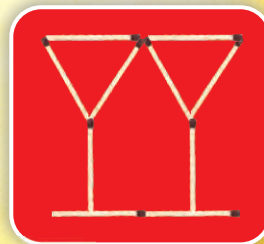
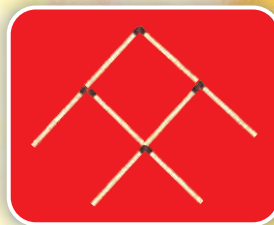


Nawhalh fung 10



Nawhalh fung hmanga infiam

- 1) Nawhalhfung 6 hmangin triangle 8 siam rawh.
- 2) Nawhalh fung 8 hmangin hetiang hian sangha lem siam la. Sangha hi a lêt zâwnga tui hleuh turin nawhalh fung i duh duh 3 han rem sawn teh le. I ti thei em?
- 3) Nawhalh fung 10 hmangin hetiang pianhmang hi siam la. In lem chhuak turin nawhalh fung 5 rem sawn rawh.



Hengte hi i siam thei lo a nih chuan a siam dân phek 29-naah i en dawn nia.



Angle Tehna

Engtin nge angle
intiat kan siam
ang?

Angle tehna
siam ila.

I geometry box-ah khan
angle tehna i nei a. Divider
an ti.



* Lehkha khawng lain thlur hnih chep thla la.

* Drawing pin emaw  emaw hmangin lehkha them 2 te chu
awlsam taka che kual thei turin kilh zawm ang che.

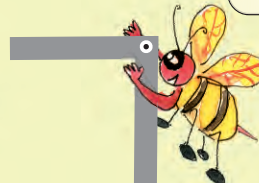


Rohmingi leh Marami-te chu angle tehna kengin an class-a angle chi
hrang hrangte teh turin an kal kual a.

Rohmingi chuan Maths bu leh pencil bâwm chu a angle a han teh chhin a.

Angle tehna hi han en teh
u. Hawrawp-a L ang
chiahin a inkau nia.

Hei hi **right**
angle a ni a. L
tiin kan ziaik.



* I angle tehna kengin kal kual la. L anga a kauna apiang lem hnuaiah
hian i ziak dawn nia. Right angle an nih vek leh vek loh i chiang em?



I tih ve hun

1) A lema angle-te hi en la, table hi dah khat rawh.

Angle	Right angle	Right angle aia lian	Right angle aia te
			✓

2) Sukhman-i chuan he milem hi angle tam tak hmangin a siam a.



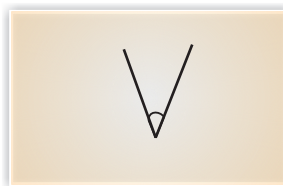
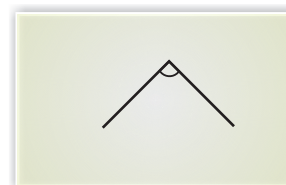
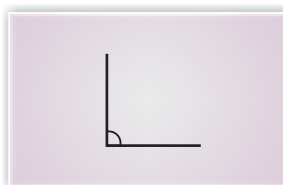
A chhinchhiah nan rawng pencil hmang la.

- * right angle chu a dumin.
- * right angle aia lian angle-te chu a hringin.
- * right angle aia te angle-te chu a pawlin.

3) Angle tar lan hmang hian i duh duh lem han ziaak teh le. Eng angle nge a nih i ziaak baw k dawn nia. A hmasa ber hi entir nân ziah sa a ni.



Right angle aia te



Activity

a) Square paper la la.



b) A lai takah thlep rawh.



c) Vawi khat thlep leh la, zût rawh.



d) I thleh hnahnun zawk kha phelh leh la, a lai taka inthlep turin.



e) A kil pakhat chu a inrinna lai si chiah chiah turin thlep la.



Paper-ah chuan line-in a siam right angle, right angle aia te leh right angle aia lian angle te i hmu ang.

Angle tinte chu enin rawng hrang hrangin i chhinchhiah dawn nia.

Tih tur - I taksa-a angle-te



Heng angle-te hi i siam thei em?

- a) I kut hmangin right angle.
- b) I ke hmangin right angle aia te.
- c) I bân hmangin right angle aia lian.
- d) I taksa hmangin right angle aia lian.



Han ti chhin la. A hlimawm phian a nia. Hetiang hmawlh milem hmang hian i lehkhauah a lem i ziaak dawn nia.

Angle huan



Ka lâm dan angle hian kawng a lantir!
Khawizu siamna tur pangpar ka hmuh khuai
dang hrilh ve ka duh a. A kawng kawhmmuh
nân ka lâm ta a. Ka lâm hian ni leh pangpar
inkara angle a lantir a ni.

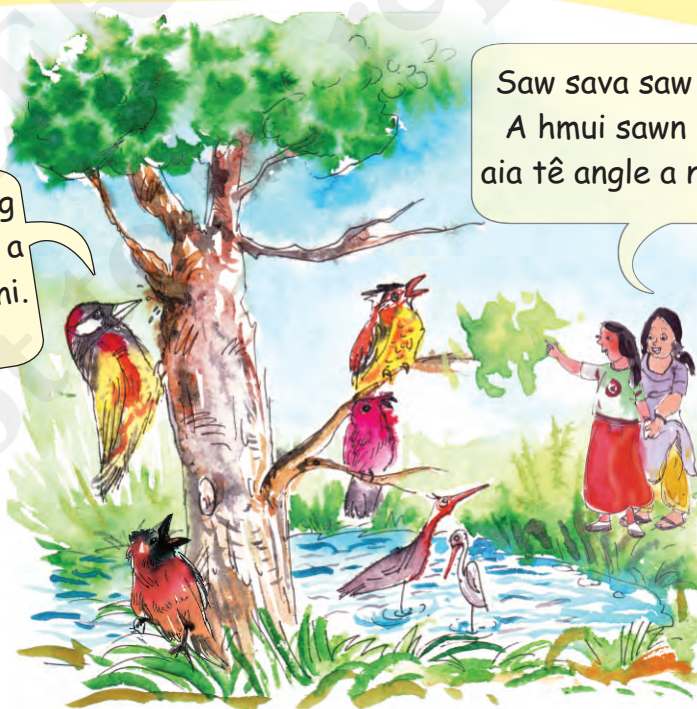


Activity

Huana mi hnah la khawm la. Rawng hnawihin a thla i
nem kai dawn nia. Hnaha angle awmte chu en la. Engte
chu nge right angle aia lian/aia tê?

Thloh ka ni a. Thing
tuk nan ka hmui hi a
zum tha em em a ni.

Saw sava saw han en teh.
A hmui sawn right angle
aia tê angle a nei a nih saw.

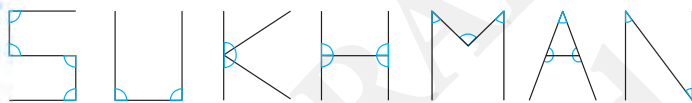


* An hmui kau angle te tak tē nei sava zawng ang che.

* A lema thing zar pahnih inkara angle-te hi chhinchhiah la, a khawi zawk hian nge angle nei lian zawk?

Kan hminga angle awmte

Kan hminga hawrawpahte pawh hian angle a awm teh a ni.



Ka hmingah hian right angle 11 lai a awm a. Right angle aia te 10 a awm baw.

* Rin ngil hmangin hming pathum zia la, angle awmte i chhiar dawn nia.

Hming	Right angle awm zāt	Right angle aia lian angle awm zāt	Right angle aia tē angle awm zāt

Tih tur

a) Math Magic bu 10 chherchhuan la. A chung zawl rual chiahin pakhat chu a sirah a awnin tung ang che.

b) Math Magic bu 6 hmangin a hmaa mi ang khian ti leh la.

* A chung aṭang chuan ball lum thla la. Khawiah nge ball chu a lum chak zawk ang?

* A khawi zawka angle nge tē zawk?



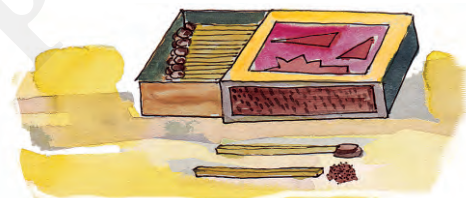
Park-ah tawlpahrit pahni a awma.

- * Khawi tawlpahrit angle nge tē zawk?
- * Khawi tawlpahrit hi nge naupang tan hian him zawka i rin? Eng nge i rin zawkna chhan?

Pianhmang danglam

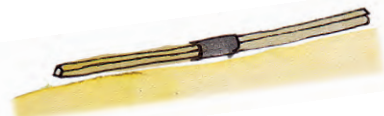
- * I thil mamawhte - nawhalh fung, frooti dawtna (straw) ang chi.

i) Nawhalh bâwk chu ziat thla la.



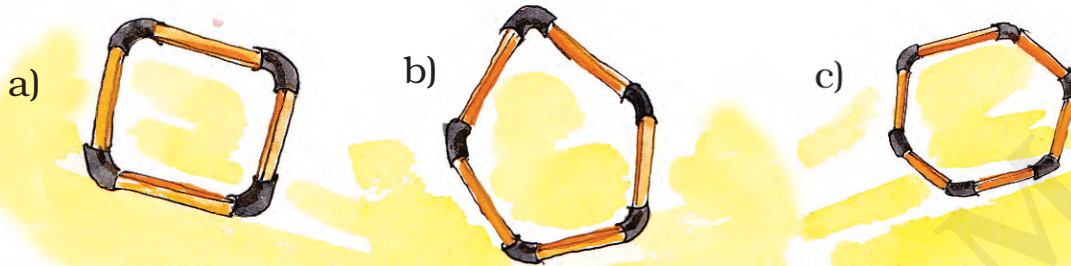
ii) Straw chu 1 cm vel zêla seiin tan rawh.

iii) Straw tan bun hmawr lehlam lehlamah chuan nawhalh fung thun lut la.



iv) Triangle siam turin nawhalh fung chu i thun belh zel dawn nia.

Straw bung leh nawhalh fung hmangin pianhmang sir 4, sir 5 leh sir 6 neite siam ang che.



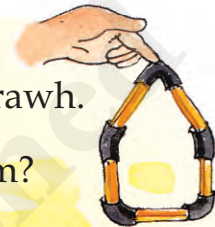
* Heng pianhmang tinte hian angle eng zat theuh nge an neih zawng chhuak la. Chûngte chu chhinchhiah ang che.

I kut hmawrin heng pianhmangte hi zuk nawr chhuk diat diat rawh.

I kut hmawra i nawr chhuk lai khan a angle chu a lo danglam em?

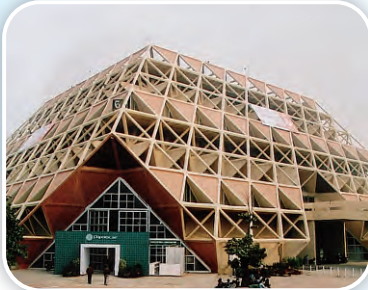
* Zawng chhuak la, a hnuaia table-ah hian i thil hmuh chhuah chu i ziaak dawn nia.

Pianhmang	Angle danglam/danglam lo
	
	
	
	



Pianhmang leh Tower

A hnuaia lemahte hian triangle zawng teh le.



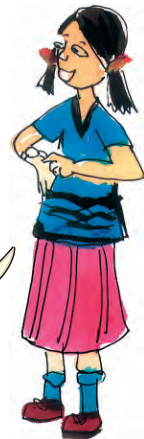
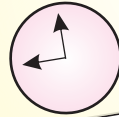
- * Pianhmang inthlak danglam aţang khan eng vangin nge triangle hi in chhawng, lei, etc. sak n n hman a nih i hria em? ?
- * Ichheh velah khan triangle an hmanna dang zawng chhuak ang che.

Angle leh Sana



Zeenat, i sana-ah khan nambur a inziak miah si lo va, engtin nge dar z t i hria?

Angle-te hi ka en mai alawm. A b nte hian right angle an siam chuan dar 9 a ri tih ka hre thei mai a ni.



- * Ni khat chhungin sana b nte hian vawi tam tak right angle an siam a. A lem han ziaak ve teh le.

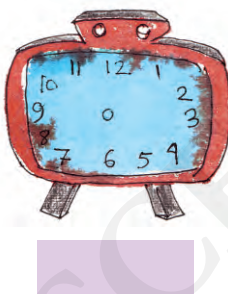


Triangle-te hi pianhmang nghet tak, han nem vak pawha danglam mai mai lo a ni a. Pianhmang hrang hrangte hi nghet lehzu l turin diagonal hmangin triangle tam takah  thendarh (lei dawha mi ang hian) a ni tih naupangte chuan an hre thei ang.

✱ An hun tar lanah hian sana bânthe hian eng angle nge an siam? A dar zât ziaak bawk ang che.



✱ Sana bânin right angle aia tê angle an siam lai ziaak la, a dar zât ziaak bawk rawh.

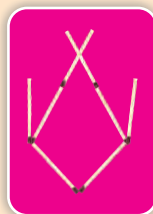


Chhânna: Nawhalhfung puzzle (phek 19-naa mi)

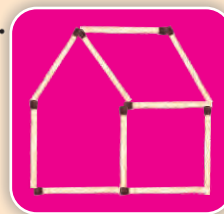
1.



2.

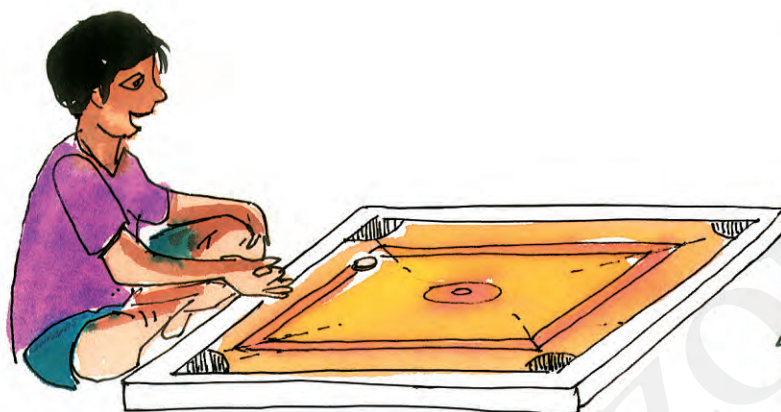


3.



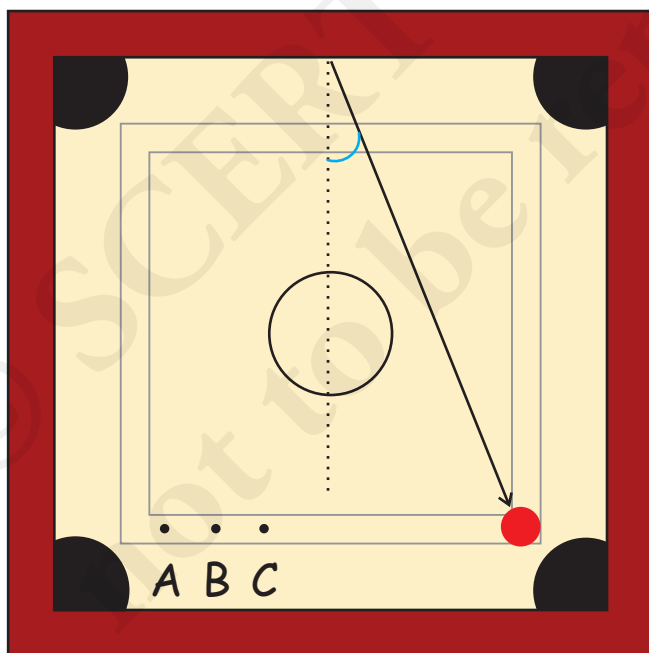
Degree Sana

Tlana leh Rina chuan carromboard an pen a. Tlana chuan striker chu a han pen thuai a.



Hm Hm.....Angle ngai chiahin a rawn lêt leh a nih hi.

* A lemah hian point pathum A, B leh C te lantir a ni a. A sen fuh turin penna tur point chu rin ngil hmangin lantir rawh.

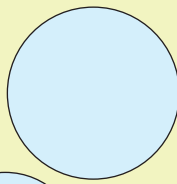


I duh chuan angle a degree zat hi degree sana hmangin i teh thei ang. Degree hi $^{\circ}$ tiin ziah a ni.



Tih tur: Degree sana siam

1. Paper atangin cirle chep la.



2. A lai takah thlep rawh.



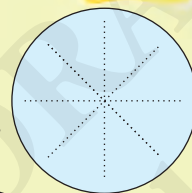
3. Vawi khat thlep leh a, palia pakhat a lo ni ang.



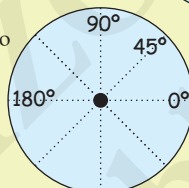
4. Vawi khat dang thlep leh rawh.



5. Paper chu kai pharh la, hetiang rin hi i hmu ang.

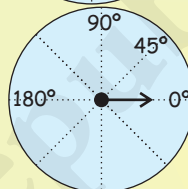


6. A lema mi ang hian 0° , 45° , 90° and 180° chhinchhiah la.

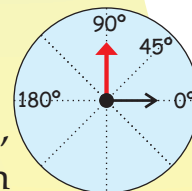


7. Lehkha khawngah bel rawh.

8. A centre atang chuan bân pakhat ziaak la.



9. Lehkha khawng hmangin a bân sen pakhat siam la, awlsam taka a chet theih nân a laiah drawing pinin kilh bet la.



Tichuan i degree sana chu hman theiha peih a lo ni ta.

* I pencil box-a right angle teh nan i degree sana chu hmang la. Right angle len lam chu _____ a ni.

* Heng angle-te hi degree eng zât nge a nih han ring chhin teh le. —

- Right angle $\frac{1}{2}$ _____
- Right angle $\frac{1}{3}$ _____
- Right angle lêt 2 _____

90° hi right angle.



* Phek 30-naa Rinan striker a penna tur angle hi teh rawh.

Thlawhdeng-a angle-te

1. Square paper la la.



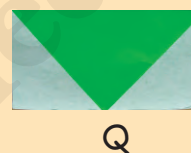
2. A laiah thlep la, pharh leh rawh.



3. A kil pahnih chu a lai thleng thlep la. I paper chu hetiang hi a lo ni ang.



4. P in Q va tawk turin triangle hring chin zawng hi thlep la.



5. He rectangle-a a sir hnihte hi a inrinnaah hian thlep leh rawh.



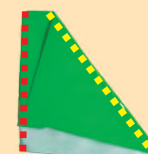
6. I paper chu hetiang hi a lo ni ang. A lemah hian triangle te tak tê thleh ngai a la awm a.



7. Let thawk la, a inrinna laiah hian thlep ang che.



8. A thla siam turin a tlâng eng hi a tlâng senah va thlep ang che.



9. Hetiang chiah hian a lehlam pawh i thlep ve dawn nia.



I thlawhna chu thlawk turin a inpeih ta. A thlawk duh em le?

- * Thlawhdeng kha i kaih pharh leh hunah 45° leh 90° te i zawng dawn nia.

Thlawhdengah khan 45° , 90° leh angle dang inthlep te a awm a. 30° and 60° cheh thlâk tur hi he lehkhabu phêk tawp berah hian a awm a. Naupangte chu an chhehvela angle hrang hrang awmte teh chhuak tura fuih phur theih an ni.

Insawizawina a angle-te

Rohminga chu a insawizawi thin a. Hengte hi ni tina a tih dan hrang hrang lem a ni.



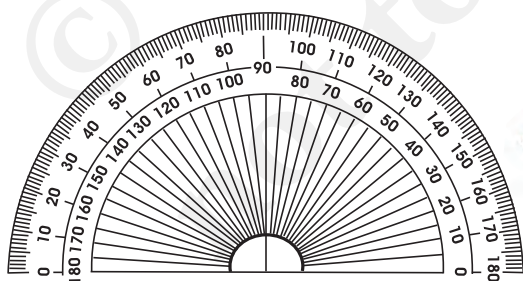
* A insawizawi laia a taksa bung hrang hrangten angle an siamte hi i teh theihte teh rawh.

D Game

'D' game hmangin i thiante nen infiam ula. Angle ziah la. I thiante chuan i angle ziah len lam chu an ring dawn a ni. Chutah i 'D' hmangin in teh dawn nia. Angle in teh chhuah leh i thiante rin zât inthlahuna chu an score zat a ni ang a. A score tlem ber chu a chak ber a ni ang.

Ti ru, Infiam ang u le!

Hming	Angle ziah	Rin zât	Score

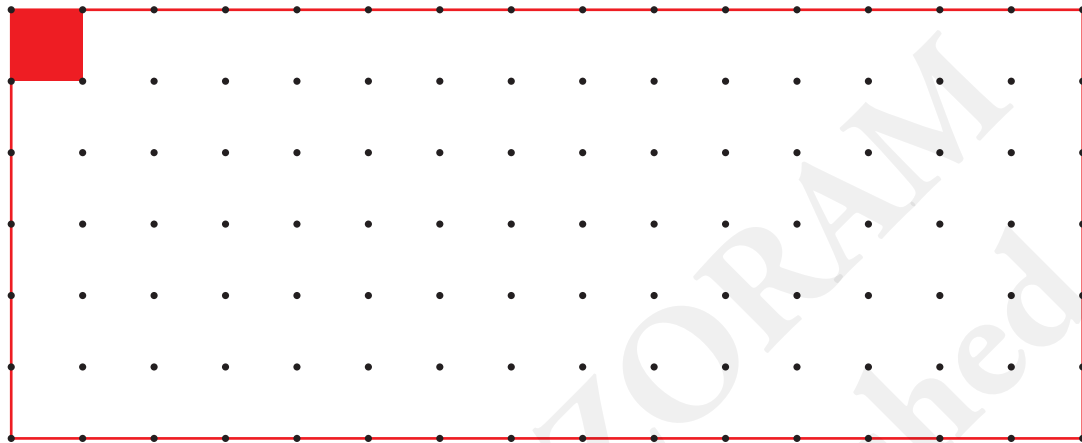


He 'D' hi geometry box-ah khan i hmu thei ang. Ka lu-a pehbuk hi a angle zat teh rawh.

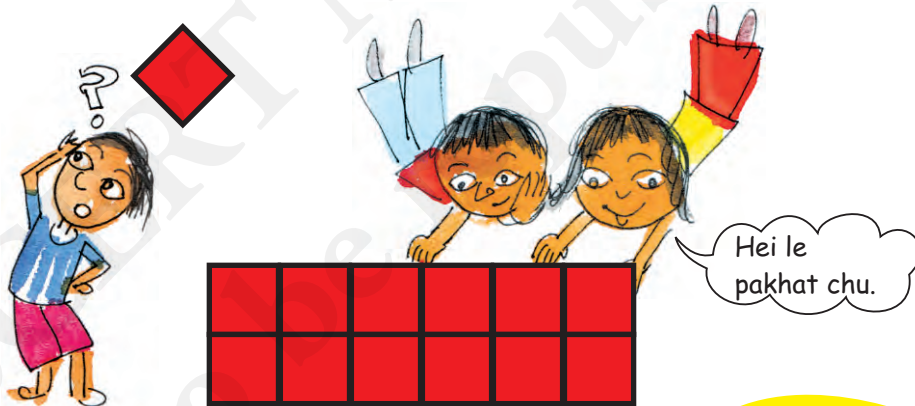
'D' (protractor) an hmelhriatna hun remchangah hmang la. Angle len lam zuk teh thiam turin naupangte chuan tanpuina an mamawh ngei ang a; mahse a vel tham an teh chhuah kha a taw kêm êm a ni.



Square Eng Zât Nge?



- * A chung a dot-ah hian square sen sir sei zâwng teh la. Hetiang square 12 hmang hian rectangle awm thei ang ang han ziaik teh le.
- * Rectangle eng zat nge i ziah theih le? _____



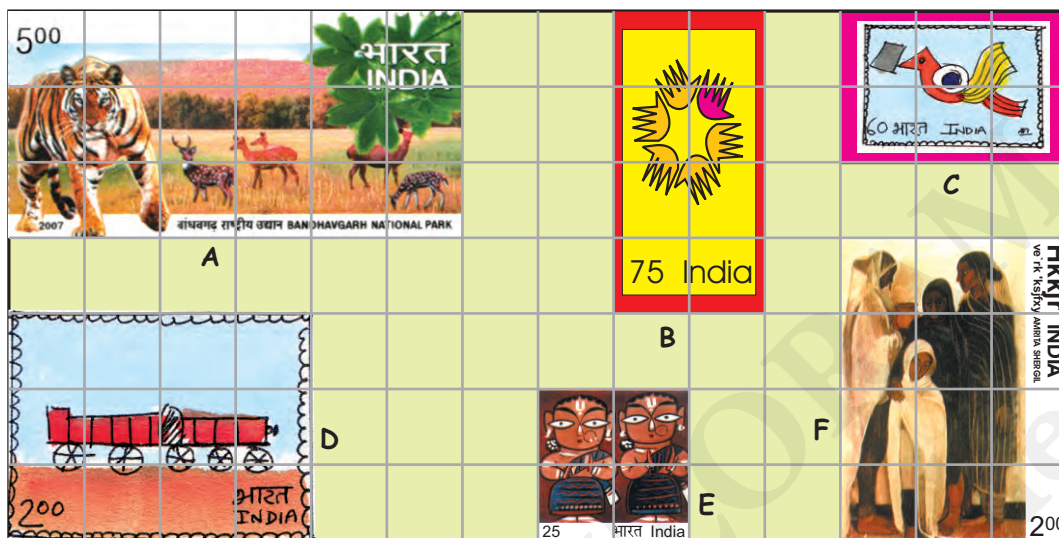
Rectangle tin hi square in ang chiaah 12 zelin a siam a ni a, tichuan an zau zâwng a inang vek a, mahse, a tlâng teh kual sei zâwng chu a inang lo.

A tlâng tehkual sei zâwng hi **perimeter** tia vuah a ni.

- * A khawi rectangle hian nge perimeter nei sei ber?
- * A khawi rectangle hian nge perimeter nei tawi ber?

Naupangte hi area tih sawi fiahna la hre lo tura ngaih an ni a; amaherawhchu, entirna hmangin a awmzia lo tuh lâwk tum ni se. Classroom-a thil awm hrang hrangte khaihin kualin, lian zâwk leh te zâwkte zawh thin ni se, chuta tang chuan area awmzia chu an hre fiah zel thei ang. Stamp, hnah, ke hniak, sikul bang, etc. te pawh khaihin theih a ni ang.

Stamp teh ila



A chung a stamp hmuhnawm tak takte khi en la.

- a) Centimetre khat square eng zat nge stamp A hian a khuh? _____

Stamp B thung hian? _____

- b) A khawi stamp nge area lian ber ? _____

Chu stamp chuan square a sir 1 cm a sei eng zat nge a khuh ?

Stamp area lian ber chu eng zata lian nge? _____ square cm a ni.

- c) Stamp pahnih area inang chiah engte nge ? _____

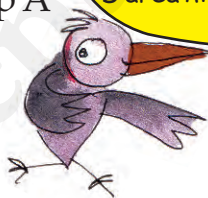
Chung stamp-te area chu eng zat ve ve nge ? _____ square cm a ni.

- d) Stamp tê ber area chu _____ square cm.

Stamp tê ber leh lian ber area in thlahuhna chu _____ square cm a ni.

Stamp hlui khawn khawm la. Square grid-ah dah la, an area leh perimeter zawng ang che.

Stamp D hian square 12 a khuh chiah a. Square tin sir hi 1 cm a sei a ni a. Chuti a nih chuan stamp D area hi 12 square cm tihna a ni.



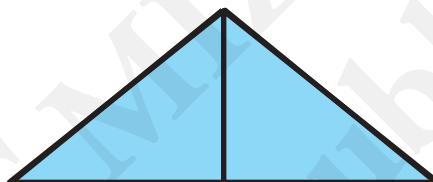
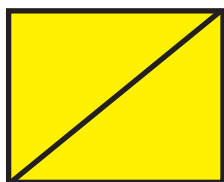


Rin chhinna

- A khawi area nge lian zawk ang - i ke hniak pakhat nge hemi lehkhabu pheh hi?
- A khawi area nge tê zawk ang - Cheng nga note pahnih dah dun nge cheng za note pakhat?



- Cheng sawm pheh en la. A area chu square cm za aiin a lian zawk em?
- Pianhmang pawl hi pianhmang eng aiin a area a lian zawk em? Eng nge a chhan?



- Pianhmang eng hi pianhmang pawl aiin a perimeter a sei zawk em? Eng nge a chhan?

Ka kutphah hi engtia hlai nge?

A pheh lehlama square sheet-ah hian i kutphah dah la, i kutphah tlâng zeî zeiah chuan han zûl teh le.



I kutphah nge lian i bula thu kutphah tih engtin nge i hriat theih angle?

I kutphah area chu eng zat nge?

_____ square cm.

I bula thu kutphah area chu?

_____ square cm.





Ka hniak a
sei zawk!

Mahse ka hniak a hlai
zaw a. Anih chuan tu
kephah nge lian zawk ta
ang le?

Ka hniak te

- * I hniak nge lian ang i
bula mi hniak?
- * Engtin nge i hriat ang?
Sawi ho ula.
- * I kephah lehlam lehlam
hniakte chu an area a
inang chiah em?



Ka vun hi a inthuah tup
mai a. Area zau tak ka
nei a nia aw. Hei hian
ka taksa pawh a vawng
dai hial asin.

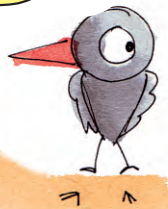


Samak No

Ká hniak area hi 'eng
zat nge?

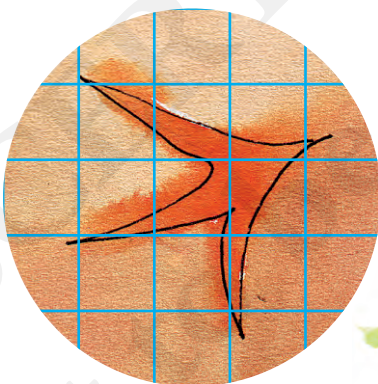


Ka hniak area hi eng
zat nge ni ve ang le?

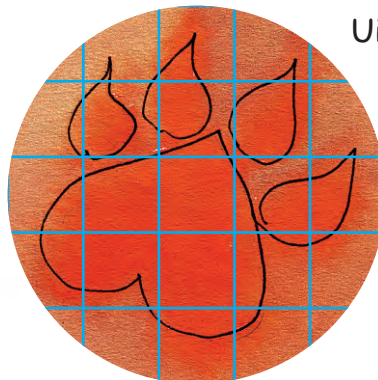


- * I hniak ang tiat hniak nei ramsa hming han ring teh. Sawi ho ula.
- * Ran thenkhat hniak, a len zawng dik tak tar lan a ni a. An hniakte hi a area tur awm ang han ring chhin teh le.

Arpui



Ui



Rang zawka a area zawn theih nân
hetiang hian square leh rectangle lian
tak tak siam rawh.



Sakei

Hetah hi chuan square tinte chhiar vek a ngai lovang a. A area hre thei turin hniak chhunga square leh rectangle lian thei ber ziah thiam tir ni se. A bak pianze mumal lo chhunga mi square te chhiar tir leh ni se. Chapter 11-ah rectangle area zawn dan dik awm tho mah se, anmahniin puntir hmangin area chu rang zawkin a zawn chhuah theih tih an hre thei ang.

Keimahah hian square eng zat nge awm?

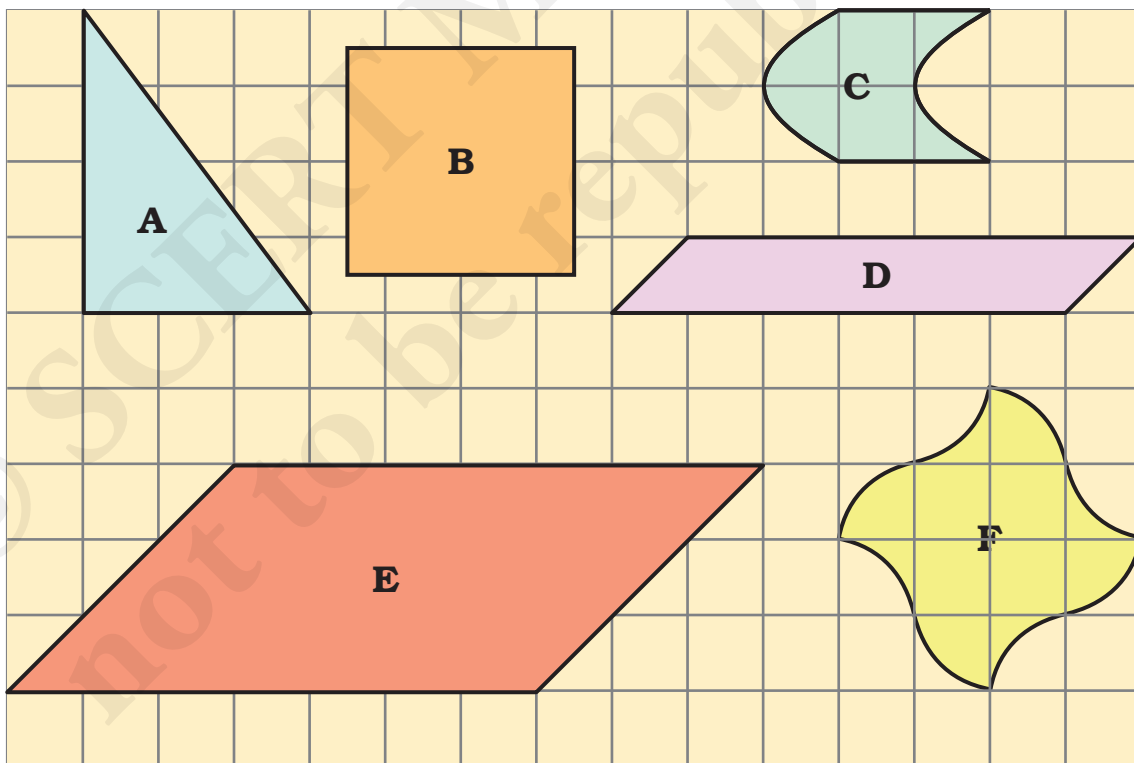
He triangle area hi eng zat nge?

He pianhmang hi rectangle lian chanve a ni em?

He rectangle area hi 2 square cm a ni a. Chumi chanve chu he triangle area hi a ni.

Hmm... a nih chuan a area chu _____ square cm a ni.

* A hnuaia pianhmang hrang hrangte hi a area(square cm-in) ziaik rawh.



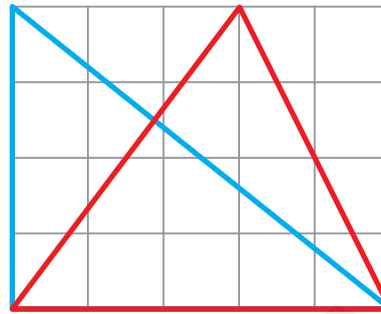
He exercise-ah hian naupangte chu area zawng chhuak tura geometry-a symmetry-te hmu thiam tura beisei an ni a. Naupangte chu anmahni theihna hmang thiam tura tihphur ni se. Heng example-ahte hian area-te hi a dik chiah phut loh ni se.

Triangle tehna

He rectangle
chhunga triangle lian
pahnih awmte hian
area inang an nei.



Sangtei



Mahse, en mai
chuan an va
inang lo ve.



Hminga

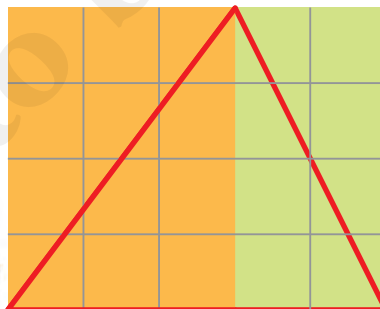
Triangle pawl hi rectangle
lian chanve chiah a ni a.
Rectangle area hi 20
square cm a ni a. Anih
chuan triangle pawl area hi
_____ square cm a ni
ang.



A nih chuan
triangle sen ve
thung hi?



Khai a, rectangle
inang lo pahnihte
chanve ve ve a lo
awm reng a nih hi.



Hminga sawi rectangle
pahnih area chu kan zawng
chhuak thei tawh ang.
Triangle sen area hi eng
zat nge ni ta ang? Sawi
fiah la.



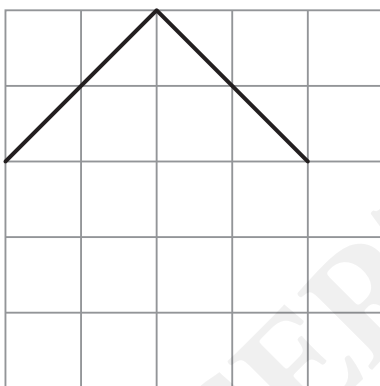


I tidik tlat mai. Eng nge a nih i hria a ni. Triangle dang a area 10 square cm ni turin he rectangle chhungah hian ziah han tum teh le.

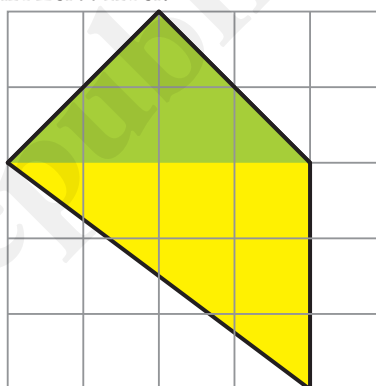
Chutiang triangle dang ziaak tur chuan Hminga hi han pui teh. 5 tal ziaak ang che.

Pianhmang tihkim

Ruati chuan pianhmang sir rin pahnih hetiang hian a ziaak a. A thianpa Chhuana chu a sir rin hnih dang ziah zawm turin a pe a, an thil ziah area chu 10 square cm a ni tur a ni.



Chhuana chuan heti hian a rawn ziah zawm a.



Engtin nge i ziah theih a?

A har hlei nem! A hring chin area hi 4 square cm a ni tih i hmu ang a. A hnuaiah a eng chin hi 6 square cm a ni tih i hmu leh bawk ang a. Tichuan ka thil ziah zawh chu 10 square cm a ni mai alawm.

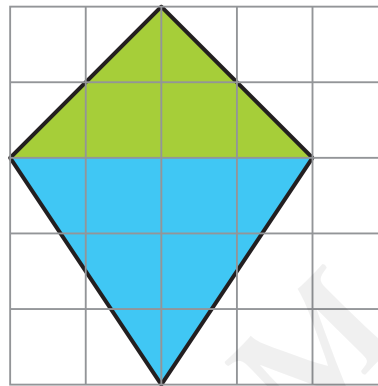


* Chhuana sawi hi a dik em? Sawi ho teh u.

* A hring lai hi 4 square cm a nih dan leh a eng lai hi 6 square cm a nih dan sawi fiah ni bawk se.



A nih tak chu a. A tih dan tur hi a dan dang daihin ka lo ngaihtuah a. Hetianga i ziah pawh hian a area chu 10 square cm a la ni tho vang.



- * Ruati sawi chu a dik em? A pawl chin area hi eng zat nge? Sawi fiah bawkl a.
- * Ruatin sir rin pahnih a ziah sa hi a area 10 square cm ni turin ziah zawm sak dan tur kawng dangin i ngaihtuah thiam em le?
- * Nangin a tih dan tur kawng dang i hria em le?
- * In lama i thiante pawh kawng danga a tih theih dan zawt bawkl a.

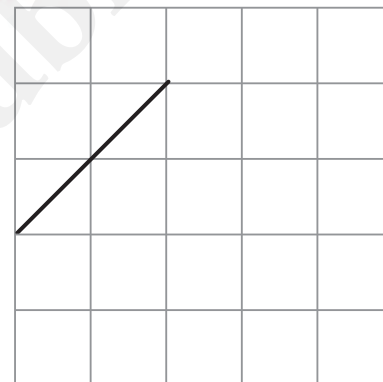


Kan inlengte ka lo zawt thin a, mahse ka zawh apiang hian min hrilh thei ngai lo.



I tih ve hun

1) Hei hi sir rin pakhat a ni a. A area 4 square cm ni turin siam pum rawh.

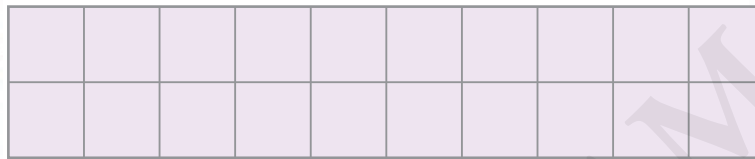


2) Hetah hian sir rin hnih ziah a ni thung a. A area 2 square cm aia t e turin sir rin hnih dang hmangin ziaak pum rawh.

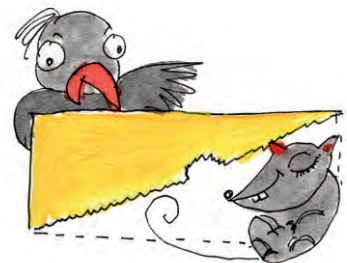


Area pek sa tiata rin ngil emaw rin k u l emaw hmanga pianhmang hrang hrang siam ve turin naupangte chu fuih ni se. Hetiang exercise hi square paper-ah naupangte a tam thei ang ber tihtir la, tichuan a perimeter sei ber leh tawi ber rin chhintir ang che. A finfiah nan scale emaw lazai emaw hmangin tehtir ang che.

3) Hei hi rectangle a ni a. A area chu 20 square cm a ni.



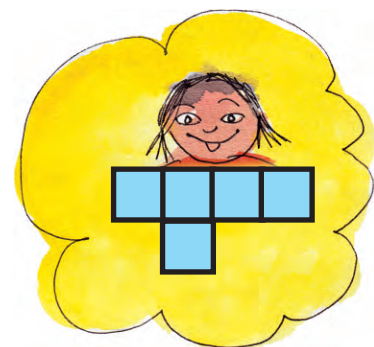
- Rin ngil pakhat hmangin he rectangle hi triangle intiat chiah pahnihah then rawh le. Triangle-te chu an area eng zat ve ve nge a nih?
- Rin ngil pakhat hmangin he rectangle hi rectangle intiat chiah pahnihah then la. Rectangle-te chu an area eng zat ve ve nge a nih?
- Rin ngil pahnih hmangin he rectangle hi rectangle pakhat leh triangle intiat chiah pahnihah then rawh.

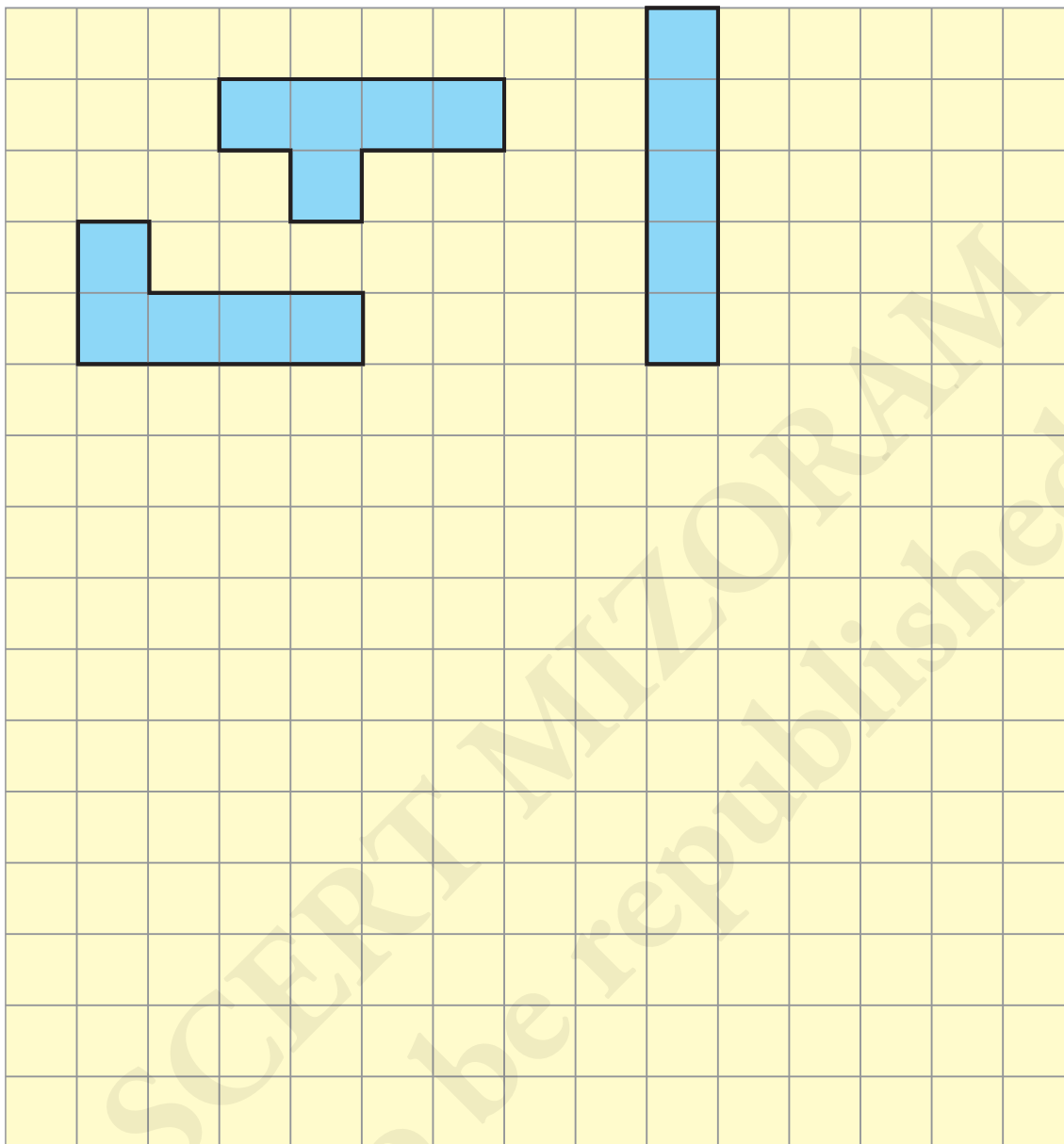


- * Rectangle chu a area eng zat nge?
- * Triangle-te area chu eng zat ve ve nge?

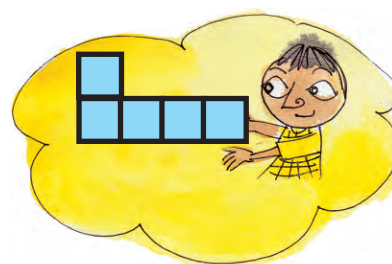
Square panga hmanga puzzle

Phek lehlama square paper-ah hian square-te sir sei zâwnng teh la. Chutiang tiat chiah square panga belhbawm hmang chuan pianhmang awm theih dan hrang hrang han ziak teh le. Pathum chu ziah lawk a ni a.

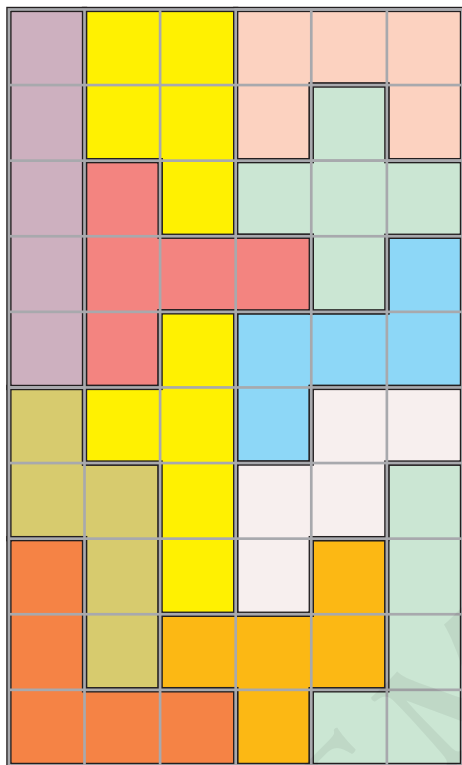




- Pianhmang hrang hrang eng zat nge i ziah theih le? _____
- Chung pianhmang hrang hrangahte chuan eng pianhmang perimeter nge sei ber? _____
Eng chen nge? _____
- Eng pianhmang hian nge perimeter nei tawi ber? Eng zat nge a perimeter _____ cm
- Pianhmang hrang hrangte area chu _____ square cm a ni.
Awlsam lutuk!



Heng pianhmang hrang hrang 12-te hi square 5 hmangin i siam chhuak em ?

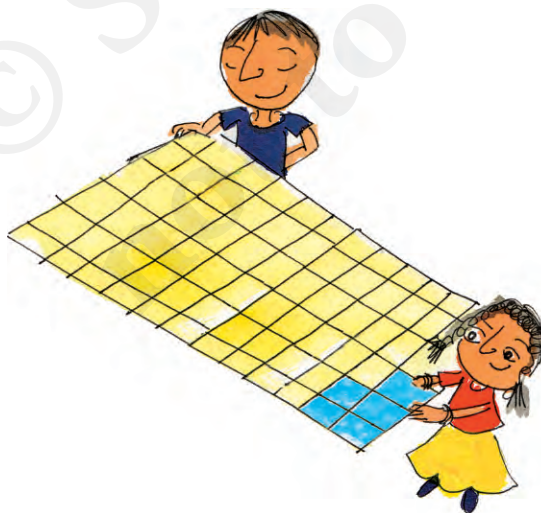


Pianhmang hrang hrang 12-te hi fel taka remin rectangle siam a ni a. 10 row leh 6 column a nih avangin rectangle 10×6 a ni. Mak deuh mai chu rectangle 10×6 ni tur hian a rem dan kawng 2000 chuang zu awma maw le!



Lehkha khawngah heng pianhmang 12-te hi ziaak la, chep thla rawh.

A chung a rectangle 10×6 siam turin pianhmang 12-te hi kawng dangin rem rawh le. I ti thei em?

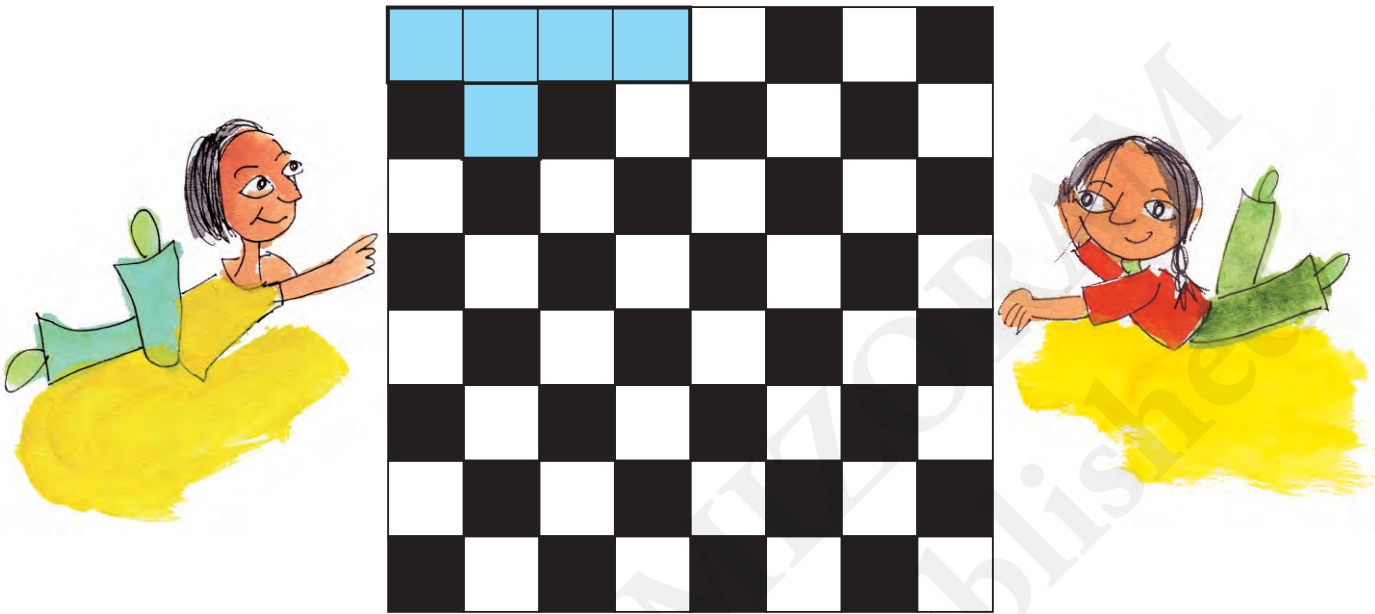


Puzzle dang tih tur

Heng pianhmang 12-te hmang hian 5×12 rectangle siam tum rawh. A rem dan chi hrang 1000 chuang a awm a nia aw. Chung zinga pakhat i rem chhuah theih chuan a ropui ngawt ang.

Infiam hun

Hei hi chessboard a ni a. In thian dunin a hmaa pianhmang 12-te hmang khan infiam ru le.



A thawk hma chuan pakhat lain chessboard-a square panga chungah dah se.

A tumpui chuan pakhat la ve lehin chessboard-a square panga chungah dah ve leh se, a hmasa zawkin a lo dah tawh chu bawh thuahtir loh tur a ni.

A inchhawka dah zelin pakhat zawk zawkin dah ngaihna a hriat loh thlengin rem ang che u.

A dahna tur hre hnunung zawk chu chak zawk a ni.

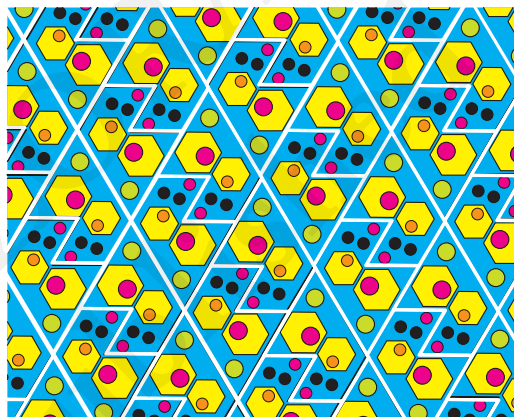
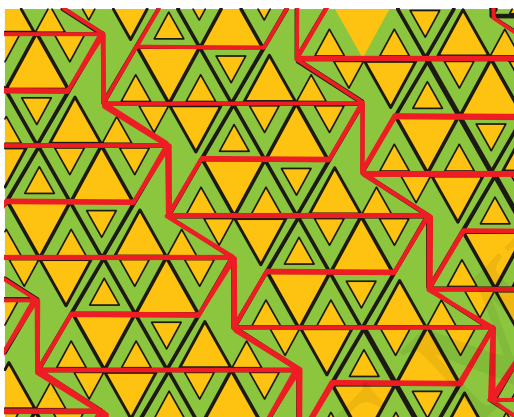
Mahnia tile siam

Math Magic pawl 4 zirlai bu (phek 117 - 119) a chhuatphah phah dan hrang hrang kha i la hria ang a. Kar awl awm lova rem theih tur tile te thlang ang che.

Naupangte chu heng 'pentomino' puzzle te hi in lamah ti thin tura fuih ni se. Chung tih turte chu square 6 (hexominoes) hmanga siam niin hengahte hian pianhmang chi hrang 35 a siam theih a ni.

Ziri chu dawrah a kal a, chhuatphah ziarâng chi hrang hrang a hmuh chuan mak a ti hle mai. Hengte hi an nalh hlawm ti rawh.

* Heng chhuatphah ziarang siamtu tile hi i hre thei em? Ziarang tin atang hian ziarang siamtu tile chu han thai bial teh le.

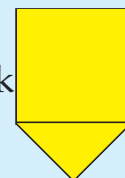


Ziri chuan ziarangte a en hnu chuan tile rawng eng siam a duh ve a. Nang pawhin hetiang hian tile siam ve rawh.

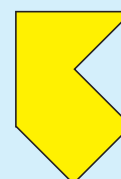
Step 1: Lehkha khawng la la, a sir 3 cm-a seiin square ziaak rawh.



Step 2: A sir rin pakhat ringin a pawn lamah triangle ziaak rawh.



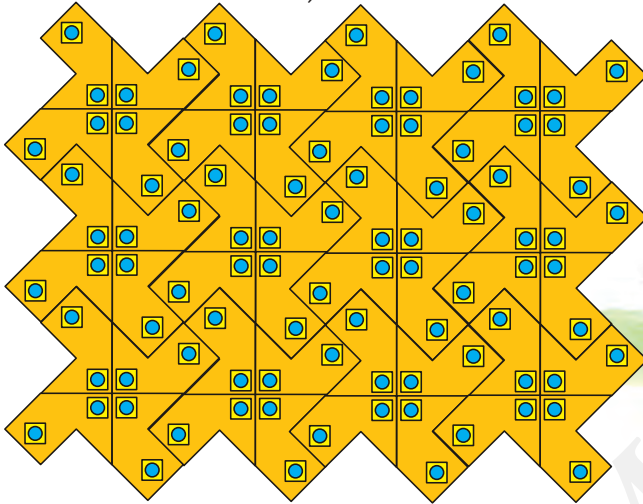
Step 3: Triangle i ziah ang tiat chiah chuan a sir dang ringin square chhung lamah triangle ziaak leh rawh.



Step 4: I thil ziah chu chep thla la. Tichuan tile chu i siam zo ta. A area eng zat nge?

I tile siam chuan ziarang han siam teh le. Lehkha phekah zûl chhuak la. Vaw eng emaw zat kar awl awm lovin zûl chhuak la, tichuan ziarang mawi tak i siam tih i hmu ang.

Ziri chuan a tile eng hmangin hetiang hian ziarang a siam ve a. (A tile area chu i hriat sa kha)



Hengte hi chhang rawh -

- * Tile eng zat nge a hman?
- * Ziri chhuat ziarang siam area chu eng zat nge?

I tih ve hun

Ziri chuan tile dang siam leh a tum a. Square a sir 2 cm-a seiin hetiang pianhmang hi a siam chhuak a.

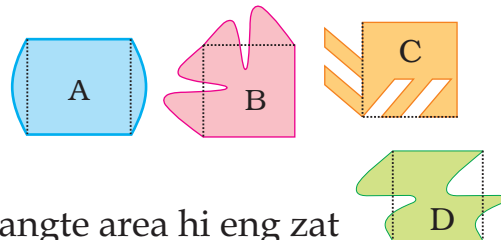
Ngun takin hengte hi en la, a hnuaia mite hi chhang rawh le:

- * A eng pianhmang hi nge kar awl awm lovin chhuatphah atana hman theih?

Sawi ho ula. Heng pianhmang hrang hrangte area hi eng zat nge?

- * Heng tile-te hian i duh danin ziarang han siam teh le.
- * Square atangin tile thar i duh danin i siam chhuak ta a.

Triangle hmangin i siam thei ang em? Han ti ve teh.



Pawl 3 leh 4-ahte khan pianhmang hrang hrang square te, rectangle te, hexagon te, triangle te, circle te leh a dangte kha chhuatphah siam nana hman theih leh hman theih loh in lo fiah tawh a. Naupangte hi khatiang pianhmang kha tidanglamin chhuatphah siam nana hman theih tile te siam thiam tura beisei an ni. Square atangin pianhmang dang, in her rem thei lo, an area erawh chu la danglam si lo an siam chhuak mai thei bawk.

Kan Flag

Kan ram flag i hmu tawh thin ngei ang. A lem ziah dan i thiam em?

Rectangle, a dung 8 cm leh a vang 9 cm a sei ziaak rawh. Rectangle chu intiat chiahin hmun thumah then la tichuan flag chu i siam dawn nia.



Flag then pathuma pakhat zinga a chung ber chu saffron (serthlum) rawng a ni.

Pathuma thena a laitaa awm chu eng rawng nge?

Ashoka Chakra chu flag khawi laiah nge i dah ang?

Flag then eng zat nge rawng hringin i chei ang?

Rawng varin flag luah zat chu $\frac{1}{3}$ aiin a tlem em? Eng vangin?

He flag hi en teh le. Eng zat hi nge rawng dumin a luah? _____

Rawng hring luah zat chu _____ tiin kan ziaak thei ang.

Rawng senin flag hmun a luah zat chu $\frac{1}{3}$ aiin a tlem em? Eng vangin?

Italy Flag



Hei hi Samoa ram, South Pacific Ocean lama awm flag a ni.

Rawng pawlin hmun a luah zat chu $\frac{1}{4}$ aiin a tam nge a tlem?

Rawng senin hmun a luah zat han ring teh. $\frac{1}{2}$ aiin a tam em? $\frac{1}{3}$ aiin a tam em?

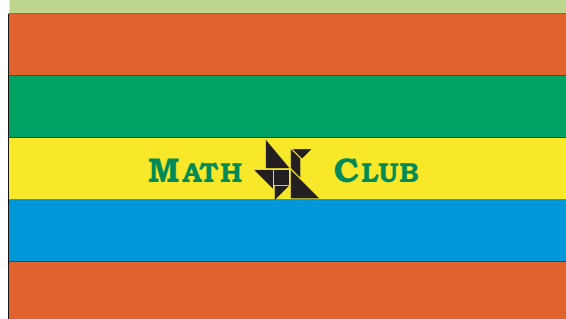
Kan ram flag rawng var chin chhungah chakra pawl a awm avangin rawng varin $\frac{1}{3}$ aia tlem hret hmun a luah a ni. Hei hi sawi ho ni se.

Zawng chhuak rawh

I theih anga tam ram hrang hrang flag la khawm rawh.

Chung zinga flag eng zatin nge rawng chi hrang pathum nei? Flag-a rawng hrang hrangte chu a intiat tlang em?

Hei hi Kerala-a school pakhata an Math Club flag a ni. Then eng zat nge rawng sena chei a nih? Then eng zat nge rawng hringa chei a nih?



Logo dum  hi i hmu em? A lem han ziak ve teh.

In sikulah Math Club in nei ve em? In neih loh chuan in din dan tur in zirtirtu zawt rawh u. In Math Club flag tur duang chhin rawh. Hetah hian a lem ziak chhin teh.



Rawng sen i hmang em? Then eng zat nge rawng senin i chei?

Rawng dang engte nge i hman tel?

Sikulah Math Club dinin naupangte tana zir paha intihhlamna hrang hrang heng - puzzle siam te, tangram hmanga pianhmang hrang hrang siam te, kan chhehvela pianhmang leh angle hrang hrang awm te hmuh tum, kan sikul area leh perimeter chhut te leh a dangte siamsaktu ni thei se a tha hle ang.



Tuaivir danglam

Tuaivir danglam tak i siam ang u.

Lehkha khawng la la, chutah chuan radius 3 cm-a sei circle ziaak rawh.

Circle chu intiat chiahin hmun riatah then ang che. Tichuan then tinte chu circle pum $\frac{1}{8}$ zel a ni ang.

Milema tarlan ang hian $\frac{2}{8}$ a senin, $\frac{1}{8}$ serthlum rawngin, $\frac{1}{8}$ a engin, chutiang zelin i chei dawn nia. Circle lai tak (centre) ah nawhalh fung hawlh tlang ang che.



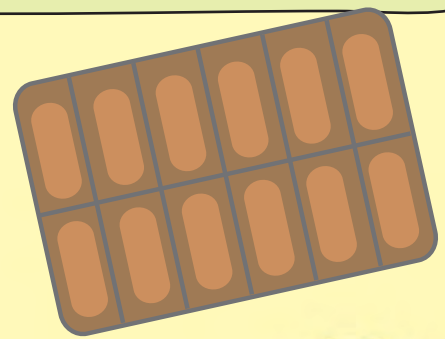
I tuaivir danglam chu peih fel a ni ta. Chak takin han tuaivir chhin teh!

Eng nge i hmuh? Rawng te chu i hmu kim thei em? I lehkhabuah i thil hmuh chu ziaak thla ang che.

Chhât tur

A) Chocolate bar

Manju-i chuan chocolate neiin palia pakhat chu Raji, pathuma pakhat chu Sugatha leh paruka pakhat chu Sheela-i te pein, a bâng zawng chu aman a ei a. An zavai chuan chocolate hrang eng zah theuh nge an chan? Hetah hian ziaak ang che.



Raji



Sugatha



Sheela



Manju



Then eng zah chiah nge Manju-in a ei?

B) Lukhumte hi chei rawh

Lukhum zinga $\frac{1}{3}$ te hi rawng senin.

Lukhum zinga $\frac{3}{5}$ te hi rawng pawlin.

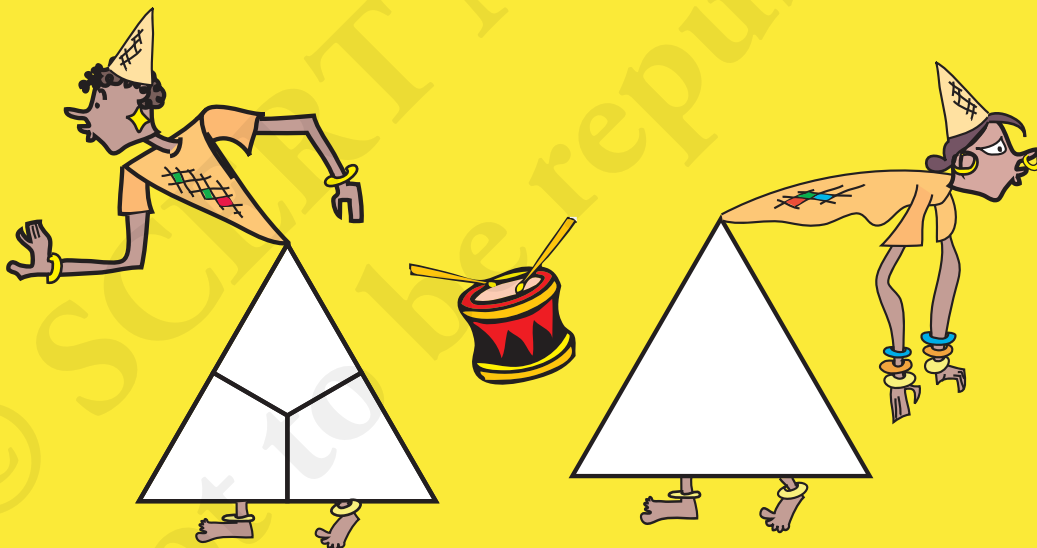
Lukhum eng zah nge rawng senin i chei?

Eng zah nge rawng pawlin?

Then eng zah nge rawng a chei loh awm?



C) Triangle then sawma intiat te

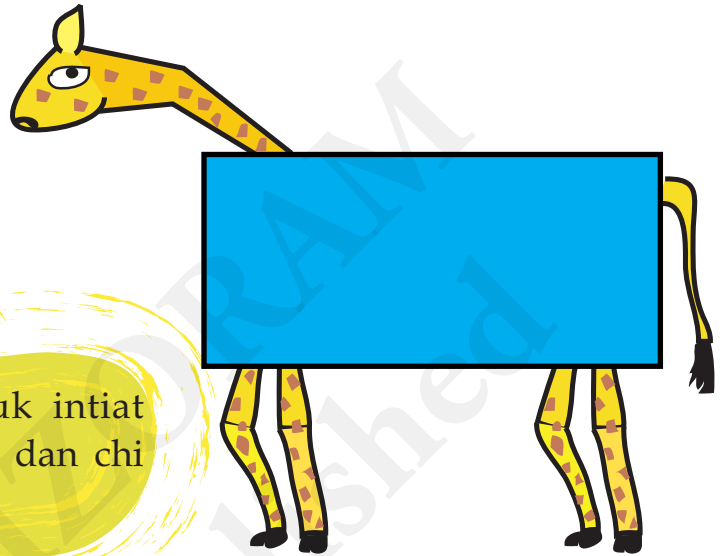
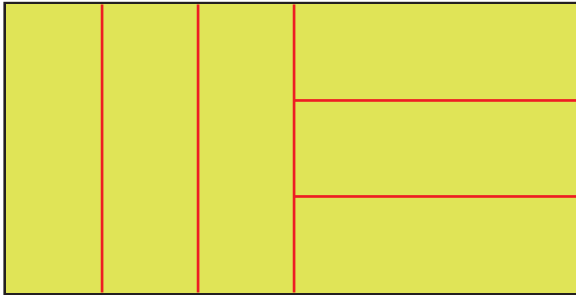


Triangle var hi hmun thum intiat chiaha then sawm a ni a. Pathuma pakhat te hi rawng hrang theuhvin chei rawh. A pathum hian an intiat thlap a ni tih i ti Chiang thei em? Engtin?

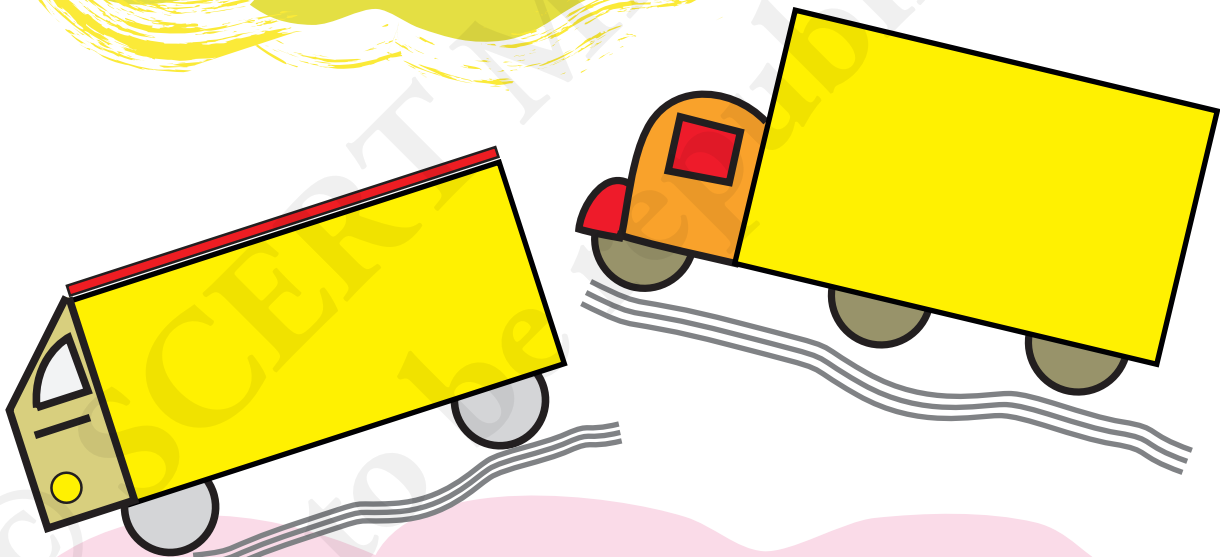
He triangle hi a chung a then sawm ang ni lo khian hmun thum intiat chia siin han then sawm ve teh le. Pathuma pakhat te chu rawng hrang theuhvin chei ang che.

D) Rectangle hmun ruka then

Rani-i chuan rectangle hring chu a lema tar lan ang hian hmun ruk intiat chiaha a then sawm a.



- * Heng rectangle-te hi hmun ruk intiat theuhah han then ve teh. Then dan chi dang zel hmang ang che.



Sawi ho tur

- * Then tinte hi an awm na theuh rectangle paruka pakhat an ni ngei tih engtin nge i finfiah theih ang?
- * Rectangle hring hi rectangle pawl aain a lian zawk a. Tichuan, rectangle hringa $\frac{1}{6}$ hi rectangle pawl $\frac{1}{6}$ aain a lian zawk a tih theih.



Kawngkhar vengtu duhâmte

Birbal-a kha i la hria em? A ni chu Lal Akbar-a khawnbawl fing tak a nih kha (Math Magic Class IV, pheik 14-na). Lal khawnbawl a nih dan i hria em?

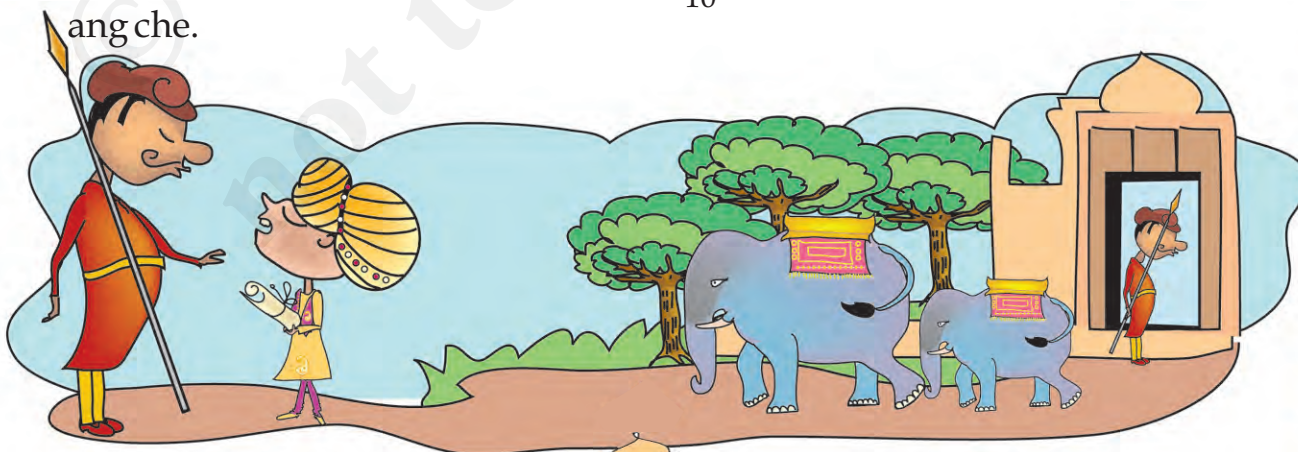
Birbal-a chu naupang tē niin thingtlang khaw pakhata khawsa thin a ni a, mi fing tak niin hla te pawh a phuah thiam hle a.

Tum khat chu hamthatna beiseiin lal hmaah kal a rilruk a. Tichuan, a hla phuahte kengin khawpui lam a pan ta a.

Lal in kawtchhuaha kawngkapui a thlen chuan kawngka vengtu chuan a lo tiding a, "Nang kha, ding teh ! Khawiah nge kal i tum?" tiin a lo au va.

"Hla phuah thiam ka ni a, Lal Akbar-a hnenah kalin amah chu ka hla phuahte entir ka duh a ni," tiin ani chuan a chhang a.

"A ni maw! Hla phuah thiam i nih chuan kan lal hi a fel si a, lawmman tha tak a pe ngei ang che. I lawmman $\frac{1}{10}$ min pek dawn chuan ka luhtir ang che.



Duhthlan tur dang a neih loh avangin Birbal-a chuan a rem ti ta mai a.

Birbal-a luh hnu chuan kawngkapui vengtu chuan a chan theih tur zat chu a lo chhût nasa ve a. "Kha pa khan rangkachak tangka 100 a dawn chuan ka chan tur chu rangkachak tangka _____ a ni ang."



Chutia a luh zelnaah chuan kawngkapui dang hi a lo awm leh a.

Chu kawngkapui vengtu pawh chuan "I lawmman dawn $\frac{2}{5}$ min pek dawn chuan ka luhtir ang che," a lo ti ve leh a. Birbal-a chuan a aw leh ta a.

Kawngka vengtu pahnihna pawh chuan hlim takin a chan tur zat chu a chhût a. "Ani khan a tlem berah rangkachak tangka 100 a dawng awm si a, rangkachak tangka _____ ka nei thei dawn a nih chu."

Kawngkapui tawp ber a thlen chuan a vengtu chuan a hmaa mi te ang bawkin phût a lo nei a. "I lawmman dawn zâtve min pek dawn chuan Lal chu ka hmuhtir ang che." Duhthlan tur a neih loh avangin Birbal-a chuan rem tiin a lut ta a.



Kawngka tawp ber vengtu chuan, "Vawiin chu ni tha tak a ni. Ani khan rangkachak tangka 100 a dawn chuan rangkachak tangka _____ ka nei thei ang a, 1000 a dawn phei chuan ka chan tur chu rangkachak tangka _____ a ni dawn a ni," tiin a lo ngaihtuah zui ve baw k a.

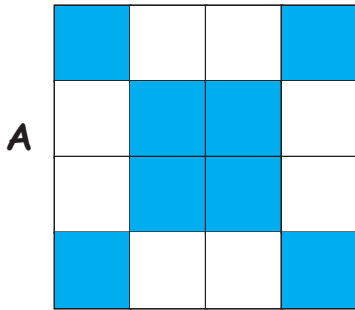
A hla te chu Lal chuan tha a ti em em a, "I kutchhuakte chu a tha hle mai. Lawmman atana i duh duh min dil rawh," a ti a.

"Lalpa, vawi 100 vuak ka duh." "Eng a? Vuak 100 a?" Lalpa chuan mak a ti ngang mai...

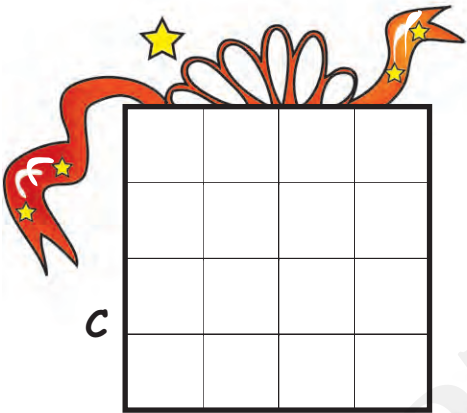
* Eng thil nge a hnua hthleng ta le? He thawnthu hi ziaak zo ang che. Lawmman eng zah nge hla phuah thiam a khan a dawn?



**Thensawma
ziarangte**

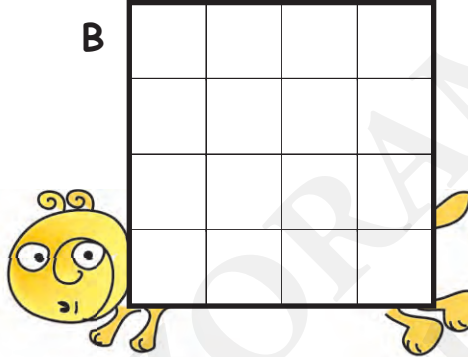


$\frac{8}{16}$ a pawl, $\frac{8}{16}$ a var



- 1) Grid B, C leh D te chhunga awm square thenkhatte hi rawnga cheiin ziarang hrang hrang siam ang che. Grid then hrang eng zat nge i chei? Then eng zah nge chei loh awm? Ziak rawh.

B



D



- 2) Grid A khi en leh teh. Rawnga chei a nih dan khi hetiang hi a ni em?

- a) $\frac{1}{2}$ a pawlin, $\frac{1}{2}$ a varin b) $\frac{2}{4}$ a pawlin, $\frac{2}{4}$ a varin
c) $\frac{3}{8}$ a pawlin, $\frac{5}{8}$ a varin d) $\frac{4}{8}$ a pawlin, $\frac{4}{8}$ a varin

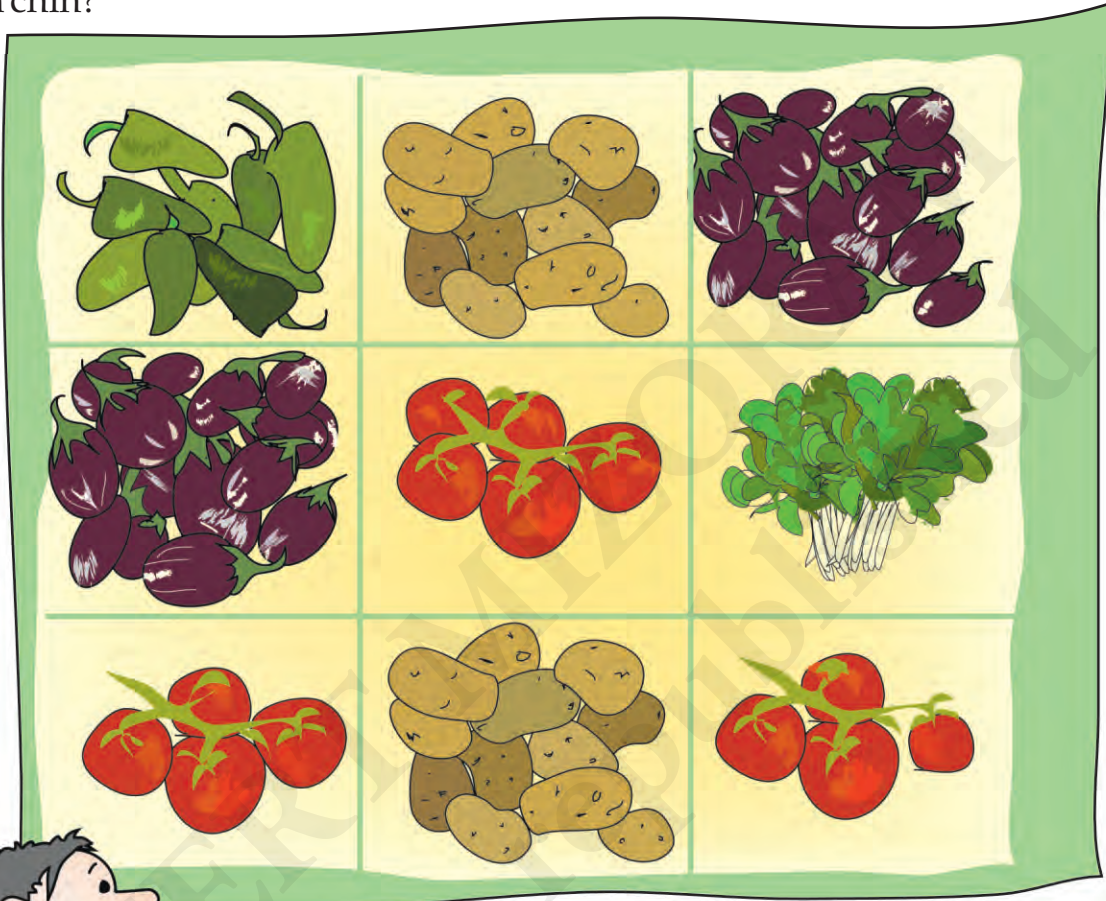
A dik lo zawnah [X] thai rawh.

- 3) Square 16 nei grid pakhat siam la, ziarang nei turin chei rawh.

- a) $\frac{2}{8}$ a senin, $\frac{1}{2}$ a engin, $\frac{1}{4}$ a hringin
b) $\frac{3}{16}$ a pawlin, $\frac{5}{16}$ a senin, $\frac{1}{2}$ a engin

Ramtea thlai huan

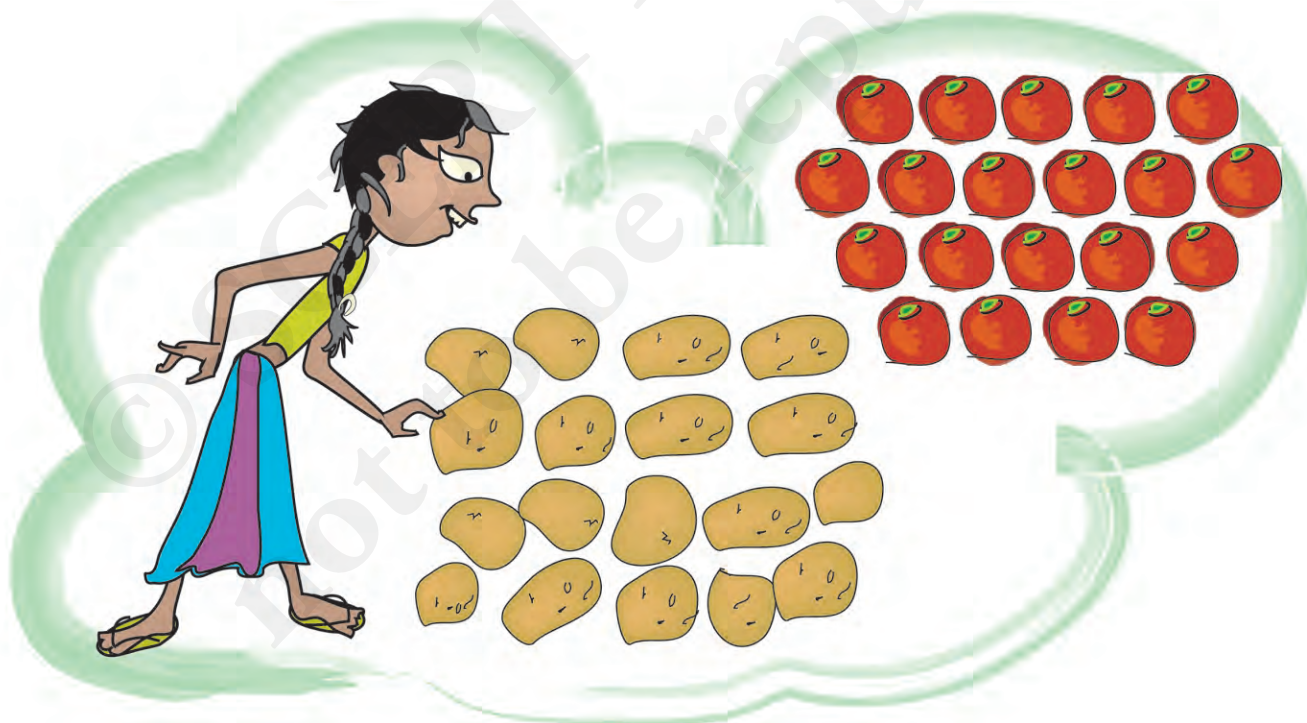
Ramtea thlai huan chu intiat vek hmun kuaa then a ni a. Eng thlaite nge a chin?



- 1) A huanah chuan eng thlai nge a chin hnem ber?
- 2) Huan khawi laiah nge alu a chin?
- 3) Huan khawi lai nge antam chin nâna hman a nih? Khawi laiah nge bawkbawn chin a nih?
- 4) A chung a milem khi thlirin zawhna han siam ve teh le.



* Heng thlaite hi Ramtea chuan a thiante pek a duh a. Thianga chu tomato $\frac{1}{5}$ leh alu $\frac{1}{3}$ a pe a. Seni chuan tomato $\frac{2}{5}$ leh alu $\frac{3}{6}$ a chang a, a bak zawng chu Nancy-in a chang a. Thianga chan zawng chu rawng pawlin kualkhung la, Seni chan zawng chu rawng engin kualkhung ve thung rawh.



* Nancy-i chuan tomato leh alu eng zah ve ve nge a chan?

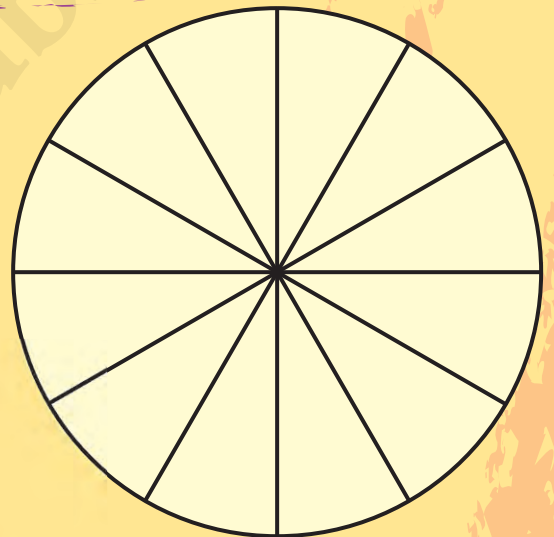
Infiamna: Tu nge rin bial chei hmasa?

He infiamna hi group khatah mi 4 zel awma khelh tur a ni a. Infiamnaa tel zawng zawngte chuan a lema tar lan ang hian circle an siam theuh tur a ni. Pawl tinin lehkha them sawmpanga theuh siamin heng nambar $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{6}, \frac{1}{12}, \frac{2}{12}, \frac{3}{12}, \frac{4}{12}, \dots, \frac{11}{12}$ te hi lehkha them pakhatat pakhat zel an ziaak tur a ni.

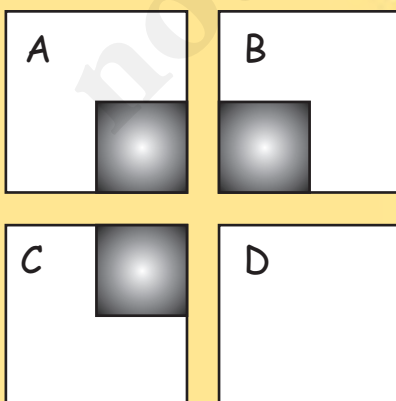
Group tinte chu thu kualin chung lehkha thlehte chu a laiah dah khawmin chawhfin sela; Tichuan infiam tan theih a lo ni ang.

Infiamna tantu chuan lehkha them dah khawm zinga a duh ber pakhat a la anga, chuta nambar inziaak zat chiaah chu a circle siamah rawngin a chei ang. A lehkha them lak chu a dang zingah dah thla lehin an chawh fin leh ang a, tichuan a tih dan ang chuan infiamnaa tel zawngte chuan a inchhawkin an chhonzawm zel ang. Mahni circle siam chei zo hmasa ber chu chaka puan tur a ni ang.

- * Tu nge in pawlah chak?
- * A chak ber chuan lehkha them engte nge a lak?
- * I lehkha them lakte kha ziaak thla rawh.
- * I circle then eng zah nge i chei?



Card Puzzle



A lem hi ngun takin en la, heng zawhna palite hi chhang ang che. I inring em?



60

- 1) *Square A-a a var lai zawng hi intiat chiahin then hnihah then ang che. I ti thei em? A har em?*

Zawhna pahnihna hi han ti leh teh le.

- 2) *Square B-a a var lai zawng hi intiat chiahin hmun thumah then ang che.*

Hei pawh hi a awl ti rawh?

Zawhna pathumna hi han ti leh teh.

- 3) *Square C-a a var chin zawng hi intiat chiahin hmun li-ah then ang che.*

A har deuh em? Lungngai suh, hmanhmawh miah lovin ngaihtuah rawh. A ngaihna i hriat loh hunah chauh a chhanna chu i en dawn nia.

Hei le! A tawp ber atan.

- 4) *Square D-a a var chin zawng hi intiat chiahin hmun sarahah then ang che.*

Hei hi second sarah leka ti thei an awm asin; world record a ni hial a ni. Nang chuan tih ve nan minute tam tak i mamawh mai thei. Tih dan i ngaihtuah peih tawh lo em? Phek 68-naah a tih dan i en dawn nia.

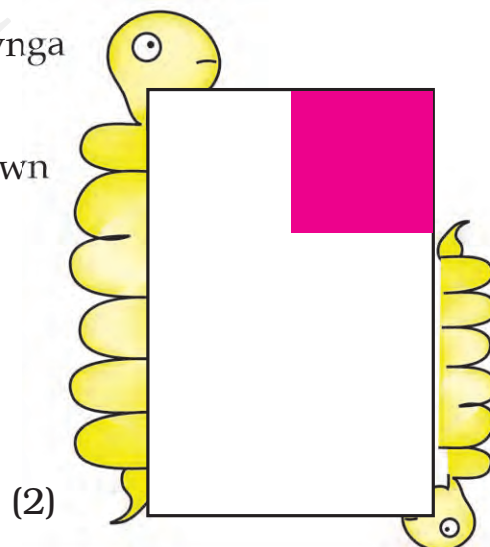
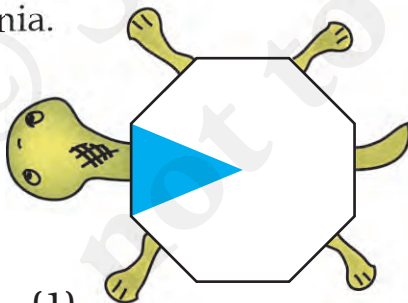
A har em?



Ring chhin la, finfiah rawh

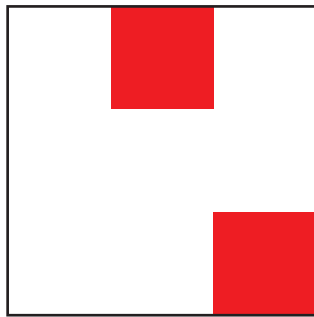
- A) A pum atanga then eng zah nge rawnga chei a nih?

Ring chhin phawt la, i finfiah leh dawn nia.

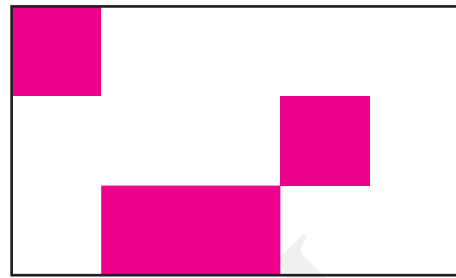


Circle rawnga chei ang chi infiamna leh a dangte pawh class-a tihpui thin ni se. Heng infiamna atanga zawhna awm leh sawi ho hian naupangten fraction an hriat thiamna kawngah thui tak a tanpui thei a ni.

(3)

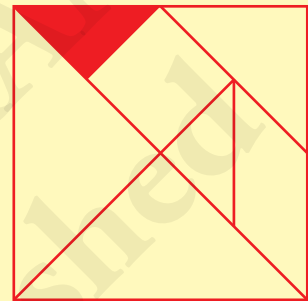


(4)



B) He lem hi i la hria em? A chhûnga triangle-te hi han thlir teh. Square bung hrang khawi lai ber nge a nih? Engtin nge i zawn chhuah ang?

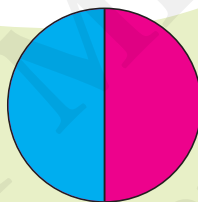
Triangle liante leh pianhmang dangte hi triangle têah then rawh (a sen tiat hian). A vaiin triangle eng zat nge awm?



Rawnga cheite

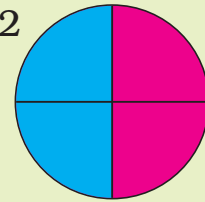
Hengte hi ti zo rawh.

1



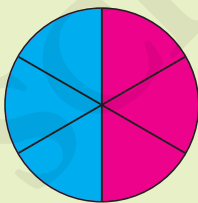
He circle hi intiat chiaha hmun hniha then a ni. Rawng pawla chei zawn chu _____ pakhat a ni.

2



He circle hi intiat chiaha hmun ____ a then a ni. Rawng pawla chei zawn chu _____ a _____ a ni.

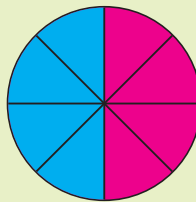
3



He circle-ah hian

.....

4

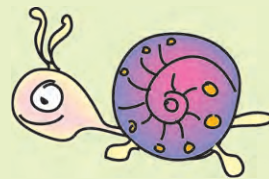


He circle-ah hian

.....

Tichuan, hetiang hian kan sawi thei.

$$\frac{1}{2} = \frac{2}{4} = \frac{4}{8} = \frac{6}{12}$$





Cake zai

Zuala chuan a fate Zovi leh Nuteite tan cake a lei a.

Intiat chiahin a zaisak a.

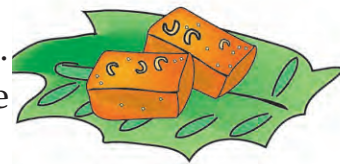
- * An pahnih chuan then _____ ve ve an chang a.
"A lian lutuka kan ei thei lo," an ti a, tichuan cake chu a chanve ve veah a zaisak leh a.

Zovi chuan zai lèp eng zah nge a chan tak? _____

- * Cake pum atanga then eng zah nge a nih? _____

"Phel te leh deuh rawh, ka pa," tiin an ngen a.
Tichuan cake chu te zawkin a zaisak leh ta a.

"Ka pa, kan lawm e."



* Zai lèp eng zah ve ve nge an unau chuan an chan tak?

* Zai lèp khat chu cake pum then eng zah nge ni ta?

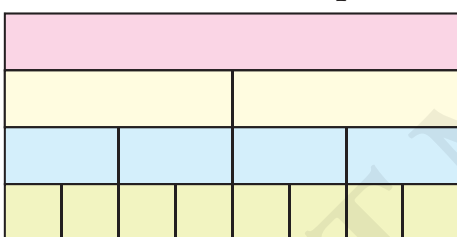
* Zualan cake chu then rukah intiat chiahin then ta se, lèp eng zah ve ve in nge an chan theih ang? Zawhna 1 atanga 4-na atana i chhannate chu en la hei hi ziaak khat rawh le.



$$\frac{1}{2} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$$

Strip-a bung hrang awmte

A lem hi en la, strip li-ah then a ni. Strip hringa then te khat hi strip hring pum pui atang chuan then eng zat nge a nih? Rawng tina bung khat zelte hi anmahni strip-ah theuh hian then eng zat nge an nih?



$\frac{1}{4}$ eng zahin nge a chanve siam?

$\frac{1}{8}$ eng zahin nge $\frac{1}{4}$ siam?

$\frac{1}{2}$ ah hian $\frac{1}{8}$ eng zah nge awm?

Tunah chuan a lem ngai hmang hian i thiante han zawt teh le.

Ziarang

He square hi en teh.

Then eng zah nge rawng pawla chei a nih?

Then eng zah nge rawng hring ni?



Ngaihtuah ngai: An intluk em?

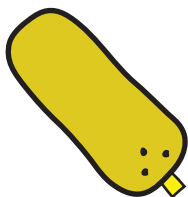
Aruati chuan thil chanve chanve hi $\frac{1}{3}$ nen inang reng a ti a. I pawmpui em?

Engtin nge i hrilhfiang ang?

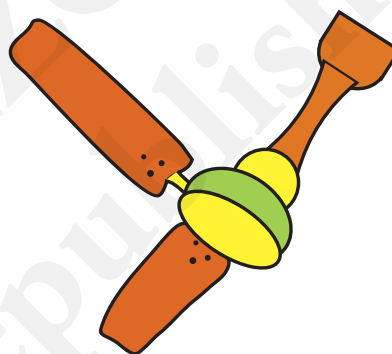
Hmanraw hrang hrang (nawhalh fung, bottle chhin leh a dangte) hmanga heng $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10}$ tih ang fraction intlukte hi zirtir a nih hian naupangten a awmzia tak leh hriat thiamna an neihna kawngah a pui thei. Naupangte chu lehkhah hmangin fraction strip chi hrang hrang siamtir la, tichuan chung an siamahte chuan fraction hrang hrang chein khaikhintir ang che.

Them atangin a pum

- 1) He lemah hian pangpar mal (petal) $\frac{1}{5}$ a lang a, a par mal dangte ziakin milem hi ziaak pum ang che.



- 2) He lemah hian fan bân $\frac{1}{3}$ a lang a, a bân dangte ziah belhin a lem hi ziaak pum ang che.



- 3) Hei hi fan dang lem niin, a bân neih chanve tihlan a ni. A chanve dang lem ziakin a lem hi ziaak pum rawh. A bân eng zat nge i ziah belh?

Cheng leh pawisa nawi

 eng zahin nge cheng khat siam?

Duli (50p) hi cheng khat chanve a ni em?

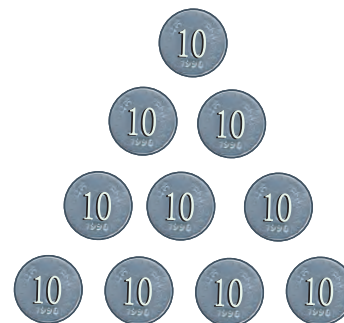
 eng zahin nge cheng khat siam?

Siki (25p) hi cheng khat then _____ a ni.

Naia 20 (20p) hi cheng khat then _____ a ni.

Naia 10 (10p) eng zahin nge cheng khat siam?

Tichuan, naia 10 chu cheng khat then _____ a ni.



Pitar thurochhiah

Hmanlai hian pitarte pakhat hi a awm a, a fanu pathumte nen an cheng ho va. Amah chu hausa tak niin sanghawngsei 19 lai a nei a. Ni khat chu a dam lo va. A fanute chuan doctor an ko va. Doctor chuan a theihtawp chhuah mah se, pitarte nunna chu a chhanhim zo ta lo va. A thih hnu chuan a fanute chuan an nu thurochhiah chu an chhiar a.

Ka fanu upa berin ka sanghawngsei neih zinga $\frac{1}{2}$ a chang ang.

Ka fanu pahnihnain ka sanghawngsei neih zinga $\frac{1}{4}$ a chang ang.

Ka fanu naupang berin ka sanghawngsei neih zinga $\frac{1}{5}$ a chang ang.

A fanute chu an buai ta hle mai a. "Engtin nge sanghawngsei 19 zinga $\frac{1}{2}$ ka neih theih ang?" tiin a fanu upa ber chuan a naute chu a zawt a.

A fanu pahniha chuan, "19 chanve chu pakua leh a chanve a ni a, mahse sanghawngsei chu bun chi a ni si lo va!" a lo ti a.

Chutih lai tak chuan an nutei lo kal an hmu a, anni chuan an harsatna chu a hnenah an thlen ta a.

An nutei chuan, "Thurochhiah chu min han hmuh teh u. Tih dan ka hria, ka sanghawngsei hi la tel ula tichuan sanghawngsei 20 in nei anga i nu duh dan takin sanghawngsei chu in insem thei dawn alawm," a ti a.

"I duh chu sawnghawngsei awm zat zawng zawng chanve a ni lo'm ni? Kha, sanghawngsei 10 hi la ta che," tiin fanu upa ber chu a hrilh a.

Fanu lai hnenah chuan, "I chanvo chu la ve ta che," tiin a hrilh leh a. A ni chuan sanghawngsei hmun lia thena hmun khat ($\frac{1}{4}$) lain sanghawngsei ____ a chang a.

A naupang ber hnenah chuan, "Sanghawngsei pangaa pakhat chu i la thei e," a ti a. Ani chuan sanghawngsei ____ a chang a. Tichuan pitar fanute chu hlim taka awmin an sanghawngsei neih chu an chhiar a.

$$10 + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = 19.$$



Dinga Time Table

[illegible]

Hengte hi rawng hrang hrang
hmangin entir ang che.

Lehkha zir chhung: Ni khat $\frac{1}{4}$

Mut nan? Darkar

Lehkha zir nan? Darkar

Infiannan? Darkar

Ni khata then eng zat nge thil dang
tih nan a hman?

Dinga chu zan dar 10-ah muin
zing dar 6-ah a tho thin. Zing
dar 7 atanga dar 8 thleng leh
tlai dar 4 atanga dar 6 thleng a
infiarn thin bawh.

Ni khatah darkar 24 a
awm chuan engtin nge ni
khat $\frac{1}{3}$ ka zawn chhuah
theih ang?

Sikul Chanchinbu

Sikul pakhat chuan thla thum dan zelah chanchinbu tihchhuah an tum a. Kum khatah chanchinbu eng zah nge an tihchhuah ang? An chanchinbu chu thla thumna tawpah zel chhut duh ta se, eng thlaah nge an chhut ang? Chu thla nambarte chu thai rawh.

1	2	3	4	5	6	7	8	9	10	11	12
---	---	---	---	---	---	---	---	---	----	----	----

Sleeping Beauty!

Ravana-a unaupa Kumbhakarna-a chanchin i hre tawh ngai em? Kum chanve tawp a muthilh avangin hriat a hlawh hle.

Mi tam zawk chu ni khatah darkar 8 an muhil thin. Chu chu ni khat then hmun eng zat nge? _____

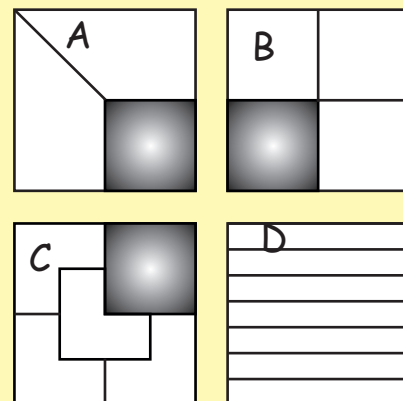
Tichuan, kum khat then hmun eng zat nge an muthilh thin? Kum 60-a upa chu kum _____ chung a muhil a tih theih.



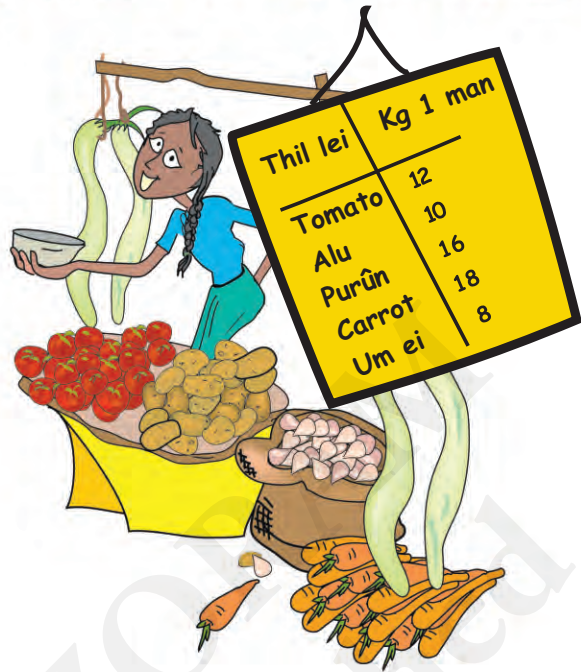
Chhanna: Card Puzzle (phek 60-na)

Square D-ah i tang em ni?

Siam awlsam ber a ni zawk asin! !



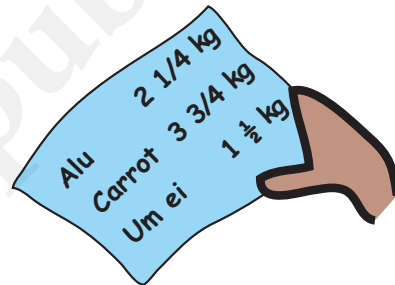
Naupangte chu thil hrang hrang tih nana nilenga hun hrang hrang an hman dan ngaihtuahtir ni se. In lama chet tam ngai naupangte dinhmun hriat thiamna ni thei se. Tin, kum khata hun hrang hrang awmte ngaihtuah tel turin fuih a pawimawh.



Kûri thil lei turte

Thil man intarna rawng eng hi en teh.

- Tomato 2 kg man eng zat nge?
- Tomato $\frac{1}{2}$ kg man eng zat nge?
- Kuri chuan tomato $2\frac{1}{2}$ a duh a, cheng eng zah man nge ni ang?
- Alu $3\frac{1}{2}$ kg man eng zat nge?
- Carrot $1\frac{1}{4}$ kg man eng zat nge?
- Um ei $4\frac{3}{4}$ kg a lei a, a man chu _____ a ni.
- Kuri'n lehkhapuana thil lei tur a ziahte hi en la, heng zawng zawng lei tur hian cheng eng zat nge ngai?
- I thlai lei duhte ziake chhuak vek la, chung lei nan chuan chêng eng zat nge ngai tih chhut chhuak ang che.



Thil lei	Kg 1 man	A man
Belhkhawm		

Naupangte chu thil man leh pawisa pekna bill hrang hrang khawn khawmtir la, chung an lak khawmte chungchang chu sawi hotir rawh.

Itih ve hun

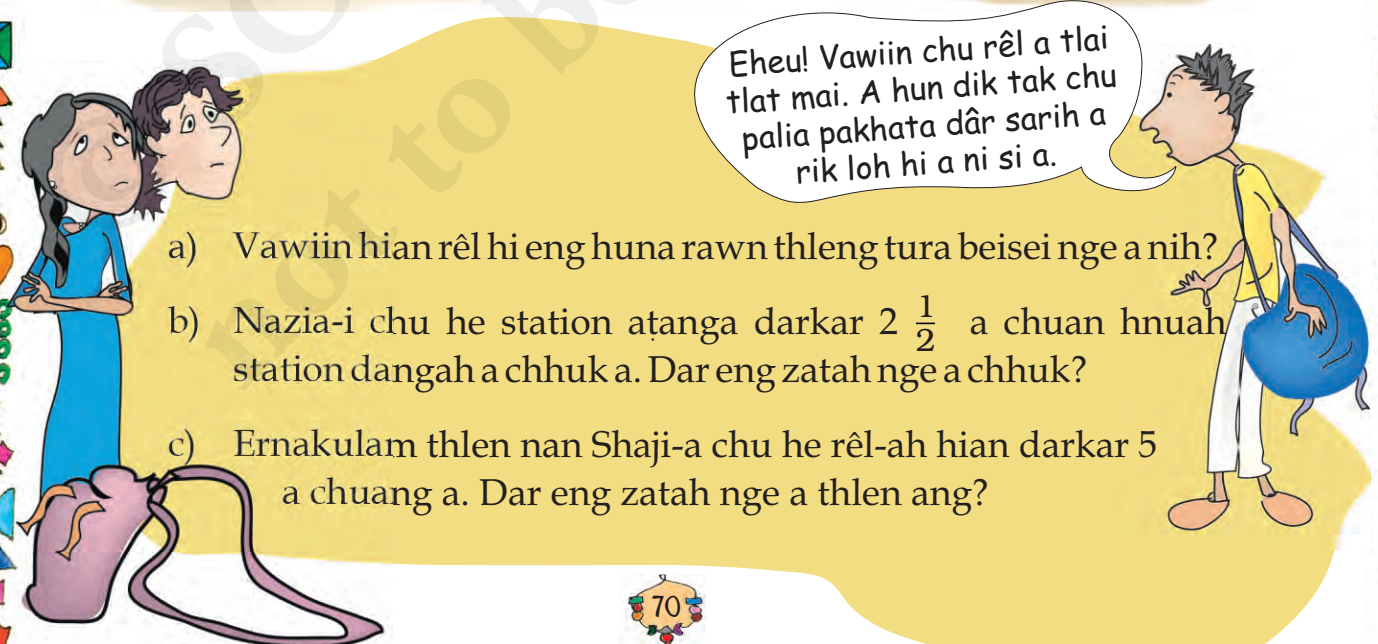
1) *Rohminga kalkawng*

Sikul thlen nan Rohminga chuan $1\frac{1}{4}$ km-a thui a kal a ngai a. Sikul kalna leh haw leh nan engtia thui nge a kal?

2) *Eng ang pawisa nawi nge?*

Lali chuan cheng sarih leh duli-in pen leh pencil a lei a. A lei nan ₹10/- a pe a. Dawrkai chuan cheng chanve leh cheng palia pakhat hlirin a kir a. Eng pawisa nawite nge a dawn?

3) *Rel Station-ah*



5

A Lan Dan a In Ang Em?

Rawng far hmangin ziarang siam ang u



Ziarang han siam teh



Lehkha phek khat la la.



A lai takah thlep rawh.



Kai pharh la, a lai tak a rin ah rawng far ang che.



Vawi hnih thlep la, rawng chu zut pherh rawh.

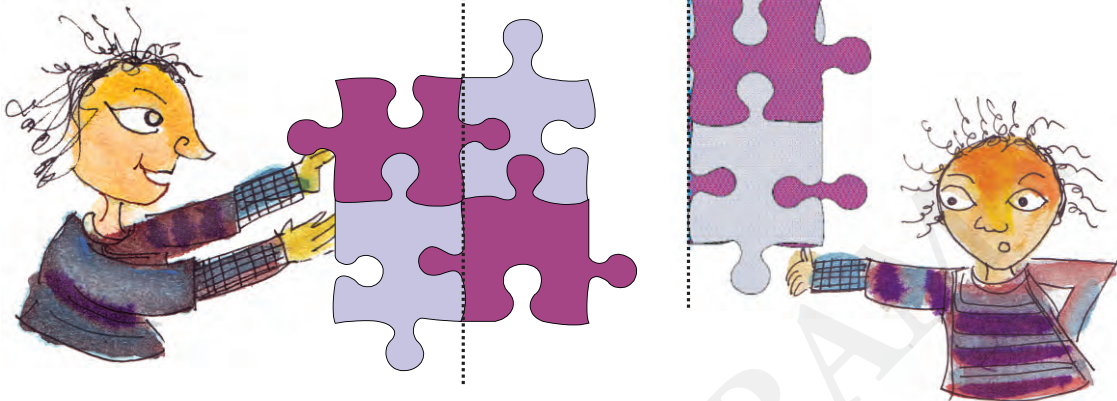
Kai pharh leh la tichuan ziarang mawi tak i hmu ang.



He ziarang hi zâwngfian phel* (mirror halves) ni turin i phel thei ang em? Eng zatin nge i phel theih?

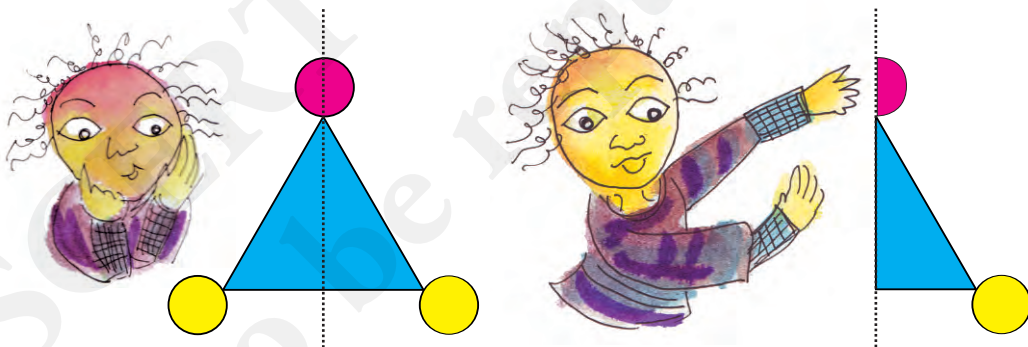
*Zâwng fian phel ang - Thil pianhmang inang chiah chiah sawina a ni a. Hetah hian a lehlam lehlam inang sawi nan hman a ni.

Heng ziarangte hi han en teh.

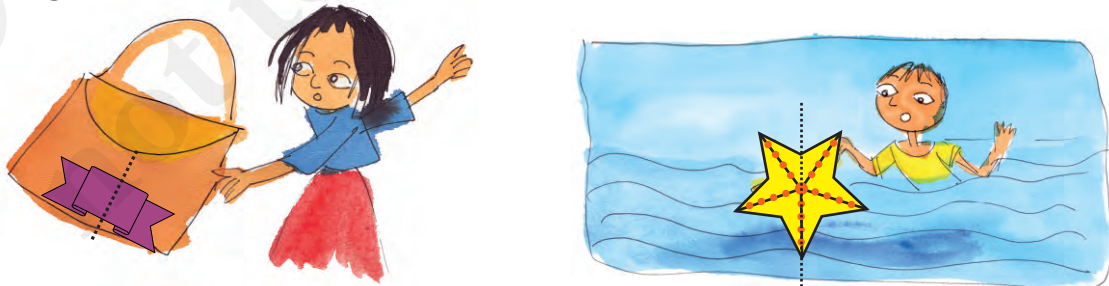


Chhunhan rinngil (dotted line) hian a chung a pianhmang hi hmun hnihah a phel tih i hmu a. Mahse rinngil chhunhanah tak hian han thlep la, a vei lam pianzia hian a ding lam pianzia chu a khuh zo lo tih i hmu ang. Tichuan a chung a pianzia pahnihte hi zawng fian phel ang an ni lo. Tunah chuan pianhmang dang i lo en leh teh ang.

A hnuaia pianhmang hi chhunhan rin ngil taka i thleh chuan, a zahve pianzia hian a lehlam pianzia chu a khuh zo vek thei tih i hmu ang. Pianze pahnihte hi *zâwng fian phel ang* kan tih chu a ni.



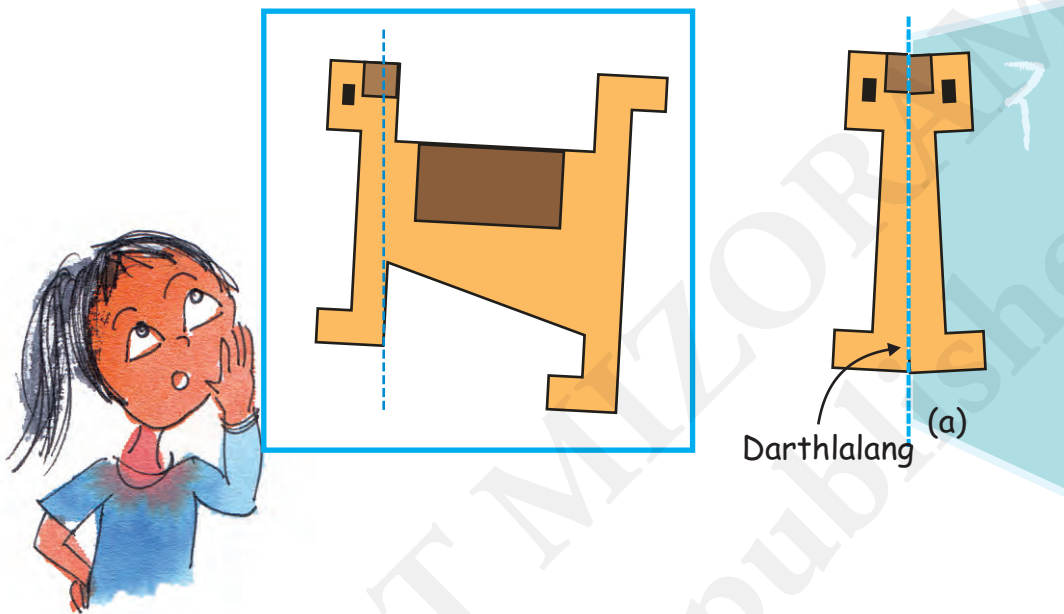
Heng milemahte hian han tichhin ve teh le.



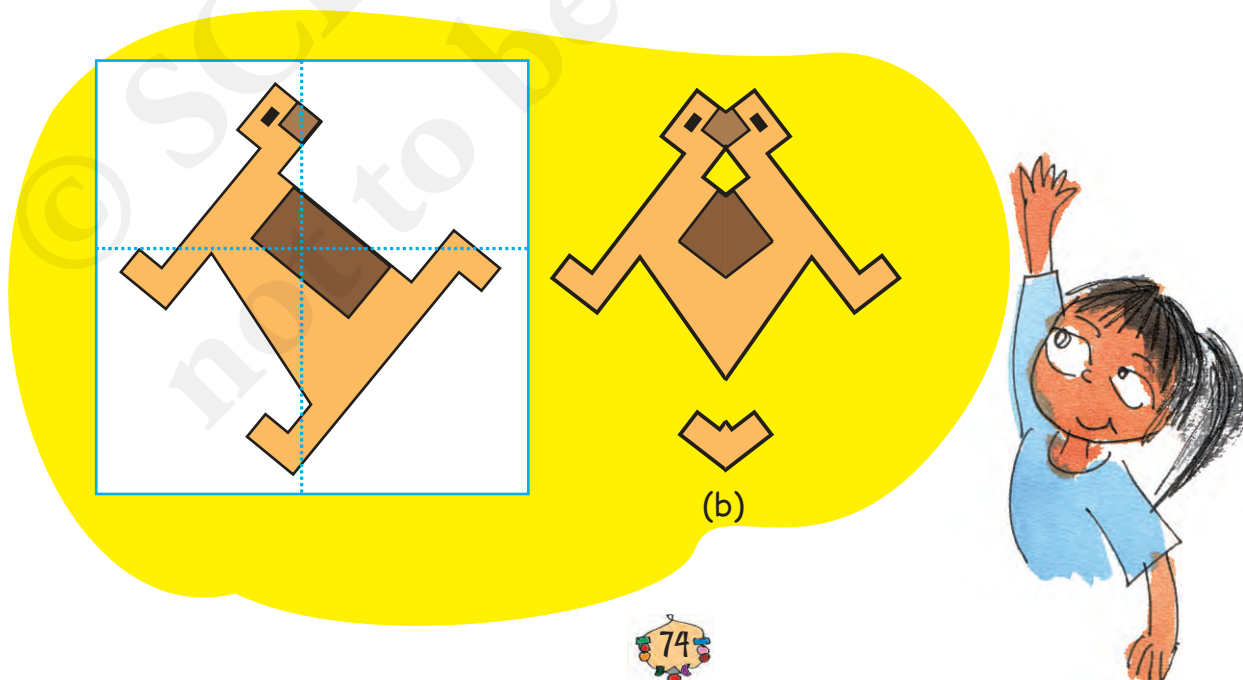
A phek dawtah hian, Naupang tan pianzia intluk chiah pawh, a rawng chei danglam dan azirin pianzia hrang daih angin a lang thei tih an hriat thiam a pawimawh hle. (Entirnan, Pianhmang/Milem 10-na leh 12-na en rawh). A pianzia avang leh a rawng cheidan a zira pianze intluk lo awm theih dan naupang hrilhfiah ang che .

Darthlalang hmanga infiamna

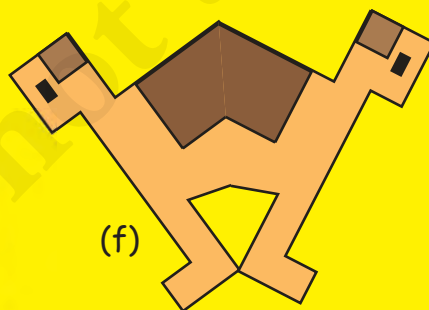
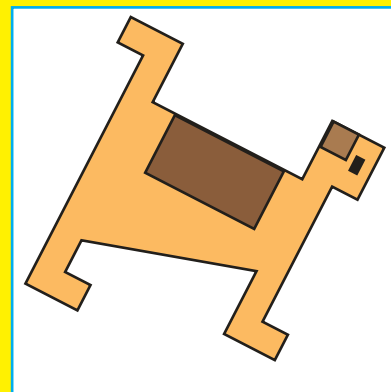
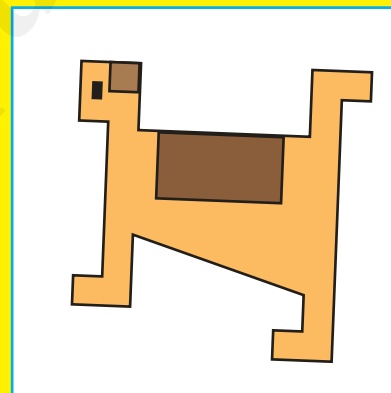
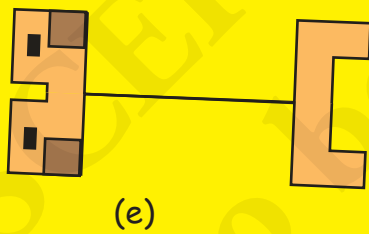
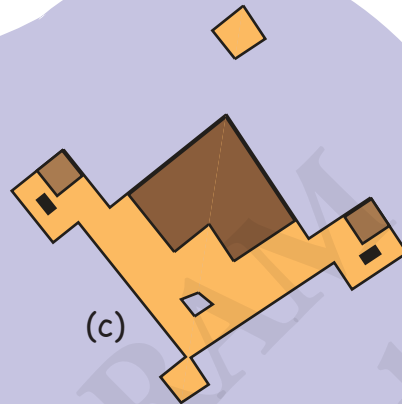
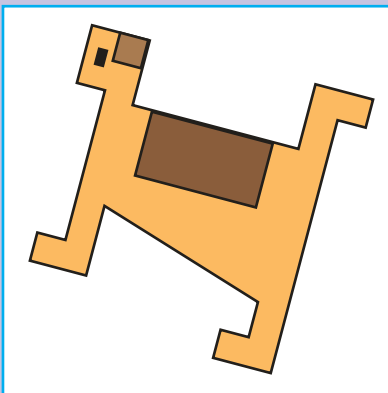
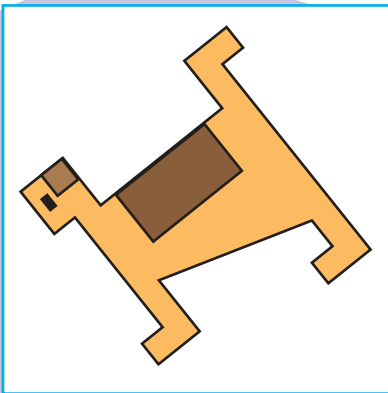
1. Hei hi uite lem a ni. Chhunhan rinngilah hian darthlalang han dah teh. Tichuan chhunhan rinngil ding lam ui lem chu hmuh theih lohvin darthlalang chhung lamah a awm tih i hre thei ang. I hmuh dan tur chu a lem (a) ang hi a ni.



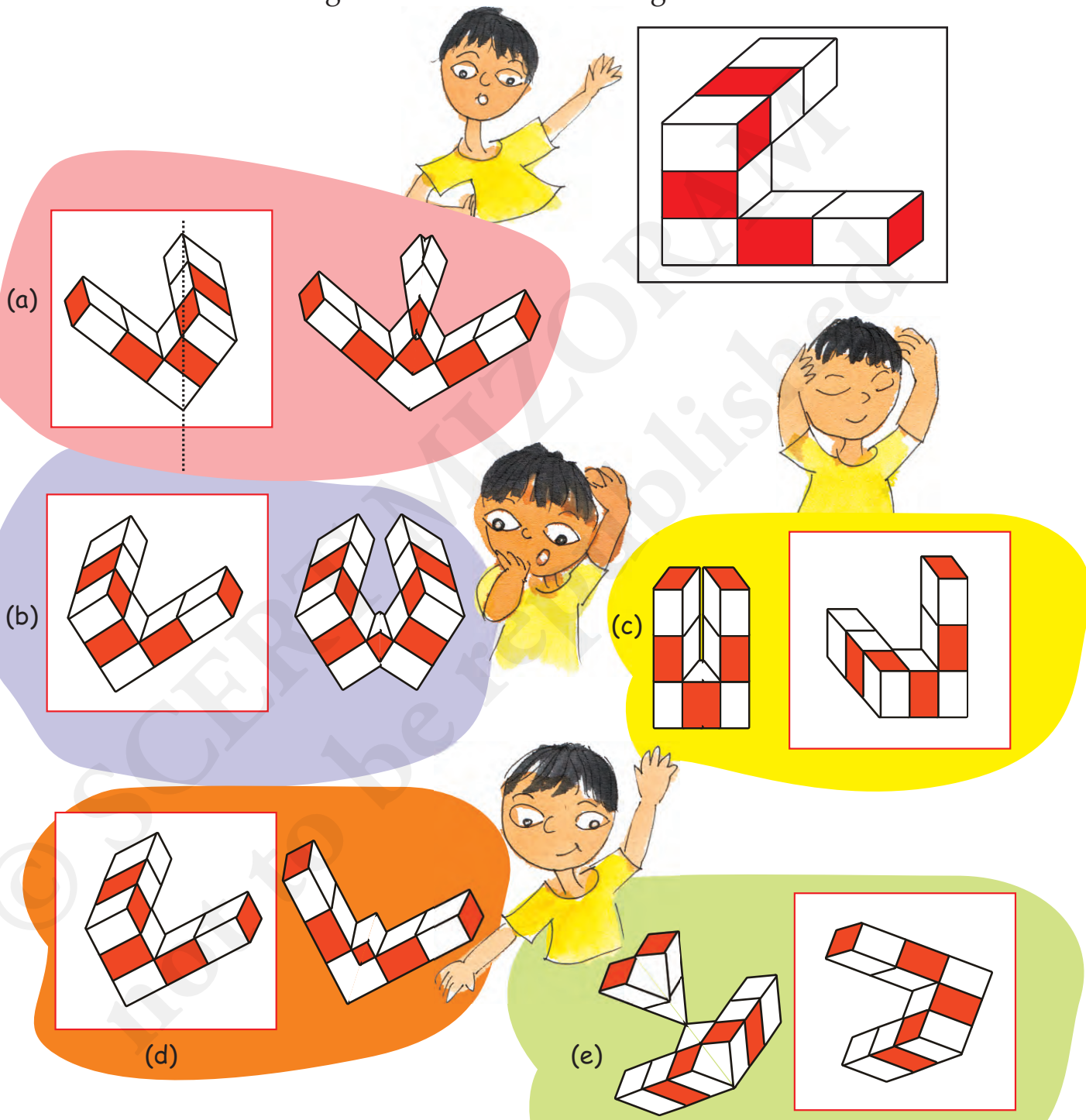
Bâwm vara milem hi han en teh. Pianzia (b) anga awm tur hian khawi chhunhan rinngilah nge darthlalang kan hun ang? Khawi lai pianzia nge darthlalang kan dah hnua hmuh theih loh tur lai han sawi bawk teh.



A piah chiah pianzia anga awm turin bawm var chhungah chhunhan rinngil han siam ve teh le.



2. Ruata chuan a sen leh a vara a inpawlhin pianzia/ milem a siam a. A bul chiah pianhmang ang awm tura bâwm var hmasa ber rinngil hi ngun takin en la. Tichuan, bâwm var dangah a bul chiah ami ang pianhmang nei turin darthlalang dahna tur chhunhan rinngil han siam ve teh le.



A chung a pianhmang thiang lem awmte ngun takin naupang entir la, bâwm var chhungah khian khawi hmunah nge darthlalang dah ila, a bula pianhmang ang chiah khi chhuak thei ang? Darthlalang dahna turah chuan chhunhan rinngil rin chhintir ang che.

Zatve Her

Hmanlai hian lal pakhat a awm a. Rukruin a robâwm ațanga rohlu man tam tak tak an ruksak fo avang chuan a mangang thei hle a. A hnuaia mi hi a robawm lan dan chu a ni.



A robâwm kalhna chu a zatve herhin a inhawng thei a. A zatve dang herh vir leh chuan a inkalh leh thei a.

Lal chuan a robâwm chu a kalh emaw tiin kalh si lovin a kalsan fo mai thin a lo ni. Eng nge a chhan han ring chhin teh le?



In hawng

In kalh

Ni khat chu a fanu fing tak chuan a tih dan tur a kawhbmuh ta a. Lal chuan tha a ti hle mai a. Chuta tang chuan Lal chuan a robawm inkalh leh inhawng chu a hriat pawlh tawh ngai lo a ni.



Eng thil nge a fanu chuan a kawhbmuh han ring teh le.

Lal fanu chuan lal hnenah chuan a kalhna rawng eng pakhat chuan chhinchhiahna siam turin a hrih a lo ni.



Lal chuan robawm tam tak a kalhna chi hrang hrang a nei a nei teuh va. A zatve tuaivira inhawng leh a dang zatve tuaivir leh a inkalh thei ni ta se, Lal hian a hriatpawlh ve thei tho ang em han ring teh le.



$\frac{1}{2}$ her hnu a ngaiawh

A hnuaia pianzia chi hrang hrangah hian a zatve her hnua lan dan ngai chiaha lang thei han ring chhin teh le.



Hemi phek dawt chiah thawnthua tihturin a kawhbmuh tum ber chu (i) pianze awmze neisa tih danglam (ii) pianzia awmsa atanga pianze awmze nei dang siam chhuah a ni.

Chhan harsa i ti em? Harsa i tih chuan hmuh chhuah dan kawng a awm
asin. I tih dan tur chu hetiang hi a ni.

Pianzia eng emaw ber khi han la teh. Chu pianzia chu lehkhapuanah
han zul teh le. Tichuan i pianze ken chu lehkhapuan zula nghet taka
nem bet chungin a zatve han her teh le.



I tih ve hun



- 1) English hawrawp zingah hian a tuaivir hnua a ngai ang chiaha awmthei han zawng chhuak teh.



- 2) Heng English thumal zingah hian a zahve a tuai vir hnua a ngai ang chiaha chhuak thei engte nge?

ZOOM, MOW, SWIMS, SIS, NOON



- 3) Nambar 0 (bial) atanga 9 (pakua) te a zatveah tuai vir la. Eng nambar-te nge a ngai ang chiaha lang thei zawng chhuak teh le.



- 4) Digit 2, 3 leh 4 nambar a zatve a her hnua a ngai ang chiaha number ni thei zawng zawng han ngaihtuah teh le.

Entir nan

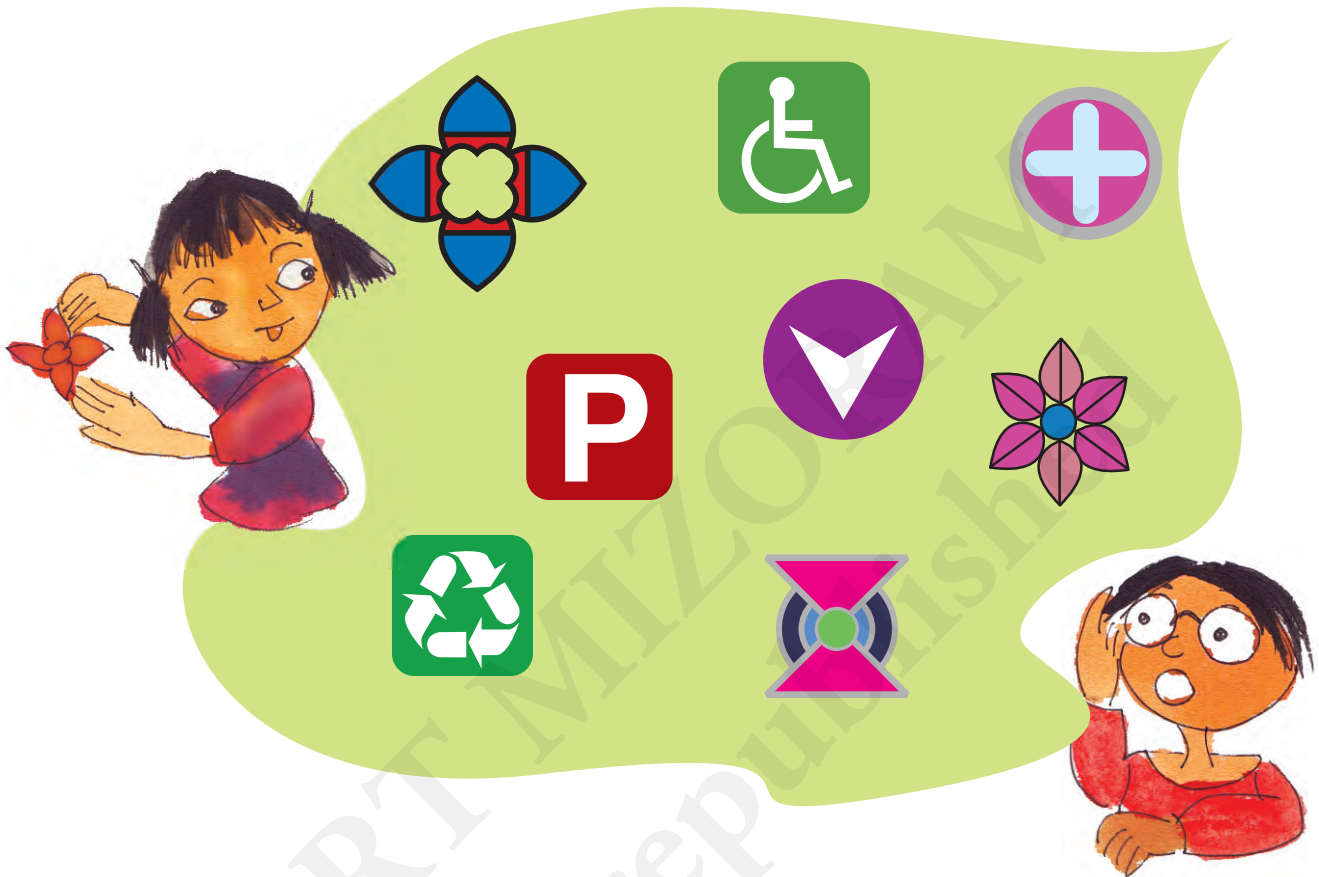


Digit 2 nambar-teah chuan 11, _____, _____

Digit 3 nambar-teah chuan 101, 111, _____, _____

Digit 4 nambar-teah chuan 1001, 1111, _____, _____

5) Heng milem zingah hian khawi lemte nge a zahve a her hnua a ngai ang chiaha lang leh thei?

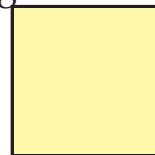
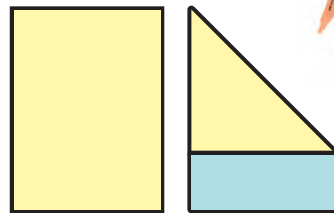


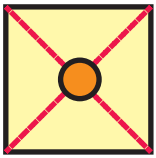
I tih ve hun

Windmill i hmu tawh ngai em? Eng atan nge an hman thin?

Windmill lem i siam ang u.

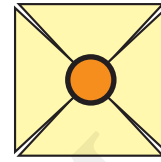
1. Lehkha pherk khat la rawh le.
2. A lema mi ang hian thlep teh le.
3. A rawng pawl chin hi chep thla ang che. Tichuan i lehkhapuan chu square pianzia ang chiahin a lo lang ang.



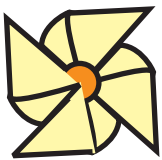
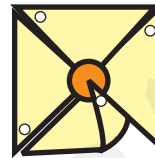


4. Rin ngil sen pahnih zawnah hian thlep ve ve la, tichuan kai pharh leh ang che. A lema kan hmuh ang hian a lai takah circle siam baw k ang che.

5. Rin sen zawnah rin bial thlen hma thlengin chep ang che. Tichuan lehkhapuan chu a lema kan hmuh ang ang hian a lo awm ang.

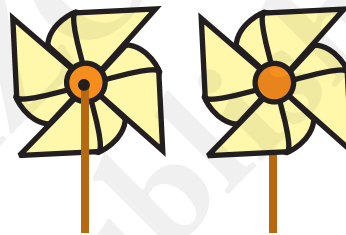


6. Perek/hriau la la, a lem a mi ang hian kil li-ah kua siam ang che.



7. A kil pali kua kan siamna chu a laiah a kuate chu inzawn theuh turin i thlep dawn nia.

8. A kuaah chuan perek thil la, hmawlhateah kilh bet ang che.



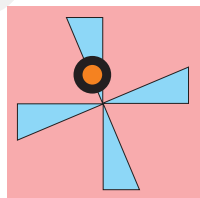
I windmill chu i siam peih ta a. Han tlanpui chhin la, engtianga chakin nge a vir han enchhin teh le.

* I windmill chu $\frac{1}{4}$ her virin a ngai ang chiahin a awm em?

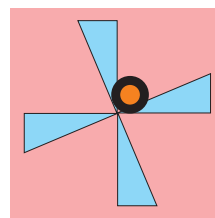
* A zahve a her virin a ngai ang chiahin a awm em? Han sawi ho teh u.

Palia pakhat her

Hmun li a thena hmun khat ($\frac{1}{4}$) a her hnuin ceiling fan hi a ngai ang chiahin a awm thei em?



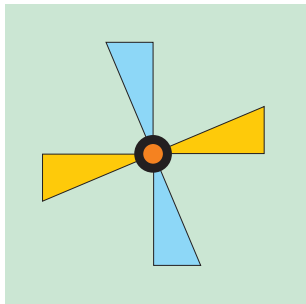
A her vir hma



$\frac{1}{4}$ a her vir hnu



He fan hi $\frac{1}{4}$ a her vir hnuah a ngai ang chiahin a lang ang em? Bâwm engah hian a lem han ziaak teh.



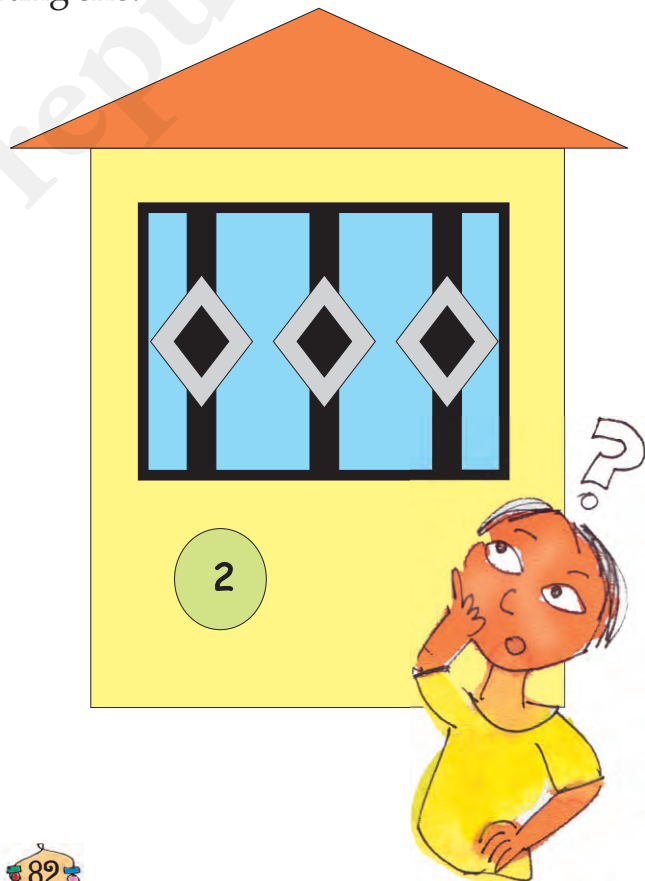
a her vir hma

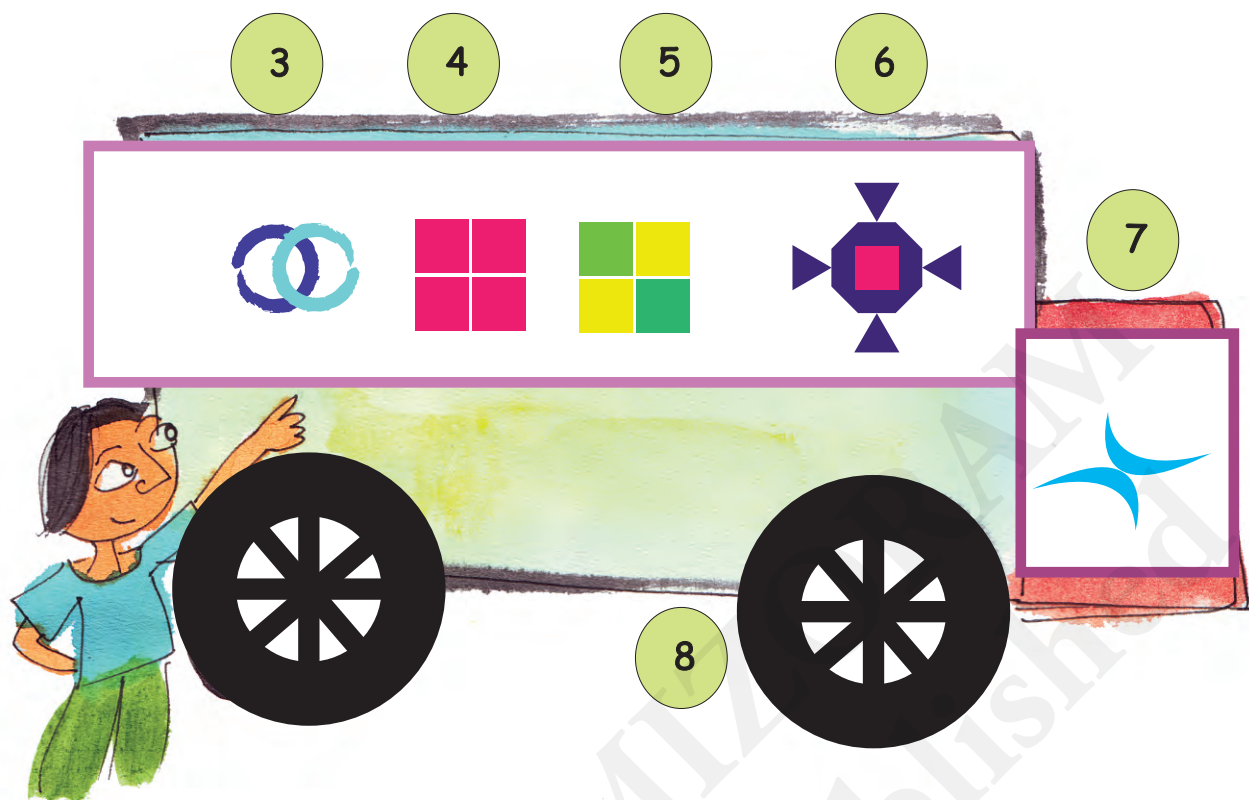


$\frac{1}{4}$ a her vir hnu

I tih ve hun

- A) ✱ Pianhmang te hi en la, $\frac{1}{4}$ a her vir hnuah, a ngai ang chiaha a awm theih chuan (✓) dah ang che.
- ✱ A chanve her hnua pianze ngai ang chiaha awm let thei lo pianziaah chuan (✗) dah ang che.





B) A lemte hi a zahve a her hnua a ngai angin a awm thei em han en chhin la. A awm theih loh chuan a zahve a her hnua a pianhmang ngai ang chiaha awm turin siam rem ang che.





C) A hnuaia pianzia hrang hrangte hi then $\frac{1}{4}$ a her leh a a zahve a her hnua a lan dan han ziaak teh.

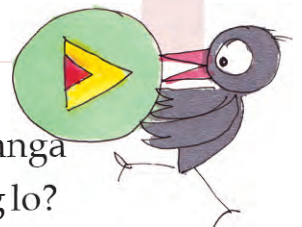


Then $\frac{1}{4}$ a her

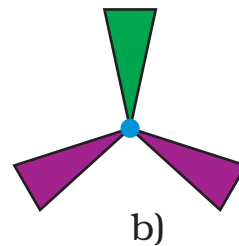
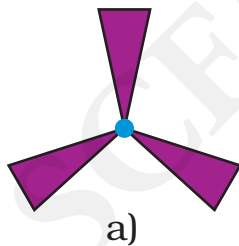
A chanve $\frac{1}{2}$ a her



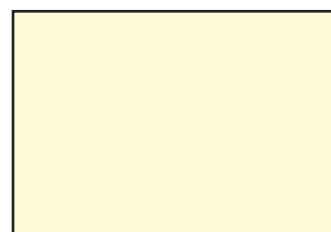
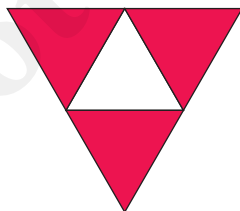
A chung a pianziate khi $\frac{1}{4}$ a her hnua h engte nge a ngai anga lang lo? Eng pianziate nge a zatve her hnua a ngai anga lang lo?



* Khawi fan zawk nge $\frac{1}{3}$ a her vir hnua h a ngai ang chiaha lang thei le?



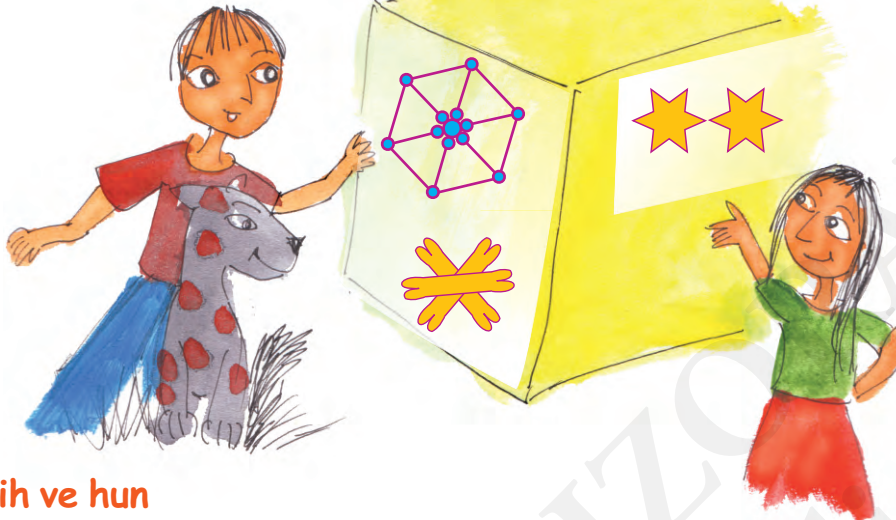
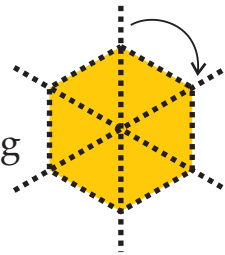
* $\frac{1}{3}$ a her hnua a pianzia tur han ziaak teh.



$\frac{1}{3}$ a her hnua a pianzia

Paruka pakhat her

$\frac{1}{6}$ a her hnuin he pianzia hi a pianze ngai ang chiahin a lang a ni tih i hmu em?



I tih ve hun

- Pianze hrang hrangte hi en la, $\frac{1}{3}$ leh $\frac{1}{6}$ a her vir hnua a pianzia tur han ziaak teh.

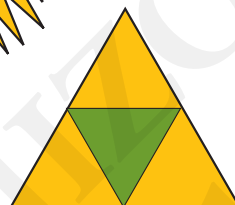
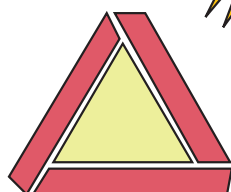
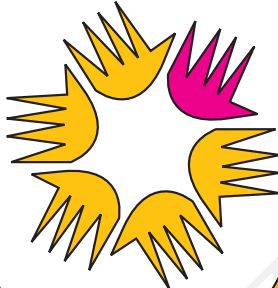
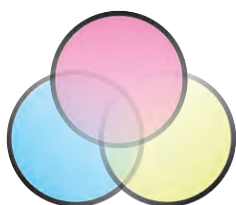
	$\frac{1}{3}$ a her	$\frac{1}{6}$ a her

A chung a milemte khi naupangte uluk takin entir la, engtia her in nge ngai an awh leh theih ngaihtuhtir rawh le. A tul chuan $\frac{1}{6}$ a her nan rinngil hmangin pianzia chu hmunruk inangah siamtir rawh. $\frac{1}{6}$ a her hnua a ngai pianzia anga awm thei chu $\frac{1}{3}$ a her hnua pianzia ngaiawh thei a ni bawk tih hre fiah turin pui ang che. ($\frac{1}{6}$ a vawi khat her leh $\frac{1}{3}$ a vawi hnih her chu thil intluk a ni)

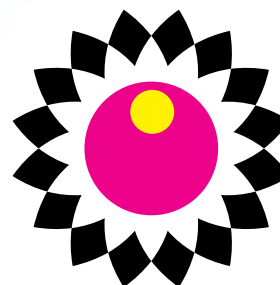
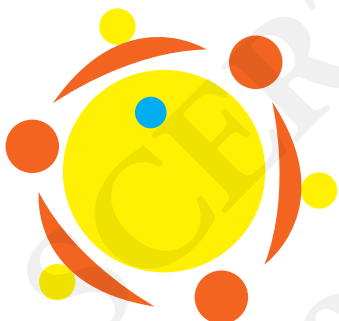
2. A hnuaia pianhmang hrang hrangte hi han en teh —

a) $\frac{1}{3}$ a her hnua pianze ngai anga lang thei zawng chhuak la, tichuan chhinchhiahna (✓) dah ang che.

b) $\frac{1}{3}$ a her hnua pianze ngai anga lang thei lo zawng chhuak la, tichuan chhinchhiahna (X) dah ang che.



c) $\frac{1}{3}$ a her hnua a pianze ngai angin a lang thei em tih en chhin la, a awm theih loh chuan lang thei thei turin siam rem ang che.



3. Pianze thenkhat $\frac{1}{3}$ i her hnua pianze ngai anga lang thei han ziaak teh.

4. Pianze thenkhat $\frac{1}{6}$ i her hnua pianze ngai anga lang thei han ziaak teh.



Ka Multiple Ni La Kei Factor

Zawhte leh Sazu

Zawhte ril tam tak hian sazu man a tum a. Sazu chu step 14-naah awmin, tum khat zuanah step 2 zel a zuang thei a. Zawhte chu step pathumnaah a awm a. Vawi khat zuanah step 3 zel a zuang thei a. Sazu hian step 28-na a thlenin a kuaah a biru thei. Sazu hi a biru hman nge hman lo zawng chhuak teh!

a) Sazu tumna step-te chu —

b) Zawhte tumna step-te chu —

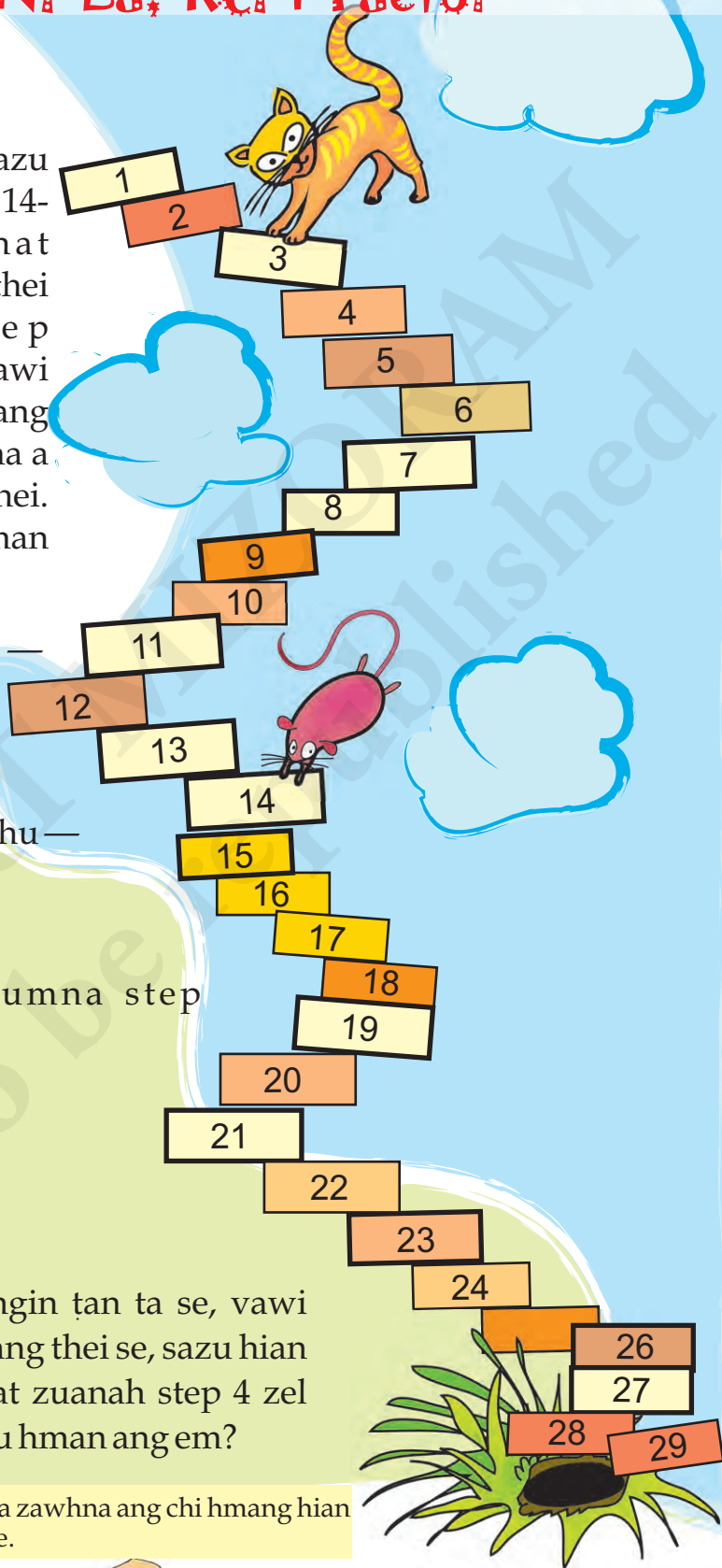
c) Zawhte leh Sazu tumna step thuhmunchu —

d) Sazu hi a biru hman em?

Zawng chhuak teh

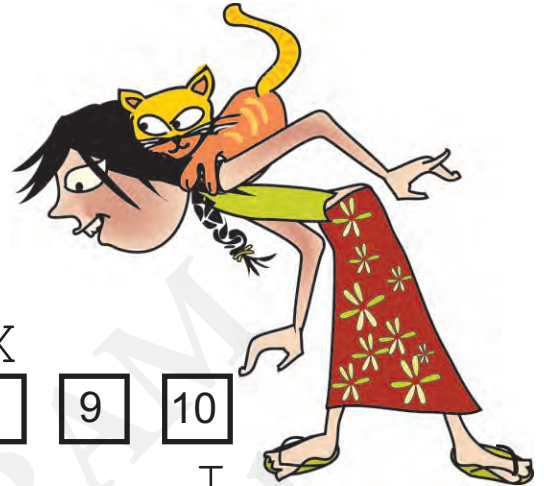
Zawhte hian step 5-na atangin tan ta se, vawi khat zuanah step nga zel zuang thei se, sazu hian step 8-naah tanin, vawi khat zuanah step 4 zel zuang thei ta se, sazu hi a biru hman ang em?

Naupangte tihphur nan a chung a zawhna ang chi hmang hian nambar dang hmangin tihtir ni se.



Zawhte hian tu nge a nghah?

Zawhte chuan tu emaw a nghak a. Tu nge a nghah i hria em? Hetiang hian a zawn chhuah theih.



1	2	3	D 4	5	6	7	X 8	9	10
	M 11	12	13	14	15	P 16	17	18	I 19
			O 21	22	23	24	25	26	27
	R 31	32	33	N 34	35	U 36	37	38	39
			B 41	42	43	W 44	45	S 46	47
	J 51	52	53	54	55	H 56	57	58	E 59
									60

Nambar 2-in a sem ral theih zawng zawng rawng senin chhinchhiah rawh. 3-in a sem ral theih zawng zawng chu rawng engin, 4-in a sem ral theih zawng zawng te chu rawng pawlin chhinchhiah leh rawh.

Eng bâwmte nge rawng chi thuma i chhinchhiah?

Chung bâwm chung a hawrawp inziakte chu engte nge?

Chung hawrawpte chu a indawt danin han ziaak teh.

Ngiau Game

He game khel tur hian, a biala din kual tur a ni. An zinga pakhat chu 'pakhat' tiin a au lauh ang a, a dawta mi chuan 'pahnih' tiin a lo sawi ve leh ang, a dawta miin chutiang zelin. An zinga '3' tih sawi tur emaw 3-in a sem zawh theih nambar emaw sawi turten nambar sawi aiah 'ngiau' tih an sawi ang. A 'ngiau' theihnghilh chu game atangin a chhuak nghal ang a, a tawp thlenga awm thei chu chak ber a ni ang.

Khawi nambar aiah nge 'ngiau' kan hman?

3, 6, 9

Heng nambarte hi 3-a sem theih (multiple) kan ti.

Hetiang game hi a nambar 4-ah thlakin han ti ve teh u. Tichuan eng nambar aiah nge 'Ngiau' tur?

Heng nambarte hi 4-a sem theihthe an ni.

* 5-a sem ral theih nambar i duh duh sawm
ziak teh.

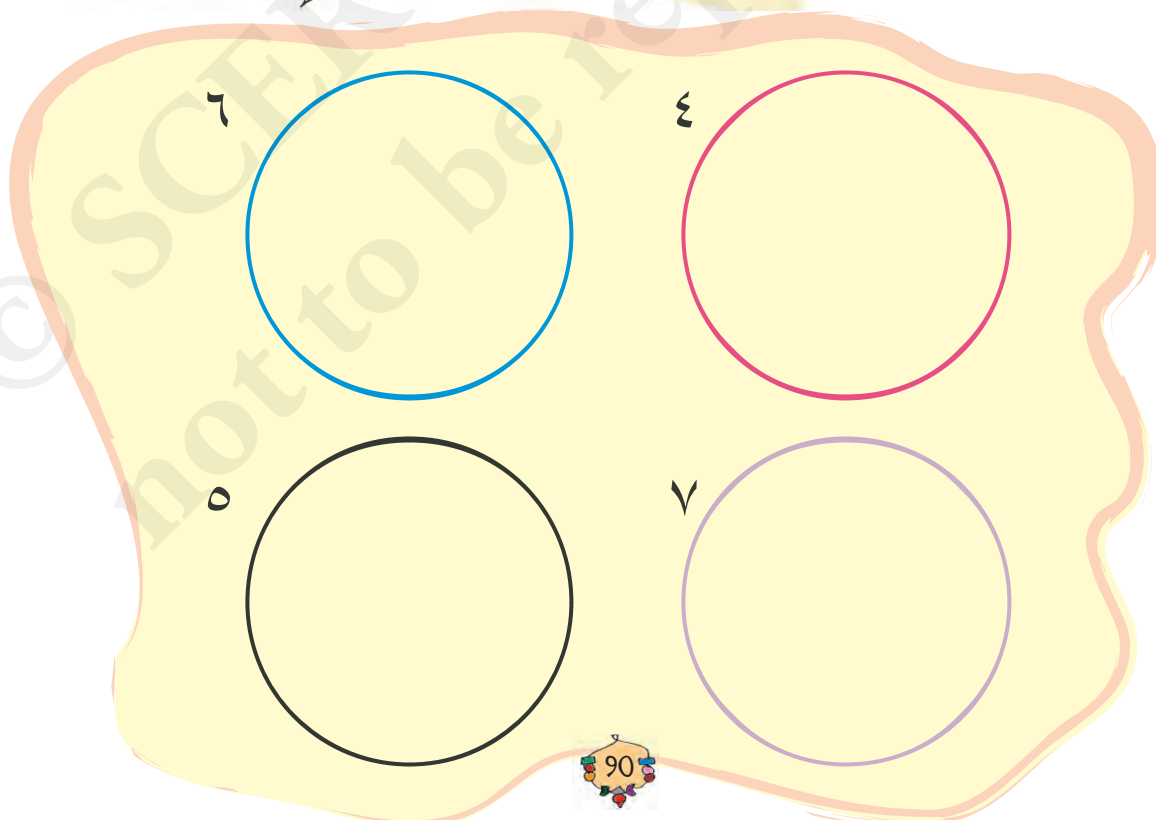
Naupangte chu hetiang game hi nambar chi hrang hrang hmangin khelhtir rawh.

Dice Game

Dice (vawrlung) pahnih han vawr teh le. Eng nambarte nge lo lang? Heng nambarte hmang hian digit hnih nei nambar siam ang che. Circle bula nambar inziak in a sem ral theih nambar a nih chuan circle chhungah ziaak ang che. Tichuan i khingpuite thawh ve ni a ni ang. Vawi 10 vawr hnua, a ziaak hnem zawk chu chak zawk a ni ang.

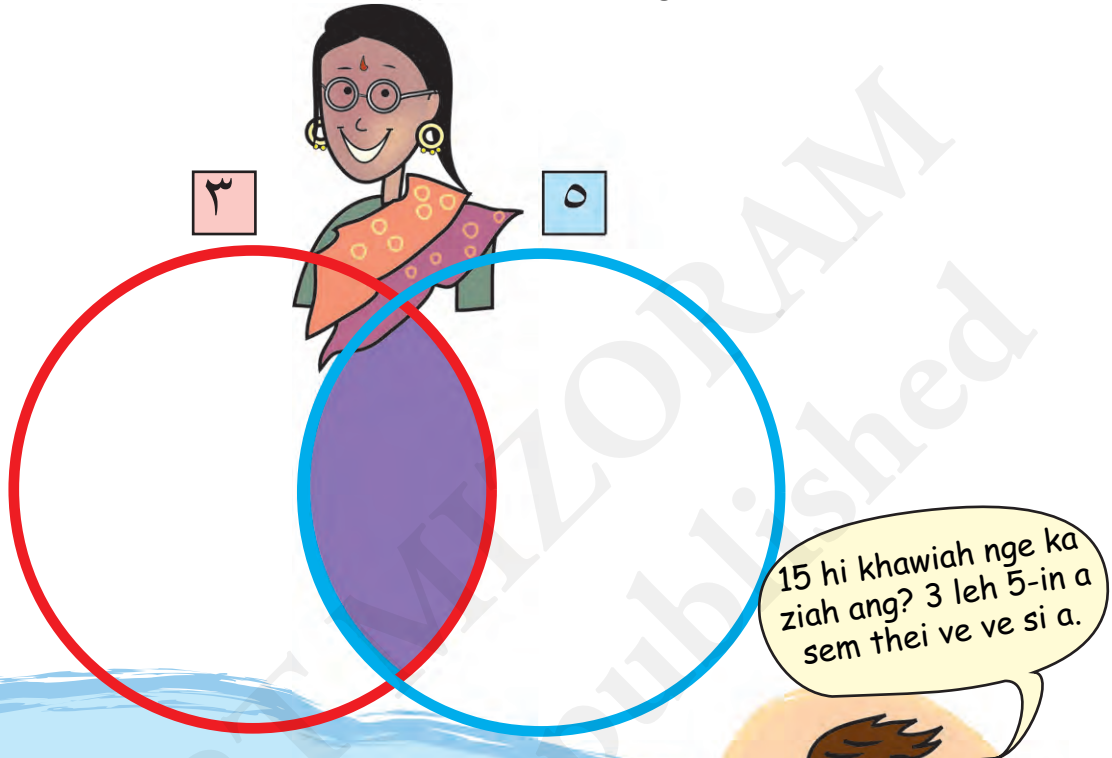


Ka dice thehah nambar 3 & 2 a lang a. Nambar 23 ka siam chuan, heng nambarte hian an sem thei lo. 32 tia ka siam chuan 4 sem theih a lo ni a, tichuan circle rawng senah ka ziaak ang.



Sem theih thuhmun/intawm (Common Multiples)

Nambar ngaihtuah rawh le. 3 sem theih a nih chuan circle senah ziaak rawh. 5 sem theih a nih chuan circle pawlah ziaak ang che.



Nambar thenkhat chu 3 leh 5-in a sem theih ve ve a awm.

Chungte chu 3 leh 5-te ina an intawm a tih theih.

Han ngaihtuah leh teh!

3 leh 5-ten an sem zawh theih ve vete hi bawkbawn rawng chhungah i ziaak a, chungte chu circle sen leh pawl huam chhungah an la awm tho ang em?

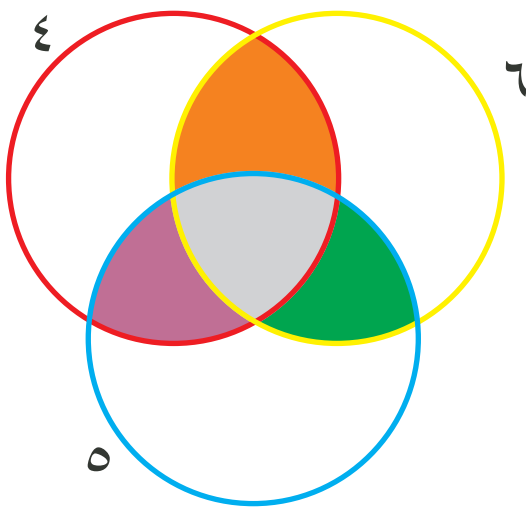
* Heng **common multiple** zingahte hian khawi hi nge tê ber? _____

Heti ang game hi nambar 2 leh 7 hmangin ti leh ang che.

* 2 leh 7-te common multiple ziaak rawh.



A hmaa game ang khan 4, 6 leh 5 multiple-te circle-ah hian ziaak rawh.



- * A hring huam chhungah hian 5 leh 6 common multiple engte nge i ziah?
- * Serthlum rawng huam chhungah hian 4 leh 6 common multiple engte nge i ziah?
- * 4, 6 leh 5-te common multiple-te hi khawi rawng huam chhungah nge i ziah?
- * 4, 6 leh 5-te common multiple zinga tē ber engte? _____

Puzzle

Tengtere mu/Lungtê/Hmawlhê

Sangpuii chuan tengtere mu thahnem tak a la khawm a. Panga zela a dahin pakhat a chuang tih a hmu a. Paruk leh pali zelin a thliar leh a. Hetianga a tih hian pakhat a chuang zel a. Sangpuiin tengtere mu hi a tlem thei ang berin eng zat nge a neih?

Hetianga tih tur hi naupangte tihphur nan thlai chi, lungte, etc hmangin tihtir tur a ni.



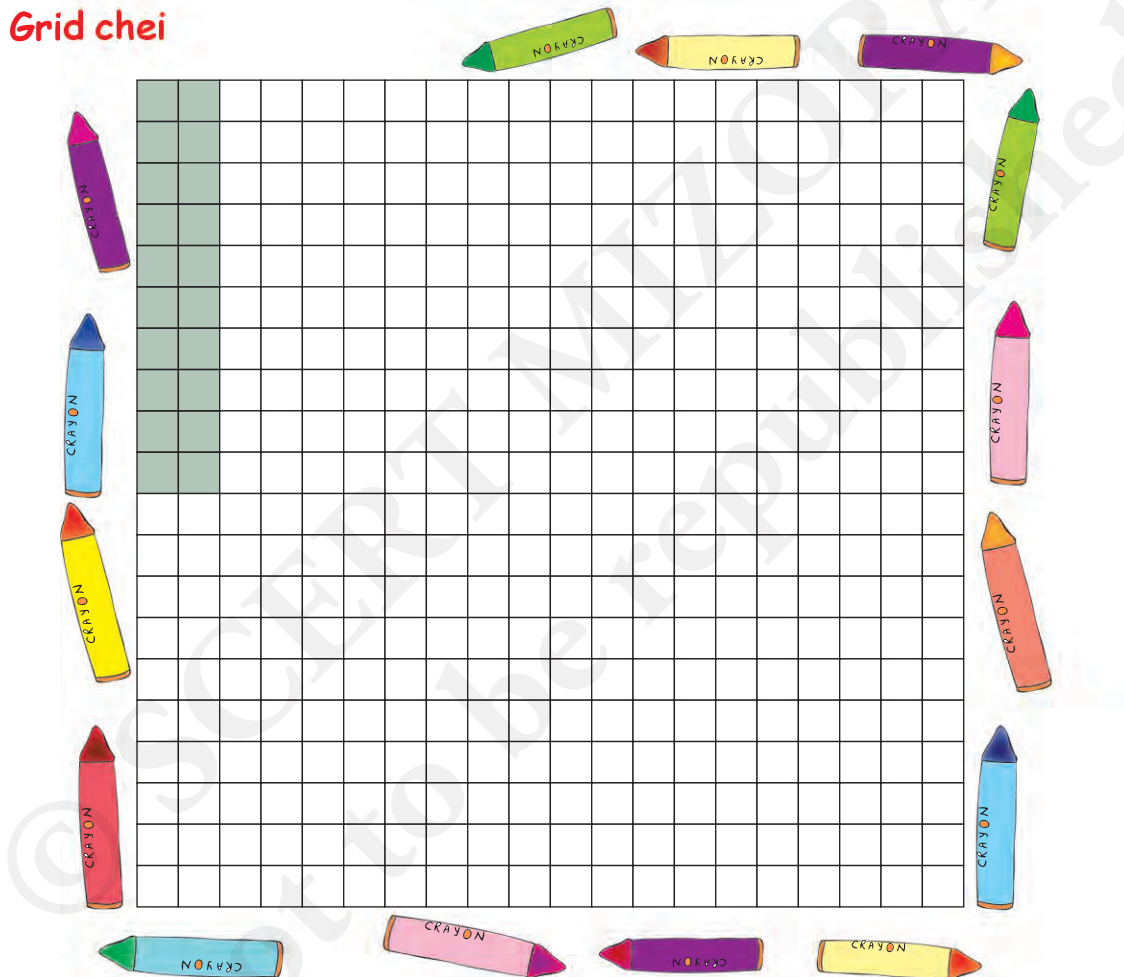
Tengtere mu tam zawk

Mahmingi chuan tengtere mu 12 hmangin rectangle chi hrang hrang a siam a. Tengtere mu 12 hmang hian rectangle chi hrang dang siam ve rawh. Chi dang eng zat nge i siam theih?



Tengtere mu 15 awm se, rectangle chi hrang eng zat nge i siam theih ang?

Grid chei



A chungah hian grid 20 hmanga siam rectangle chu chei a ni.

Rectangle vâng lam chu grid 2-a sei a ni.

- * A dung lam sei zâwnng eng zat nge?
- * Grid 20 hmanga siam rectangle chi hrang hrang han chei ve teh.

- * I rectangle cheite chu a dung leh a vâng engtia sei nge?
- * Grid 20 hmang chuan rectangle chi hrang eng zat nge i siam theih?
Chungte chu rawngin chei la, a dung leh a vâng ziaak ang che.



- * A hnuaia grid ruak hi dah khat rawh. Ngûn awm zat hi en la, hlawm khatah ngûn 1 zel awm se.



Ngûn awm zat	Hlâwm siam theih zat
18	1, 2, 3, 6, 9, 18
24	1, 2,
5	
9	
7	
2	
10	
1	
20	
13	
21	

Dah khat rawh

Puntirna hmun hmangin dah khat rawh.



×	1	2	3	4	5	6	7	8	9	10	11	12
1												12
2						12						
3				12			21					
4			12							40		
5				20								
6		12										
7												
8									72			
9												
10												
11						66						
12	12											

Grid hring hi en rawh. Nambar hrang hrang inpuntir 12 a siam dan i hmu ang.

$12 = 4 \times 3$, tichuan 12 hi 4 leh 3 te multiple ve ve a ni a, chutiang chuan 6 leh 2 te, 12 leh 1 te pawh. Tichuan 1, 2, 3, 4, 6, 12 te hi 12 factor (sem theitu) te an ni.

12
4×3
6×2
1×12

10

5×2

* 10 factor nambar engte nge? _____

Chart hmang hian i zawng chhuak thiam em?

* 36 factor nambar engte nge? _____

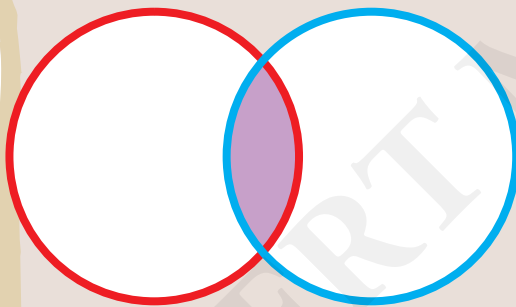
* Puntirna chart hmang hian 36 factor-te zawng chhuak rawh.

* He factor chart atanga a factor i zawn chhuah theih nambar lian ber engte nge?

* Chumi aia nambar lian zawkah engtin nge i tih ang?

Common factors

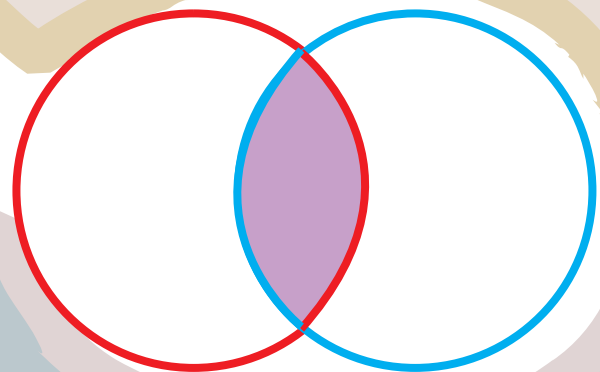
25 factor-te circle senah hian ziakin, 35 factor-te circle pawlah ziaak la.



Circle pahnihte hmun intawm (bawkbawn rawng) ah an factor engte nge i ziah? Hengte hi 25 leh 35 te common factor an ni.

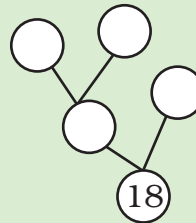
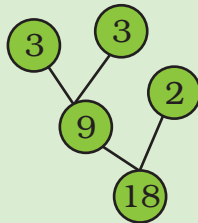
Tunah chuan 40 factor-te circle senah hian ziaak la, rawng pawlah hian 60 factor-te ziaak leh rawh.

Circle-a an hmun intawm (bawkbawn rawngah)-ah factor engte nge awm? 40 leh 60 common factor-ah hian eng nge lian ber?

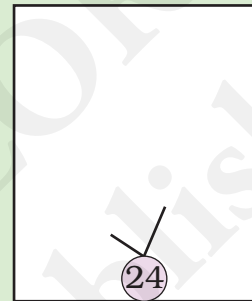
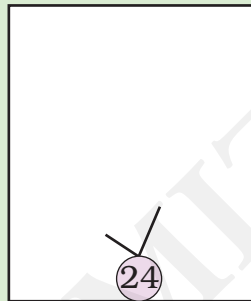
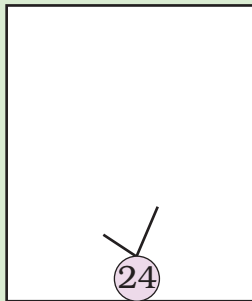


Factor Tree

Factor tree hi en teh. Hetiang hian factor tree dang i siam ve thei em?



* 24 hmang hian factor tree chi hrang eng zat nge i siam theih? A hnuaiah hian factor tree pathum han siam ve teh..

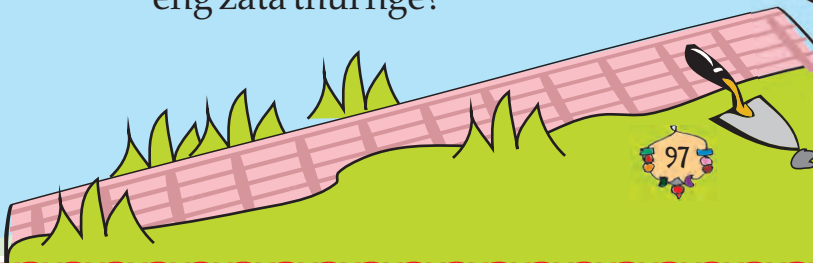
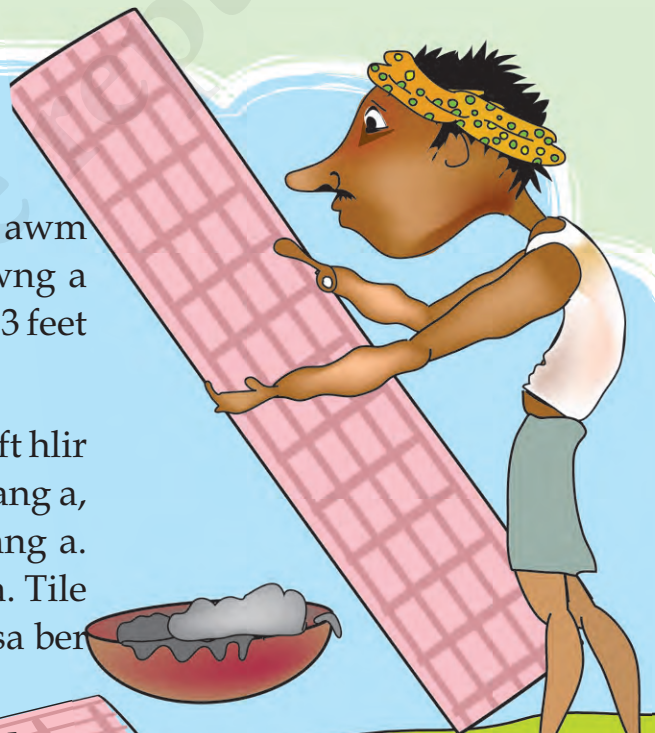


* Nambar dang hmangin factor tree siam ve rawh.

Chhuatphah

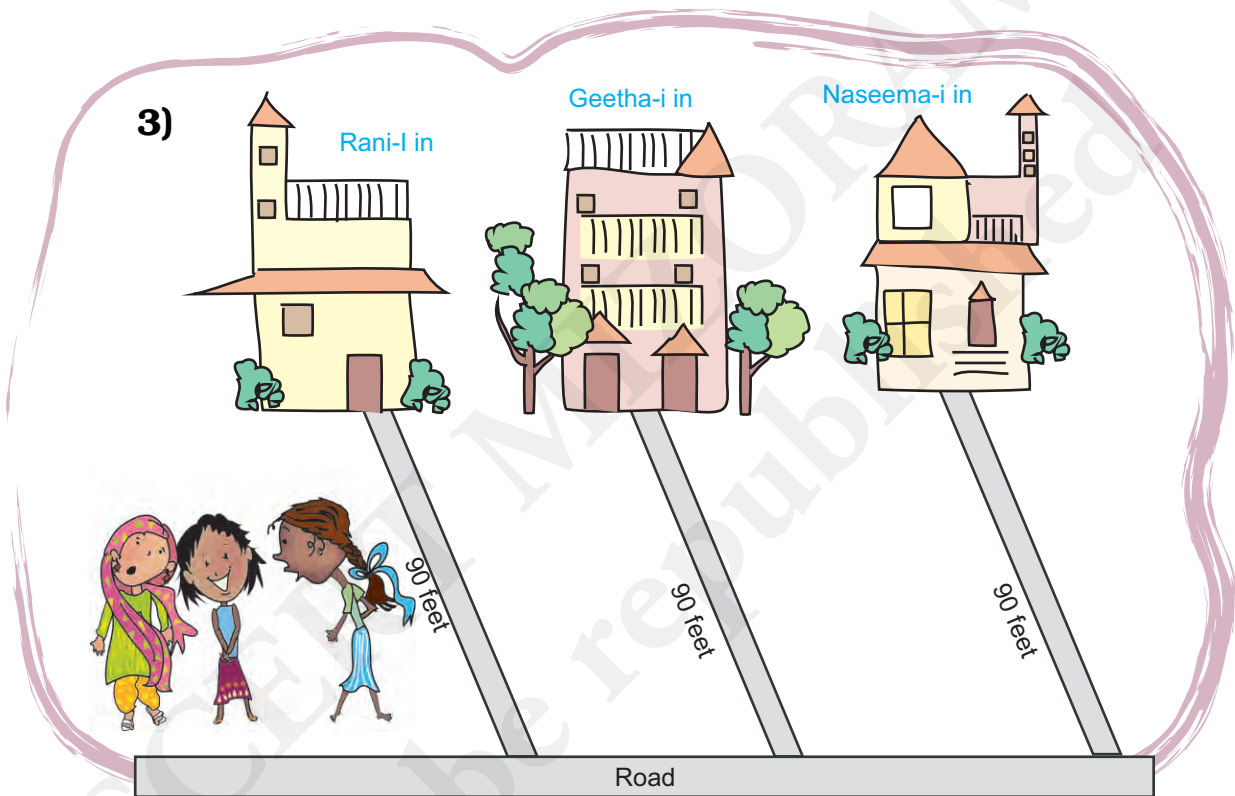
- 1) Ramliana in bulah chuan huan a awm a. Huan lai takah chuan kalkawng a awm a. Kalkawng chu tile 2 feet, 3 feet leh 5 feet hmanga phah a tum a.

Mistiri chuan vei lam sirah tile 2 ft hlir a hmang a. A laiah 3 ft hlir a hmang a, a ding lam sirah 5 ft hlir a hmang a. Tile tan bung miah lovin a rem a. Tile remte tlang inchen thapna hmasa ber eng zâta thui nge?





- 2) Muanzuala chuan in a sa dawn a, a chhuatah chuan tile phah a duh a. A inchhung zau zâwng chu 9 ft × 12 ft a ni. Bazarah square tile chi thum an zuar a. 1 × 1, 2 × 2 leh 3 × 3. Tan bun ngai lova phahchhuak vek turin khawi tile khi nge a lei ang?



Rani-i, Geetha-i leh Naseema-i te chu inthenawm hnai tê an ni a. An in aṭanga kawngpui hlat zawng chu 90 feet a ni. An in panna kawng theuh chu tile-a phah an duh a. Tile len zawng inang lo theuh an lei a. Rani-i chuan a tê ber chi a lei a, Geetha-i chuan a laiawl a lei a, Naseema-i chuan a lian ber a lei thung a. An tile lei theuh chu tan bun ngai lovin an phah chhuak vek hlawm a, an tile theuh len zawng chu eng zat theuh nge ni ang? A chhanna chi hrang pathum han ngaihtuah teh le. A chhanna i hmuhchhuah dan han sawi teh.

Feet chungchang sawi ho hi a ṭangkai hle a, mahni san zâwng teh nân kan sawi fo a ni. Naupang hovin an cm scale hmang khan feet sei zâwng te pawh an hrethiam thei ang.

7

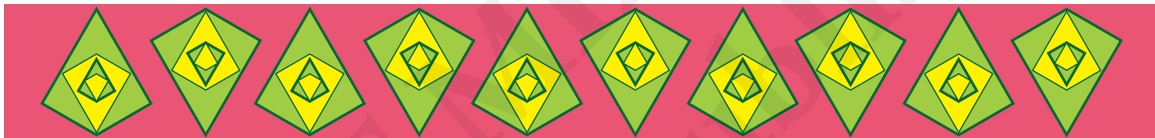
Ziarang / Hmu Thei Em?

Isha, i pawnfen chu a mawi hle mai.

Ka nuin hetiang ziarang hian a chei a.

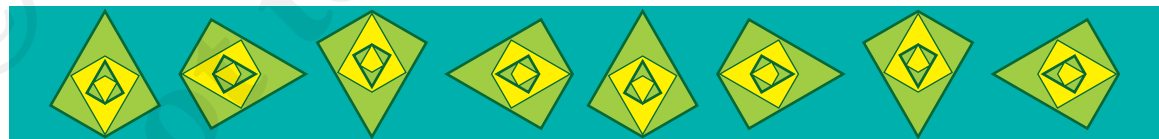
Khatiang nem kai tho hmanga ziarang dang daiha kurta an chei ka hmu tawh asin.

Engtia danglam nge a nih?



I pawnfenah kha chuan a ziarang kalphung chu: pakhat chunglam hawi, pakhat hnuailam hawi a ni a, chutiang zêla chhut chu a ni.

Ka unaupa kurta-ah chuan vawikhat a chho zâwngin a kal phawt a, tichuan $\frac{1}{4}$ zêlin a inher leh a. Chutiang zel chuan sana vir zâwng $\frac{1}{4}$ zêlah a inher a ni.



Tunah chuan a chungka kalphung chi hnih hmang hian hemi  nemkai hmang hian ziarang han siam ve teh le.

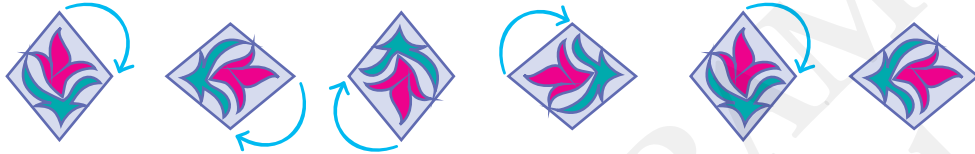
Tih dan chi dang han siam ve teh.

Math-Magic Pawl IV (phek 107-108)-ah khan, naupangten hetiang zia inrem dan chi hrang hrang 3 an hmu tawh a, Pawl III (phek 145)-ah khan hetiang zia inrem dan tho hi tar lan a ni tawh bawh a. Hetianga sana vir zâwng a zui dan hi sawi ho ni se.

Ziarang leh her

Hetiang nem kai hi han en teh le . Kalhmang hrang chi thum hmangin sana vir zawngin kan her a, ziarang lo chhuak hi han en teh.

Kalhmang 1: $\frac{1}{4}$ zêla her.



Kalhmang 2: $\frac{1}{2}$ zêla her.

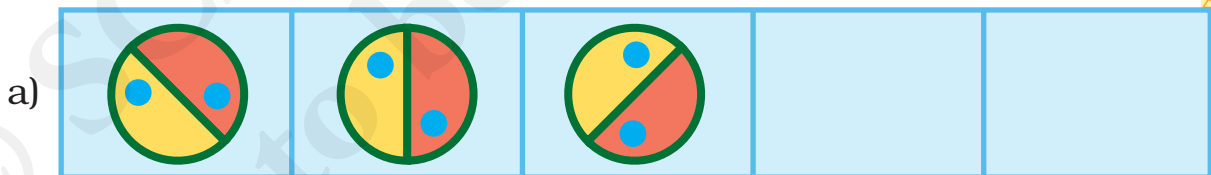


Kalhmang 3: $\frac{3}{4}$ zêla her.



I tih ve hun

1) A dawtah eng nge awm ang?



Naupangte chu tihdan kawng dang ngaihtuah chhuak turin fuih la. Sana vir loh zâwnge an hera a chhanna an hmuh chhuah pawhin pawmsak tho tur a ni a, sawi hopui zel ni baw k se.

c)



d)



2) He ziarang hi han en teh.

a)



He ziarang kalhmang chu 45° zêl a her a ni. A dawtah eng ber hi nge ni ang? A dik tak zawnah (✓) thai rawh.



Kalhmang ngai chiahin hma lamah her ve thung la, a bul tanna i kual chhuah thlengin.

b)



c)

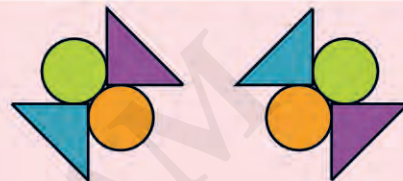


- 3) A hnuai rin sen vei lamah hian ziarang thenkhat pèk a ni a. Ziarang tin atan hian a inher dân kalmang zia ang che. Chumi zawhah chuan rin ding lam a tang hian a dawt leh chiaha a awm dân tur thlang la, a hnuaiah hian (✓) ang che.

a)

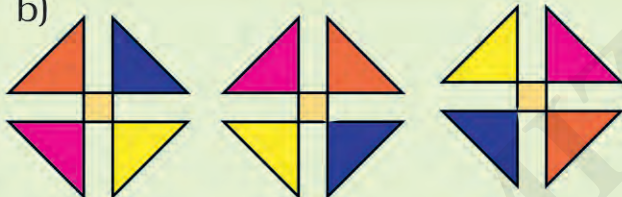


Kalmang: _____

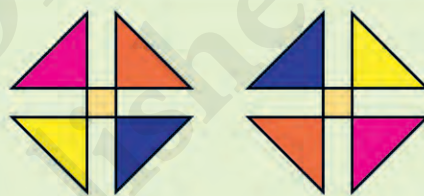


() ()

b)

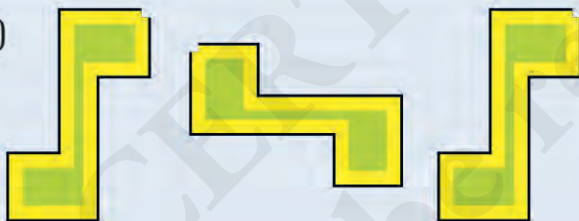


Kalmang: _____



() ()

c)



Kalmang: _____



() ()

d)



Kalmang: _____



() ()

Ziarang awm dan en rawh

A lemahte hian ziarang kalhmang zâwm lo chhinchhiah la. Siam tha baw ang che.

a)



b)



c)



d)



Magic Squares

Magic triangle kha i la hria em? Tir'u le, tunah chuan magic square i siam ang u.

✱ He square hi 46 aṭanga 54 thleng nambar zawng hmangin dah khat rawh le.

Kalhmang: Tlar tin belh chhuak hi 150 a ni tur a ni.

	25	

✱ He square hi 21 aṭanga 29 inkar nambar zawng hmangin dah khat rawh le.

Kalhmang: Tlar tin belh chhuak hi 75 a ni tur a ni.

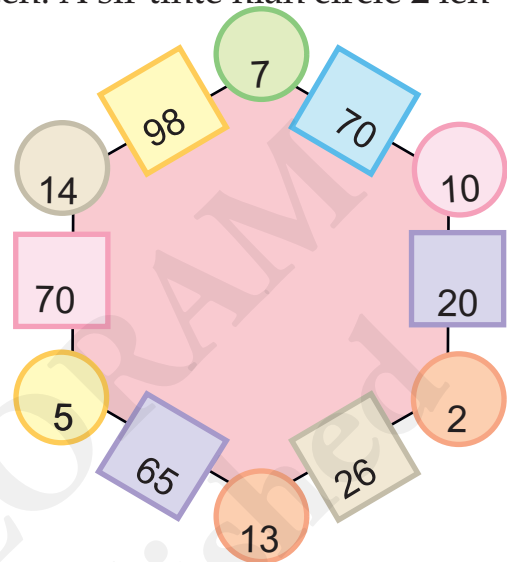
		49
46		
	52	47

Heti ang magic ziarang nei hi Math-Magic Pawl IV (phek 11) ah i hmu thei ang.

Magic Hexagon (Sir ruk indek vek nei)

Hexagon-a nambarte ziarang hi han en teh. A sir tinte hian circle 2 leh box 1 an nei a.

Box tina nambarte
hi a bul chiah
circle chhunga
nambarte inpuntir
chhuak zêl a ni a.



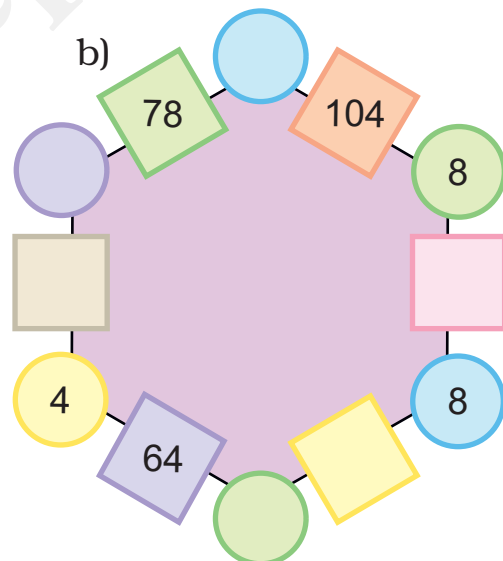
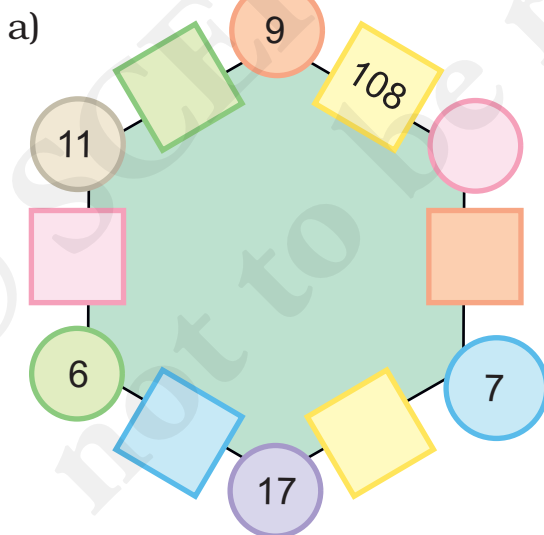
$$5 \times 13 = 65$$

$$7 \times 10 = 70$$

Box chhunga nambar 65 hi han en teh. Khawite hi nge a bul chiah circle-te chu?

A kalphung hi i hmu thiam em le?

* Hetiang chiah kalphung hmang hian a hnuaia hexagon-te hi dah khat rawh.



Magic hexagon nangman han siam ve teh le.

Hexagon chu sir ruk inchen vekin a kualkhung pap lem a ni tiin i sawipui thei ang; amaherawhchu hetah hi chuan zuk teh chhuah kher a ngai lovang.

Nambar leh nambarte

$$24 + 19 + 37 = 37 + 24 + 19$$

$$215 + 120 + 600 = 600 + 215 + 120$$

* An intluk em?

* Hetiang chiah hian a hnuaia a kar âwlte hi dah khat rawh.

a) $14 + \quad + \quad = 34 + 14 + 20$

b) $\quad + 42 + \quad = 65 + \quad + 80$

c) $200 + 300 + \quad = \quad + 400 + \quad$

d) $\quad + \quad + \quad = \quad + \quad + \quad$

* Hei hi han en teh $48 \times 13 = 13 \times 48$

A dik leh dik loh finfiah rawh.

Vei zâwng ding zâwng - A dik ve ve

121 hi a danglam bikna
riau i hmu thei em?

121

Eng maw,
nambar a ni ve
mai alawm.

A lêt zâwnga i
chhiar pawhin a
ngai reng a ni.

A ni reng tak mai
a! Ding lam leh vei
lam atang pawhin
1,2,1 ve ve a nih hi.

Nambar inrem dan thlak danglam hian a belh chhuak a tidanglam lo tih naupangte nen sawi ho rawh u.

Hawh u,
chutiang
nambar neih
dân chu i han en
ang u hmiang.



Nambar eng pawh la rawh le,
entir nan

A hnung leh a hma han
thlakthleng la

Han belh dun teh le



43

34

77

Nambar lehlín
dawn hian a
hnung leh a
hma hi ziah
thlâkthleng
mai tur.

Chutiang nambar bik pakhat chu 77 hi
ani a. Chutiang nambar bik chu a tam mai.



Nambar dang han thlang leh teh le

48

A hnung leh a hma han thlâkthleng la

84

Han belh dun teh

132

Nambar danglam bik a chhuak em? Aih! Engati maw?

Aw le, he nambar hmang hian i ti leh zêl ang

132

A hnung leh a hma han thlâkthleng leh teh

231

Han belh dun leh teh

363

Ehe! 363 chu nambar bîk a ni reng mai.

Tichuan nambar bîk hmu tur hian a chang chuan kan chawh thui deuh
angai tih kan hmu a.

* Tunah chuan heng nambarte hi nambar bikah han chantir ve teh le —

a) 38

b) 123

c) 213

Tunah chuan thumalte a bîkin i han hmang ve teh ang.

A K U T A T U K A

R A M A R A M A R

Ding lam aṭanga vei lam emaw vei lam aṭanga ding lam emaw a chhiar
pawhin a dik thei ve ve tih i lo hmu em?

Tunah chuan thumal tê a bîka hman han tum ve teh u.

Hetianga thumal/nambar bîk, engtizawng pawha han chhiara dik thei ve ve hi palindromes an ti
a. Naupangte chu a hmawr lehlam lehlam aṭanga chhiar turin pui rawh.

Calendar Magic

A hnuaia calendar hi en teh le.

Calendar-ah 3×3 box (ni 9 kualkhung) siamin magic i han en leh teh ang.

s	m	t	w	th	f	s
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

He box chhûnga nambarte belh chhuak hi rang takin ka zawng chhuak thei asin.



Hun a duh rei viau lo maw?

A belh chhuak zât chu 99 a ni.



Nambar tê ber la la

3

8 belh la

+8

=

11

9-in puntir la

×9

A vaiin

99



Hei! A lai taka nambart hi la ula 9-in han puntir teh u. A chhanna chu i hmu chhuak hma daih zawk ang.

Tunah chuan calendar-ah i duh duhna laiah 3×3 box han thlang chhuak la, a belh chhuak chu khitiang khian han zawng chhuak ve teh. In chhungkuain infiam nan han hman teh u.

Calendar trick dang i hmuh duh chuan Math-Magic Pawl III (phek 103-104) i en thei ang.

Nambar kalphung tam zawk

- * Nambar eng pawh thlang la. Tichuan a indawtin 2, 3, 4 te hmangin han puntir teh le. I puntir chhuakah khan 3 han belh leh la. A chhuakte inthlauhna hi han en la. A indawt chiahte inthlauhna chu a inang zel em?

12	×	2	+	3	=	27
12	×	3	+	3	=	39
12	×	4	+	3	=	51
12	×	5	+	3	=	63
12	×		+	3	=	
	×	7	+	3	=	
	×		+	3	=	
	×		+		=	

Tunah chuan nambar dang hmangin han ti ve chhin teh, a puntir chhuaka nambar belh tur pawh chi hrang hrang han hmang chhin teh.

- * A hnuaia nambar hi han en teh. A kalphung en la, i chhunzawm zêl thei em?

$(9 - 1) \div 8 = 1$
$(98 - 2) \div 8 = 12$
$(987 - 3) \div 8 = 123$
$(9876 - 4) \div 8 = \underline{\hspace{2cm}}$
$(98765 - 5) \div 8 = \underline{\hspace{2cm}}$
$(\underline{\hspace{2cm}} - \underline{\hspace{2cm}}) \div 8 = \underline{\hspace{2cm}}$
$(\underline{\hspace{2cm}} - \underline{\hspace{2cm}}) \div 8 = \underline{\hspace{2cm}}$

A vei lama nambar awnte hi naupangte chu chhiar ri turin ti rawh, an chhiar dik thei lo a nih pawhin fuih sauh la. Nambar thenkhat hi chu a lian khawp mai. Naupangte chhiar tura puih nan hian nuai 1 emaw sang 100 emaw chungchang kha ngaihtuah chhuah ni se.

Belh dan fing

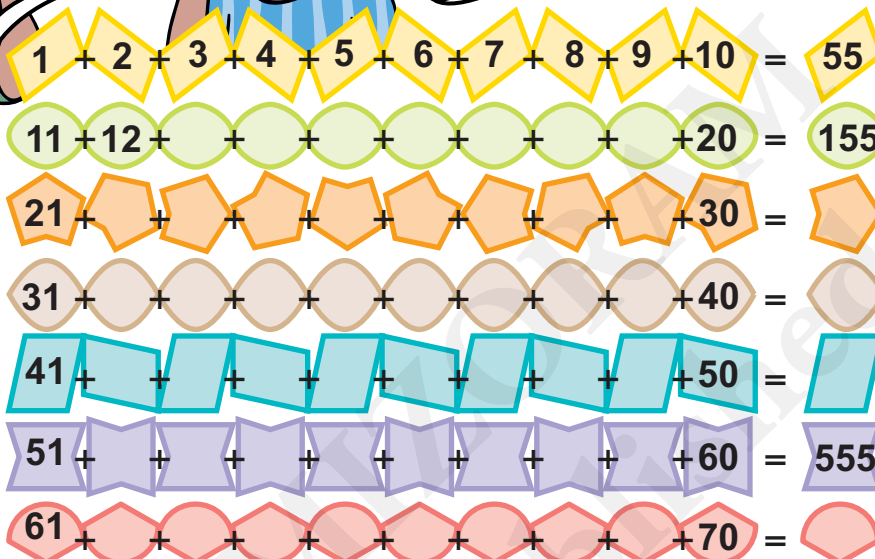


Aw! rang takin
ka zawng
chhuak thei
alawm.

I va'n hre em
em! Engtin
nge i tih
fheih?

Belh kher lo
pawhin a zât
ka chhût
chhuak thei.

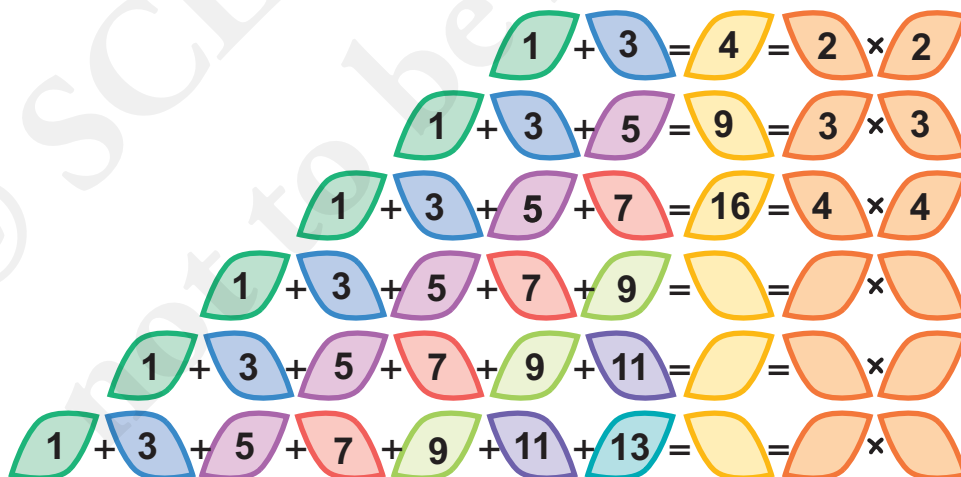
Mi tuin emaw nambar
sawm belh tur pe ta che
sela, engtin nge i tih ang?



✱ A chhuak zâtahte hian kalphung rawn langte hi i hmu thiam em?

Odd nambar hlimawm

Odd nambar hmasa pahnih hi la la, belh rawh, eng nge lo chhuak? Tichuan, odd nambar dawt leh han belh chhawng zêl teh.



Engtia thui nge i chhunzawm theih?

$n \times n$ hi odd nambar hmasa (n odd nambar) kan belha lo chhuak tur zât a ni a. Naupangte hi an thiam dan ang anga nambar belh phalsak tur a ni.

Nambar thup

Buanga leh Biaki-te chu nambar thup zawn chhuah tumin an lo infiam a, a zawn awlsamna te an lo ziaak a. An nambar thup inrin diksak tumin zawn awlsamna an siamte chu an hmang a.

An nambar thupte chu i ring chhin thei em?

✿ 100 chanve aiin a lian

✿ Sawm hlir 6 aiin a tam a, sawm hlir 7 aiin a tlem thung

✿ Sawm hmuna awm chu Pa hmuna awm aiin pakhatin a tam zawk

✿ An pahnih belh chhuak chu 11 a ni.



Eng nge ka
nambar
thup chu le?

Eng nge ka
nambar
thup chu le?



100 chanve aiin a tē

Sawm hlir 4 aiin a tam a, sawm hlir 5 aiin a tlem thung

Sawm hmuna awm chu pa hmuna awm aiin pahnihin a tam zawk

An pahnih belh chhuak chu 6 a ni.

✱ Nangma nambar thup zawn chhuahna turin a zawn awlsamna eng emaw zat han ziaak chhuak ve rawh le. I thian tu emaw pe la, i nambar thup chu han rintir ve rawh.

Nambar mak

a) I thian hnenah ti hian ti rawh le - I kum zat ziaak chhuak rawh. 5 belh leh rawh. A belh chhuak chu 2-in puntir rawh. Chuta tang chuan 10 paih leh rawh. Chumi hnuah chuan 2-in sem rawh. Eng nge i hmuh le?

I thian chuan mak a ti em?

b) ☆ Nambar thlang rawh



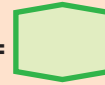
☆ A lêta tamin siam rawh



×

2

=



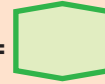
☆ 5-in puntir rawh



×

5

=



☆ A chhuak chu 10-in sem rawh



÷

10

=



c) ☆ Nambar thlang rawh



☆ A lêta tamin siam rawh



×

2

=



☆ A lêt bawka tamin siam leh rawh



×

2

=



☆ A chhuakah chuan a tira i
nambar thlan kha belh rawh



+



=



☆ A let bawka tamin siam leh rawh



×

2

=



☆ 10-in sem rawh



÷

10

=



d) He nambar kalphung hi han en la, chhunzawm ang che.

$$1 = 1 \times 1$$

$$121 = 11 \times 11$$

$$12321 = 111 \times 111$$

$$1234321 = ?$$

✱ Nambar mak han siam ve teh le.



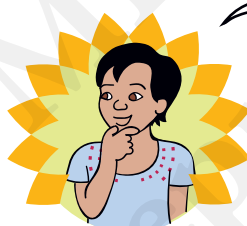
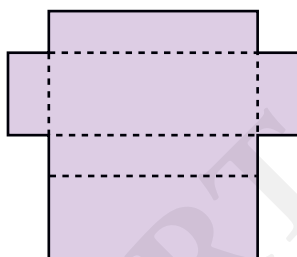
Bâwm leh a Ruangâm

Sweet Bâwm

Roteii chu chithlum (sweet) lei turin dawrah a kal a. Dawr nghaktu chuan lehkha cheh sa hmang hian sweet dahna tur bâwm senno nalh tak mai hi rang deuh mai hian a han siam a.

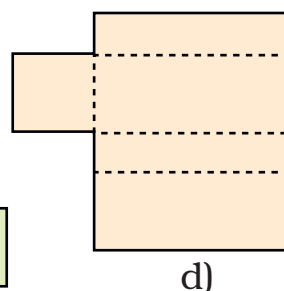
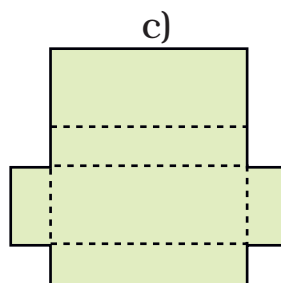
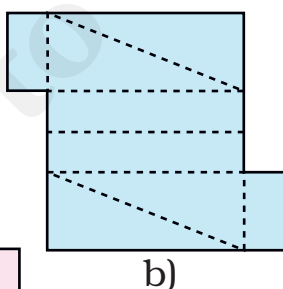
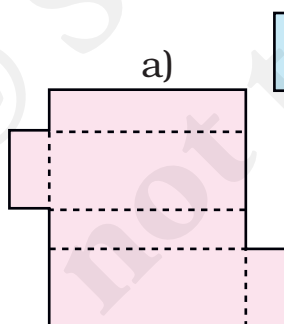
- * A lem hi en la, i bâwm tur siam ve rawh le. Phek 187-naa cheh thlak tur hi i hmang dawn nia. Engtianga rangin nge i thleh theih?

Ina a haw leh hnu chuan Roteii chuan bâwm chu a han phelh darh a. A them chuangtlai deuh chu a paih hnuin lehkha cheh chu a hnuaia mi ang hi a ni a.



Hetiang pianhmang hian bâwm a siam theih a. Eng ang pianhmang dangin nge bâwma siam theih ang ka'n zawng chhuak teh ang.

- * Pianhmang chi hrang pali a siam a. A vai hian a inrinna laiah hian thleh zel tur a ni. Khawite hi nge bâwma siam theih i zawng chhuak dawn nia.



He zirlai hian 3D pianhmang neite zuk mitthla thiam leh lehkhapuan (2D)-a lantir theih an nih dante a thlur bing a. Hemi atan hian pianhmang ruangamin a chung a mi ang te, in sak dan tur ruahmanna te leh thil a lan dan ang a lem ziahte a hmang a ni.

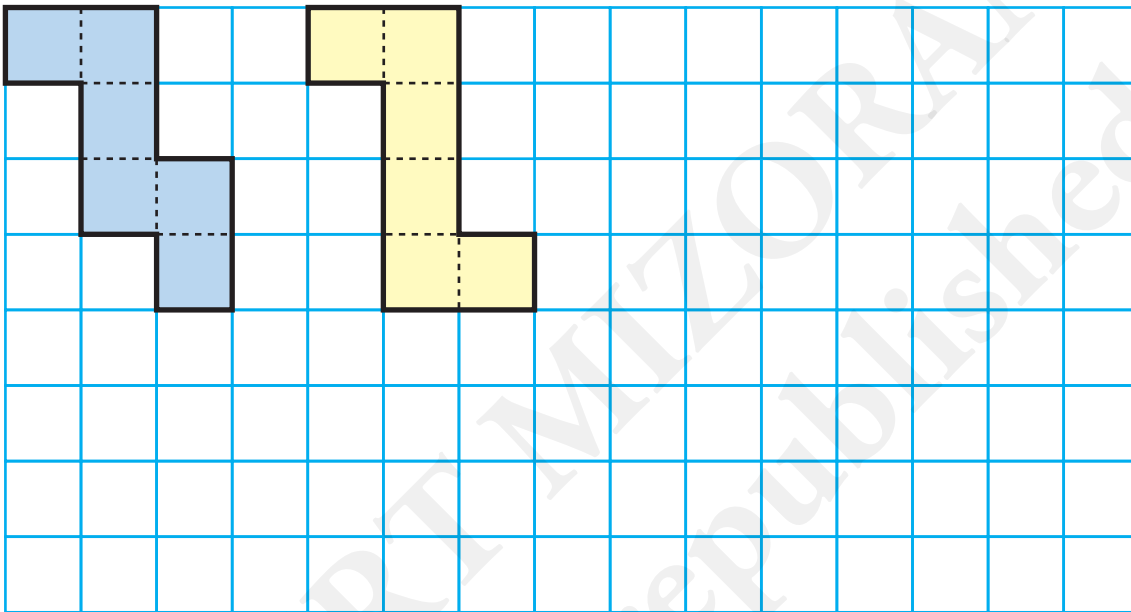
Cube-a thleh theih pianhmangte

A. Sawma chuan square sheet hmangin cube siam a duh a. Cube pang mar zawng zawng chu square vek a ni tih a hria a.

Pianhmang inang lo pahniha ziaak a.



Cube hian pang mar eng zat nge a neih? _____

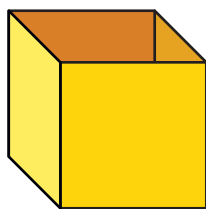


- * Pianhmang pahnihte hi cube-ah a thleh theih ang em?
- * Pianhmang dang cube-a thleh theih tur han ziaak ve teh le.
- * Cube pang mar tinte area chu eng zat nge ni ang?
- * Cube-a thleh theih loh tur pianhmang pakhat ziaak rawh.
- * In bul vel en kualin eng thilte kha nge cube pianhmang ang nei sawi ho ula. Ziaak chhuak ang che u.

Bâwm chhin nei lo siam nâna pianhmangte

Zirlai 3-naa square panga hmang puzzle kha in la hre reng em? Pianhmang chi hrang hrang 12 lai mai square panga hmanga siam kha phekk 46-naah in hmu tawh a.

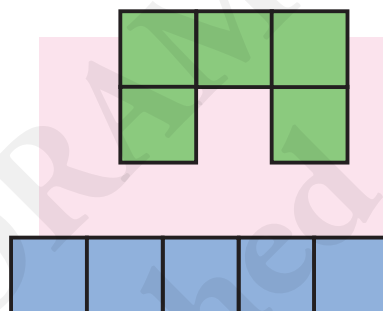
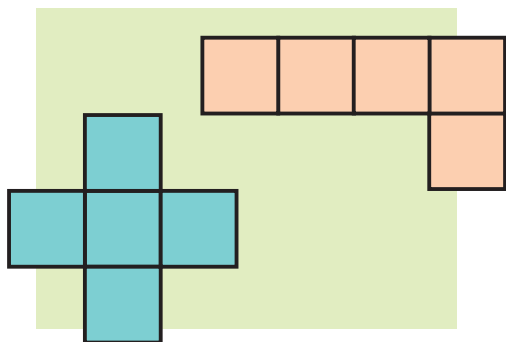
Khang pianhmangte kha i cheh thlak a, i thleh chuan a then chu bâwm chhin nei lovah a lo chhuak ang.



Hemi
pahnih
hmang hian
bâwm chhin
nei lo ka
siam thei a.



Mahse heng hmang hi
chuan bâwm chhin nei
lo ka siam thei lo.

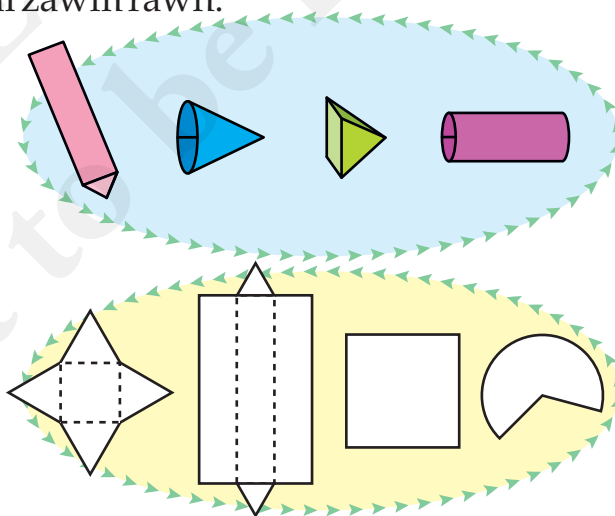


✱ Phek 46-naa khawi pianhmang chi 8 dangte hi nge bâwm chhin nei lo siam nan thleh theih zawng chhuak rawh.

✱ Bâwm chhin nei lo a thleh theih loh tur pianhmang dang ziaak rawh.

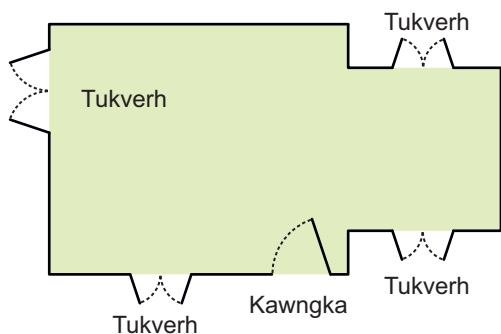
Bâwm bawk

Bâwm zawng zawng hi cube a ni vek lo va. A hnuaia mite hi bâwm chi hrang hrang a ni a. Pianhmang la thleh lohte hi a thleh chhuah tur tak bâwm nen thai zawm rawh.



Pianhmang lan dan tur zuk ngaihrut thiam hi mathematics thiam nâna thil pawimawh tak mai a ni a. Naupangte chuan bâwm siamna tur ruangâm te, a phek zâwnga a lan dan tur te leh eng ruangâm hi nge bâwm siam nâna hman theih loh (phek 112 a mi ang) tihte mitthla thiam tur chuan vawi tam tak an tihchhin a ngai a ni.

Floor Map



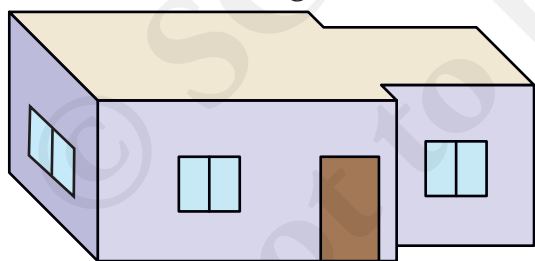
In sak dawn chuan a hmain a sak dan tur ruangâm **floor map** an tih chu an siam thin. Floor map i hmu tawh ngai em? Hei hi Peki in floor map a ni a. Tukverh leh kawngka awmnate a lantir a ni.

✱ Khawi lam hi nge a kawt lam ni a? Tukverh eng zat nge kawt lamah chuan awm? ?

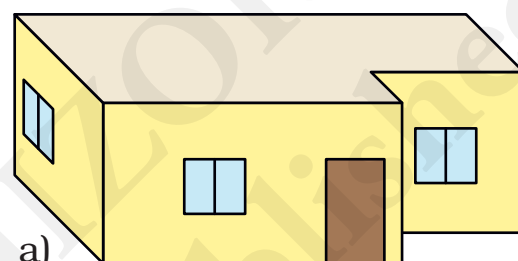
Floor map atang chuan Peki in awm dan dik tak emaw tukverh san zawng emaw te kan hre thei lo va. Chuvangin in lem ziah dan dang dang - a dung, a vang leh a san zawngte lantir thei **deep drawing** an tih chu kan mamawh ta a ni.

Hengte hi in pali **deep drawing** a ni a.

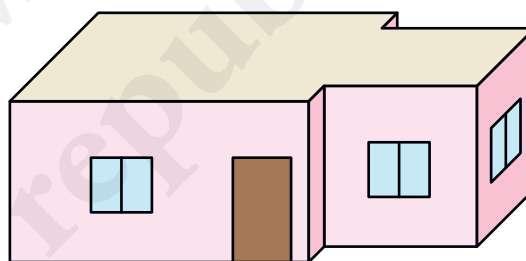
✱ Khawi ber hi nge Peki in?



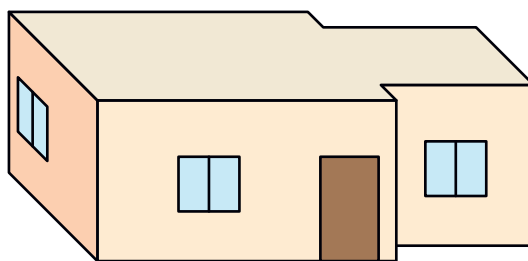
d)



a)



b)



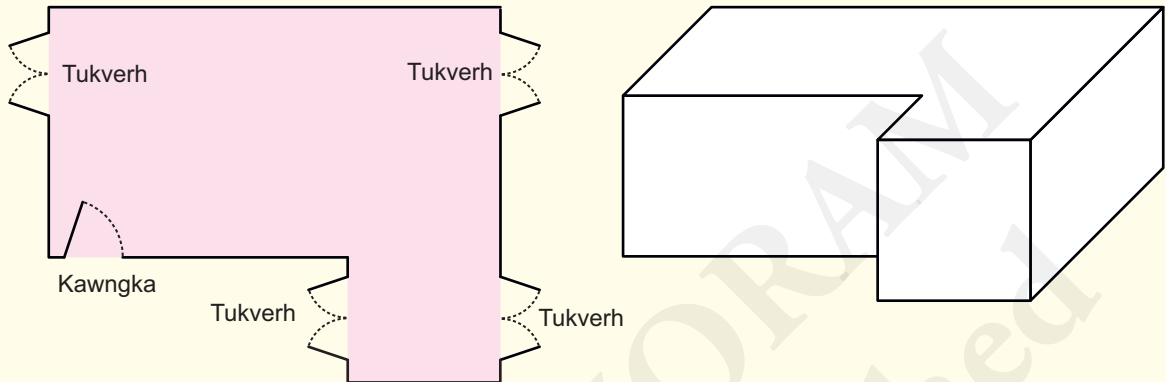
c)

✱ Deep drawing dang pathumte hian eng vangin nge floor map hi an mil ve loh? Sawi ho ang che u.

Thil lan dan 3D hmanga a lem kan ziah 'deep drawing' kan tih hi naupangte chuan a tangkaina an zuk hre thiam phak tur a ni a. Deep drawing leh floor map te hi a danglamna an hre thiam bawk tur a ni.

I tih ve hun

1. He in floor map hi en la. A deep drawing-ah hian kawngka leh tukverhte siam rawh.

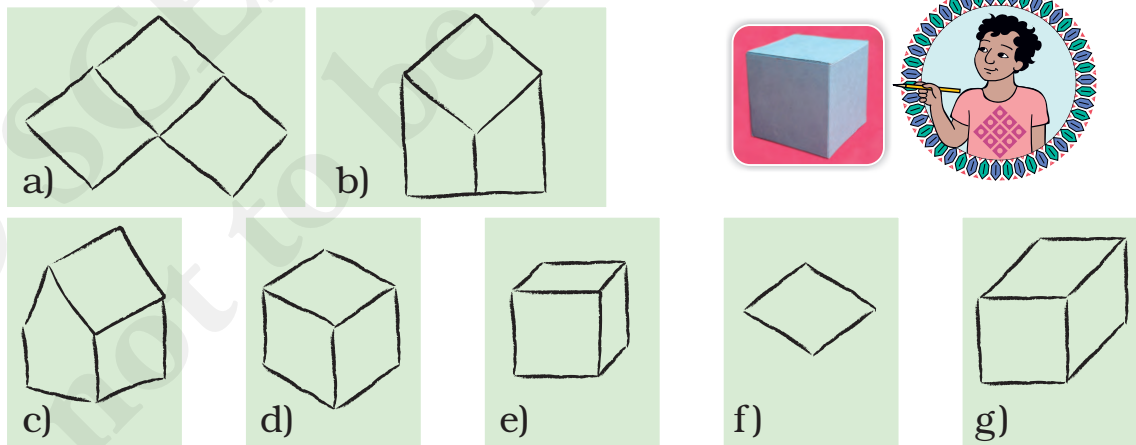


- * Deep drawing-a i lantir theih loh tukverh a awm em? Chungte chu floor map-ah hian thai bial rawh.

2. In in floor map kha siam ve ang che.

Deep drawing-a cube ziah

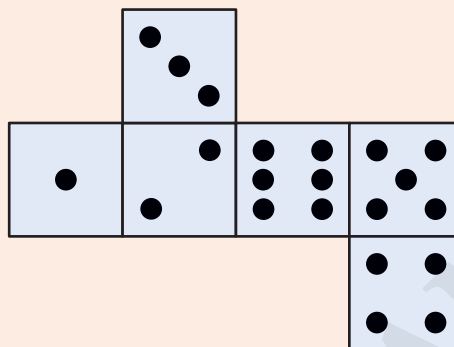
Rempuia leh a thiante chuan deep drawing hmangin cube lem an ziaik a. A hnuaia mite hi an lem ziahte chu a ni a.



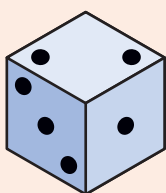
- * Khawi lemte hi nge dika i hriat? Sawi ho ang che u.
- * (f)-a mi lemziaik hi deep drawing ni turin han ziah belh teh le.

Puzzle

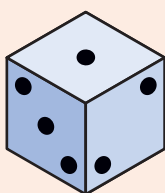
He lehkha cheh thlak hmang hian
cube siam a ni a.



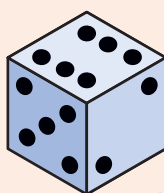
A khawite hi nge chu cube deep drawing dik tak chu ni ang?



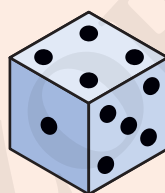
a)



b)



c)



d)



e)

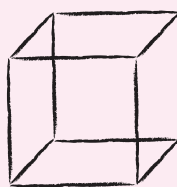
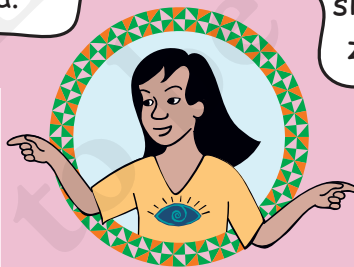
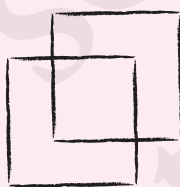
Cube ziah dan awlsam

Angaihi chuan he cube hi a deep drawing ziah a duh a.

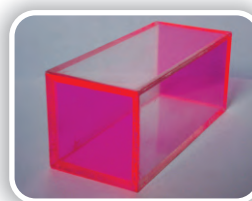
Hetiang hian cube lem chu a ziaak a.

A lema mi ang hian square
pahnih, a hnung lam leh a
hma lam tur ka ziaak a.

Chutah he bâwm deep drawing
siam turin square-te chu a kil
zum ka rin zawm leh ta a ni.



✱ Hetiang hian a lema mi ang tur
bâwm deep drawing hi ziaak ve
rawh.



3D-te 2D-a zuk lantir hi thil harsa lo tak, a taka an tihchhinna ațanga naupangten an thiam
mai theih a ni a. Hetah hian cube lem ziah dan lantir a ni.

Nawhalh bâwm hmanga infiam

Chhuana, Muana leh Ziki-te chuan nawhalh bâwm hmangin lei (bridge) an siam a.



Chhuana leh Ziki chuan lei chu a lem an ziaak a.

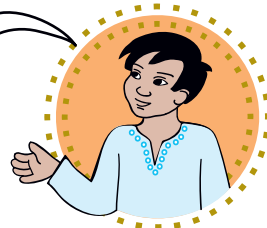
Ka dinna atang
chuan lei hi
hetiang hian a
lang.



Lei ka hmuh dan chu
hetiang hi a ni
a. Ka lemziah hi
chuan lei san zâwng
leh zau zâwng a
lantir a ni.



I lem ziah atang chuan
lei sei zâwng leh san
zâwng ka hre thei a.
Mahse engtianga zau
nge a nih ka hre thei lo.



* Lei chu a chung lam aţangin en ta la, engtin nge a lan ang? A hnuaia a lem dik zawk hi thlang rawh:

a) 

b) 

* Thlalak hi en la, he lei deep drawing hi han ziaak teh.

I tih ve hun

1) He lei lan dan tur lem hi han ziaak teh.

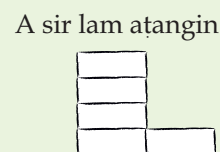
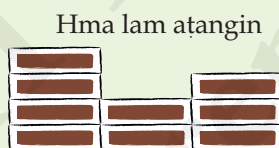
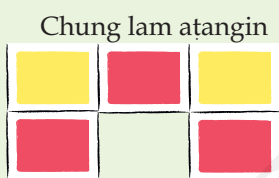
* Chung lam aţangin

* Hma lam aţangin

* A sir lam aţangin



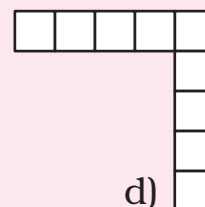
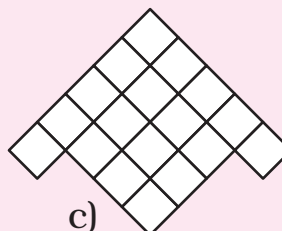
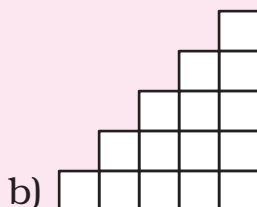
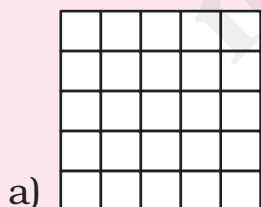
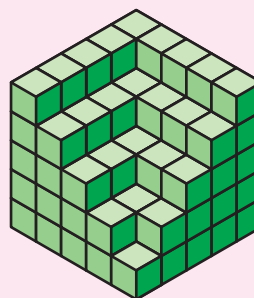
2) Nawhalh bâwm hmangin hetiang lem hi siam ve rawh.



* A lemte deep drawing hi i lehkhawh ziaak baw ang che.

3) He thil lem siam nân hian cube eng zat nge ngai ang le?

* A hnuaia mite hi cube lan dan a ni a. Chung lam aţanga a lan dan dik ber chu 'T' leh sir lam aţanga a lan dan dik ber chu 'S' tiin chhinchhiah rawh.





Sawm Bileh Za Bi

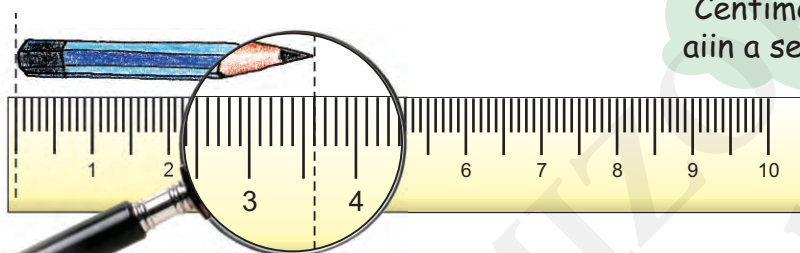
I pencil hman lai zinga tê ber kha eng chena sei nge a nih i hria em?

He pencil hi a sei zâwng eng nge ni? Han ring chhin teh _____ cm



Scale hmangin han teh la, i ring dik teuh em?

Sangsangi chuan dik taka hriat a duh avangin, enlenna hmangin Chiang leh zualin a en a.



Centimetre 3
aiin a sei zawk.



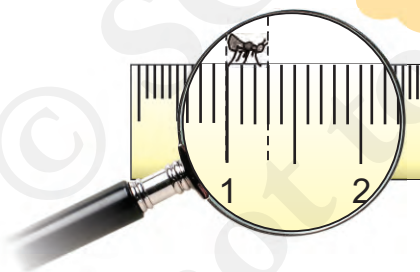
Centimetre khat hi hmun
sawmah intiat veka then
sawm a lo nih hi. Bung khat
chu sawma pakhat a ni.
Centimetre sawma pakhat
chu millimetre a ni.



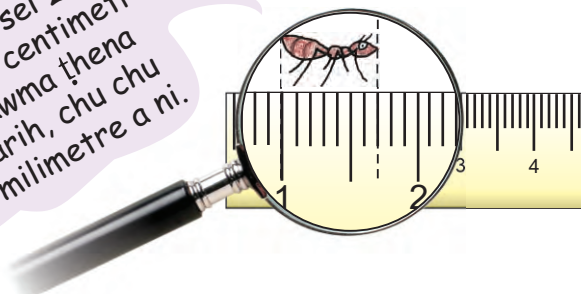
Ka hre ta e, he pencil
hi centimetre 3 leh
millimetre 6-a sei a lo
nih hi.



En teh, 3 mm
a sei ka nih hi.



Nang aiin ka sei zawk a
nial! Kei chu centimetre
hmun sawma thena
hmun sarh, chu chu
_____ millimetre a ni.

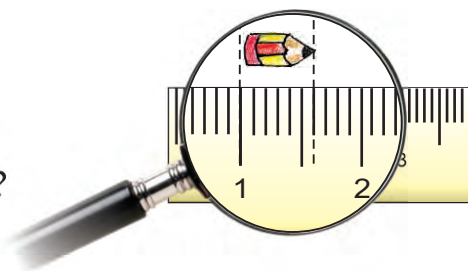


Centimetre $\frac{1}{10}$ hi centimetre 0.1 kan ti bawk a. Kan chhiar chuan
'Centrimetre bial point pakhat' kan ti thin.

Tichuan **millimetre** khat chu 0.1 cm tlukpui a ni.

* He pencil hi engtia sei nge ni? _____ mm.

Centimetre-in a sei zâwng eng zat nge ni ang?



Chungû

Chungû i hmu tawh em? Khawiah? Chungû chi hrang eng zat nge i hmuh tawh? I chungû hmuhte sei zâwng a inchen vek em? Heng chungu pahnihte chanchin hi a ngaihnawm asin.

Gold Frogs

Khawvela chungû tê berte zinga mi an ni a, 0.9 cm chauhva sei zuk nia maw le!

Hetiang chungu hi i kut zungtêah khan eng zat nge awm thei a i rin?



Bull Frog

Hei hi chungû lian ber zinga mi a ni ve thung, a sei zâwng pawh 30.5 cm lai a ni!



0.9 cm hi eng nge a awm zia? Milimetre ____ tih nen a inang.

Centimetre $\frac{9}{10}$ tiin kan sawi thei. A dik em?

Tichuan, 30.5 cm chu _____ cm milimetre ____ tih nen thuhmun a ni.

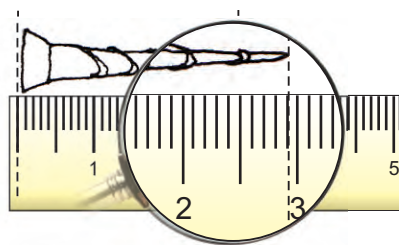
Chungû lian chite khi scale 1 m-a seiah eng zat vel nge awm thei ang?

—

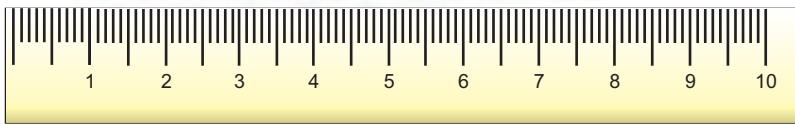
Ngil takin chungû tê chite khi thu tlar ta se, 1 m-a thui siam turin eng zah nge intlar ngai ang? _____

I tih ve hun

- 1) Perek sei zâwng — 2 cm leh ____ mm emaw
2. ____ cm.



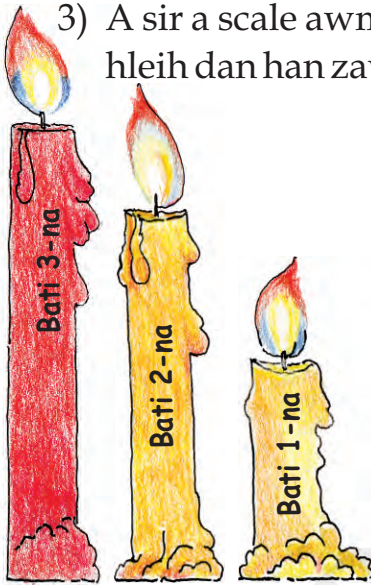
2)



Bawrh sai abe sei zawn g hi _____ cm leh _____ mm a ni.

Heti hian kan zia k thei baw k _____ cm.

3) A sir a scale awm sa hmang hian bati 1-na leh bati 3-na te hi an in sei hleih dan han zawn g chhuak teh.



Teh turte	Sei zawn g (cm leh mm)	Sei zawn g (cm)
Bati 1-na		
Meialh 1-na		
Bati 2-na		
Meialh 2-na		
Bati 3-na		
Meialh 3-na		

Rin chhin dan anga hnawih

Teh kher lovin hmawlh te hi rawng in chei rawh! I ring dik em tih i teh dawn nia.

Hmawlh sei zawn g 1 cm aia tawi

Hmawlh sei zawn g 1 cm leh 2 cm inkar

Hmawlh sei zawn g 2 cm leh 3 cm inkar

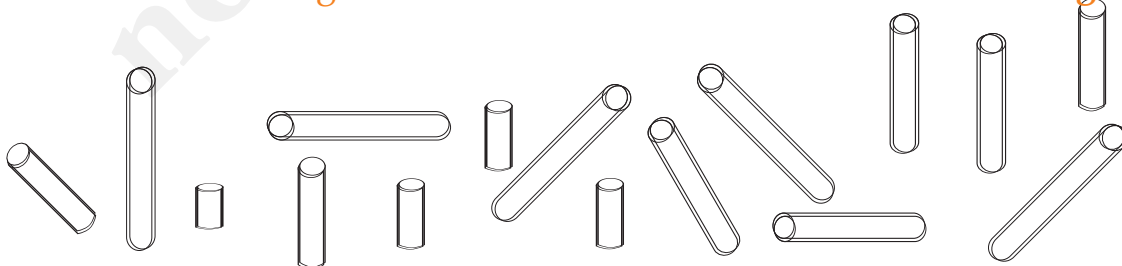
Hmawlh sei zawn g 3 cm leh 4 cm inkar

Sen

Pawl

Hring

Serthlum rawng



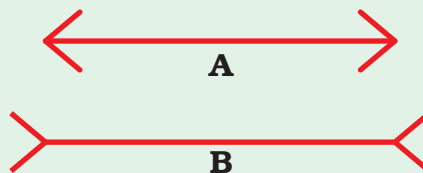
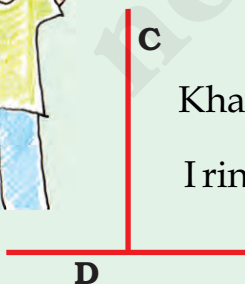
Ngaihruatin ziaik la, teh rawh

A hnuaia mite hi an sei zâwng tur ang ngaihruat chungin han ziaik teh. I thian kha ziaik ve turin sawm la. In ziah zawhah scale hmangin a sei zâwng in teh leh dawn nia. Tu nge ziaik dik teuh zawk che u le?

Sei zâwng ngaihruat a ziah tur	I thil ziah sei zâwng	I thian ziah sei zâwng
Fanghmir 1 cm aia tawi		
7 cm vela sei pencil		
Tui no 11 cm-a sang leh tui chim chin 5 cm		
Ngûn, a tlâng kual 20 cm-a sei		
Samkir, 16 cm-a sei		

Kan mit hian a thliar hrang thei em?

Eng line hi nge sei zawk? A nge B? Rinngilte hi teh la, centimetre eng zat nge an nih le. I ring dik reng em?

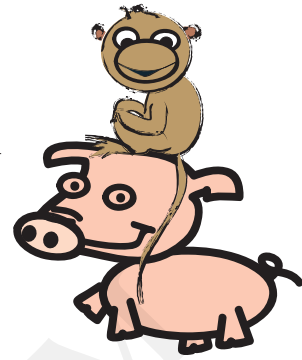


Khawi hi nge sei zawk? C nge D? Rinngilte hi han teh la.
I ring dik reng em?

Tu mei nge sei ber?



Tu mei hi nge sei ber han ring chhin teh. Tunah chuan an meite hi teh la. I ring dik rêng em?



Pawisa tlang sei ber eng nge?

Cheng 100 tlang hi a sei zawng eng nge ni? Han ring chhin teh. Scale hmangin teh ang che.

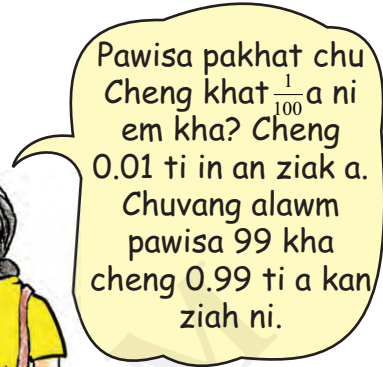


Tunah chuan thil dang dung lam leh vâng lam sei zâwng te pawh a sei zâwng ring la. I teh hnuah i rin dan leh i teh chhuah inthlahna te han zawng teh le.

Teh tur	I ngaihruatna cm-in		I teh chhuah cm-in	
	Dung lam	Vâng lam	Dung lam	Vâng lam
Cheng 100 note				
Cheng 10 note				
Cheng 20 note				
Cheng 5 note				
Pencil box				
Math-Magic bu				

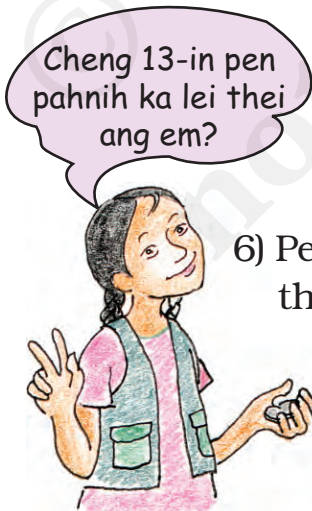
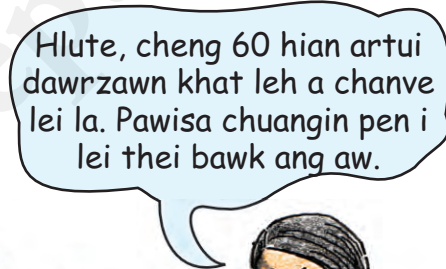
Bazarah chuan





- 1) Nawhalh bâwm khat hi pawisa eng zat man nge? _____
- 2) Cheng 2.50 in nawhalh bâwm eng zat nge a lei theih ang? _____
- 3) Cheng eng zat nge sahbawn manah i sen ngai ang? _____
- 4) Khuma chuan sahbawn 1 lei a duh a, cheng nga thir pakhat, cheng khat thir 2 leh cheng chanve thir 4 a nei a. Cheng eng zat nge a neih zia la, cheng eng zat nge rawn kir ang?

- 5a) Artui pum khat chu cheng hnih leh a chanve a ni a. Dawrzawn khat leh a chanve hi eng zat man nge ni ang?
- b) Hlutea hian pen eng zat nge a lei theih ang? Cheng eng zat nge chuang?



- 6) Pen pahnih man chu ₹ _____ a ni a. Pen pahnih a lei thei ang em?

I tih ve hun – thai zawm rawh

Bâwm eng a mite hi bâwm hringa mi leh bâwm sennova mite nen thai zawm rawh.

Cheng $\frac{1}{2}$	Pawisa 5	Cheng 0.75
Cheng $\frac{1}{10}$	Pawisa 25	Cheng 0.50
Cheng $\frac{5}{100}$	Pawisa 99	Cheng 0.05
Cheng $\frac{3}{4}$	Pawisa 50	Cheng 0.10
Cheng $\frac{99}{100}$	Pawisa 75	Cheng 0.25
Cheng $\frac{1}{4}$	Pawisa 10	Cheng 0.99

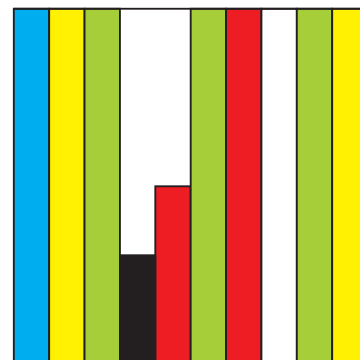
Mawi taka chei

A pawl hian hmun eng zat nge a luah? ____/10

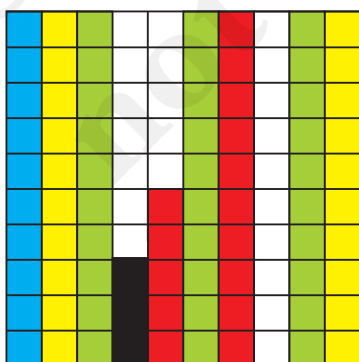
A hring hian hmun eng zat nge a luah? ____

Eng rawngin nge phek pum atanga 0.2 luah?

E, a thlûr pawl hian phek pum 0.1 a awh a nih hi.



A hnuaia mi hi han en leh teh. Thlûr tinte hi bâwm sawmah intiat vekin then têt leh an ni a. A vaiin bâwm eng zat nge awm ta?



Bâwm tinte hi phek pum $\frac{1}{100}$ an ni em?

Bâwm pawl eng zat nge awm? ____

Bâwm pawl hi a phek pum atanga $\frac{10}{100}$ a ni em? A pawl hian $\frac{1}{10}$ a tluk a ni tih kan hmu a. Phek 0.1 tiin kan zia ang.

Ti hian a dik em? $10/100 = 1/10 = 0.10 = 0.1?$

Ngaihtuah teh: Pawisa sawm hi cheng 0.1 a ni kan ti thei em?

Bâwm sen eng zat nge awm? Phek pum then eng zat nge a awm? 15/ ____

(Puituah: I la hria em, pawisa 99 chu cheng 0.99 kan tih kha!)

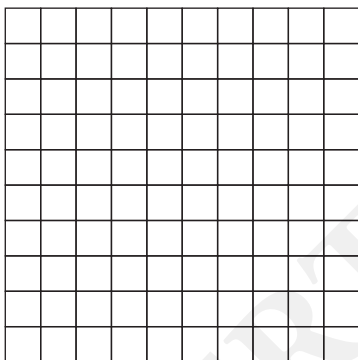
A phek 3/100 hi a dum a ni a. A dum chu phek pum 0. ____ a ni kan ti thei ang.

Phek pumah hian bâwm var eng zat nge awm?
Phek hnihna ah hian a varin then eng zat nge a awm? ____

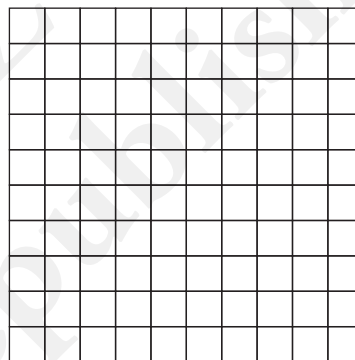
Hriat pawlh suh aw!
0.10 leh 0.1 hi thuhmun.
Hre reng rawh, 50 hi
cheng 0.50 tih emaw
cheng 0.5 tih nen
thuhmun.



✳ A lem han duang ve chhin the le.



Rawng sen mawi takin he square
phek hmun 0.45 hi han chei teh.



Rawng chi li hmang la. Rawng tinte
chuan bâwm 0.05 theuh awm se.

Sports Ni

Sailutar khuaa sikulah chuan sport ni an hmang a.

Long jump-a ti tha pangate chu:



Rini chuan 3.50m a zuang a.
Chu chu 3m leh 50 cm a ni



Ruati hian eng chen nge a
zuan? ____ m leh ____ cm

Rini	3.50 m
Sawmi	4.05 m
Puii	4.50 m
Ruati	3.05 m
Khumi	3.35 m

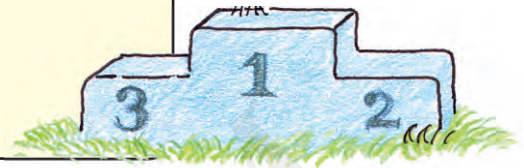
Long jump-ah hian tu nge pakhatna? ____

Dawh sana ding tur I-na, II-na leh III-na te hming ziaak rawh.

1 metre = 100 centimetres tih kha i la hre reng em?

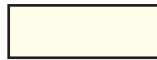
Tichuan centimetre 1 chu 1/100 metre a ni.

1 cm chu _____ m tiin kan ziaak bawh thin.



Metre-in ziaak rawh

3 metre 45 centimetre



metre

99 centimetre



metre

1 metre leh 5 centimetre



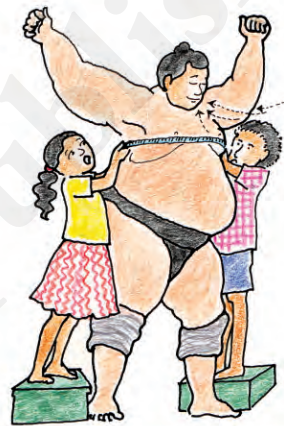
metre

Engtianga lian nge i nih theih?

A)

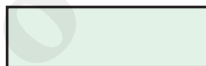


Thawh chhuah hnuah 1.52 m



Thawh lak vak hnuah 1.82 m

Len lam inthlauhna



Nangmahin hei hi ti la, a inthlauhna zawng rawh.

B)

2 m-a sang ni turin 45 cm-a
i than belh a la ngai anih hi.

Dinte-a hi metre eng zata sang nge?

_____ m _____ cm.



I tih ve hun

1) Ram hrang hrangte pawisa

Ram dangten an hman, pawisa note emaw, pawisa thir emaw i hmu tawh em? Rural Bank chuan India pawisain ram dang pawisa eng zat nge kan thleng theih ang tih kan hriat theihna tur an siam a.

Ram hming	Pawisa hming	India pawisaa thlengna
Korea	Won	0.06
Sri Lanka	Rupee (SL)	0.25
Nepal	Rupee	0.62
Hong Kong	Dollar (HK)	10.63
South Africa	Rand	4.36
China	Yuan	11.50
U.A.E.	Dirham	22.63
U.S.A.	Dollar	83.14
Germany	Euro	88.01
England	Pound	101.12



(Hei hi 25-10-2023-a mi a ni)

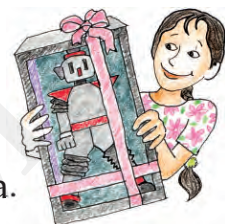
- India pawisaa tehin eng ram pawisa nge hlu ber?
- Zama patea, America-a awm chuan Zama chu USA Dollar 10 a rawn pe a. Zama chuan an sikul zinnaah cheng 350 a hmang a. Eng zat nge a la neih ang?



Naupangte hi number thui taka puntir turin beisei loh tur a ni. Chu ai chuan, ram hrang hrang pawisa hman atang tea chhut tura fuih tur an ni. Entir nan, pawisa 75×2 hi ti zawng hian an ngaihtuah thei, pawisa 50 thir pahnih leh pawisa 25 thir pahnih tiin.

C) John-a pa chuan South Africa-ah hna a thawk a. South Africa pawisa Rand 1000 a hlawh a. Khuma pa chuan Sri Lanka-ah Sri Lanka pawisa Rupee 2000 a hlawh a. India pawisain tu nge hlawh hnem zawk?

D) Hmingi chu a niin China atangin thilpek a rawn pe a. Yuan 30 man a ni. India pawisain eng zat man nge ni ang?



E) Astha chuan Hongkong pawisa Dollar leh Won tlem a duh a.

i) ₹4-in Won eng zat nge a thleng theih? ₹400 in eng zat nge?

ii) Hongkong Dollar eng zat nge ₹508-in a thleng theih ang?

2) Mawia chu ₹ 200 kengin a bazar a. A thil leite hi en teh. Dawr nghaktu hian point hi a dah lo va. A awmna tur takah point dah la, pawisa hman zawng zawngte eng zat nge han zawng bawk teh.



Item	Quantity	Price (Rupees)
Sahbawn	1	1250
Chana hring	1 kg	5025
Thingpui fe	250 gm	2725
Coconut Oil	1 Litre	6000
	Total	_____

3) *Khawi khawpui nge vawt?*



Himachal-ah ka awm a.
Chutah chuan thlasikah khaw
vawh lam chu 2° celsius a ni a.
A chang chuan tuidâwta tui te
hi a khal a, vurah a chang thin.

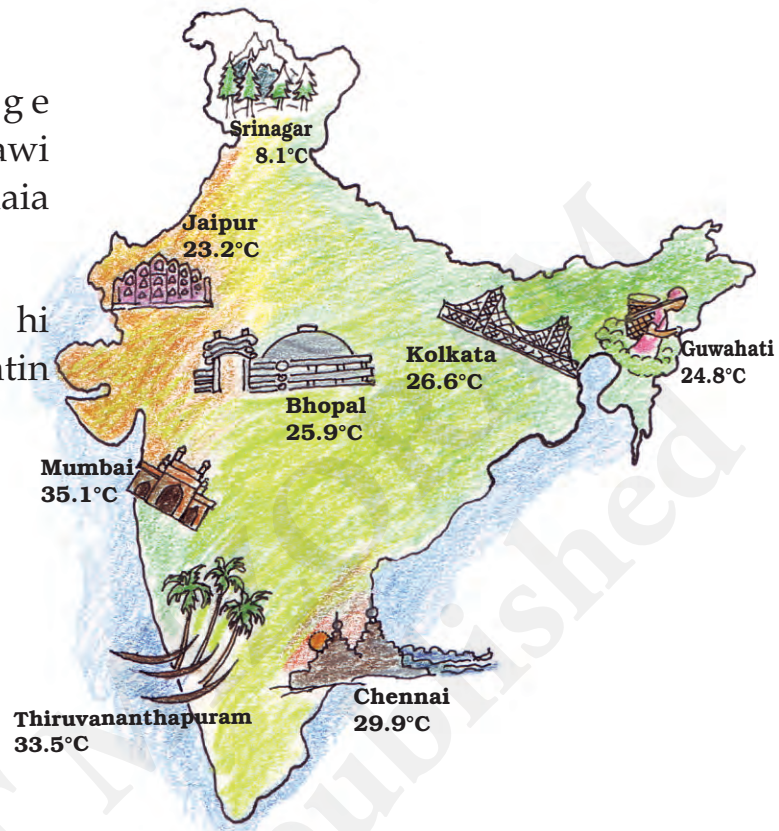


Rajasthan-a ka chenna ve
thungah chuan khaw lum lam
chu 48° Celsius lai a ni. He
lai chu a lum khawp mai. Tui
chawi turin kilometre tam
tak te kal a ngai thin.

Naupangte hi chanchinbu leh TV tea khawpui hrang hrang lum leh vawh dan (degree celsius emaw °C) an tar lan te en thin tura fuih ni se. Heta tih turah hian lum leh vawh dan hi ni khatah hun hnihah teh theih annia.)

Khawpui hrang hrangte lum leh vawh dan chu ni 16, January 2015 khan 3:00 pm-ah teh a ni a.

- 1) Khawi hmun nge 3 pm-ah lum ber? Khawi hmun nge hetih hun laia vawt ber?
- 2) Mumbai lum zâwng hi Srinagar aiin eng zatin nge a san zawk?



- 3) Degree eng zatin nge lum belh se Thiruvananthapuram hi 40° C a nih ang?
- 4) Kolkata hi Chennai aiin eng zatin nge a vawh zawk?
- 5) Heng khawpuite lum leh vawh dan hi hemi ni tho hian 3 am-ah chhinchhiah a ni a. Bâwm hi en la, zawhnate hi han chhang teh.

City	Temperature at 3 am
Chennai	21.1
Mumbai	19.0
Th'puram	21.6
Kolkata	13.1
Bhopal	9.8
Srinagar	1.3
Guwahati	12.8
Jaipur	10.2

- a) Khawi hmun nge 3 am-ah hian vawt ber? Chumi hmuna awm anga in ngaihruat in, i awm dan turte han ziaak chhuak teh.

- b) Chennai hmuna 3 am leh 3 pm-a lum leh vawt inthlauhna eng nge? Bhopal hmunah eng zat nge ni ang?

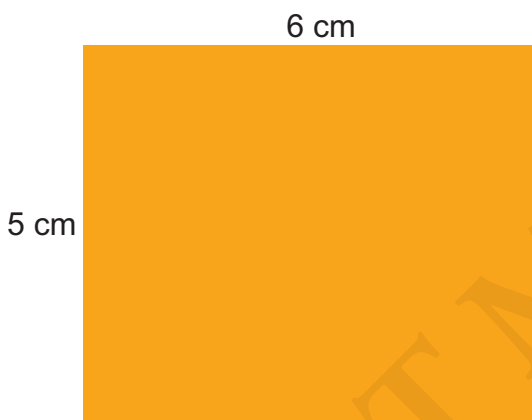


Area leh Boundary

Tu chan nge lian zawk

Pari leh Rini chuan *aam paapad* (theihai pho ro aṭanga siam) an lei a.

An thil lei pianhmang chu hetiang hi a ni.

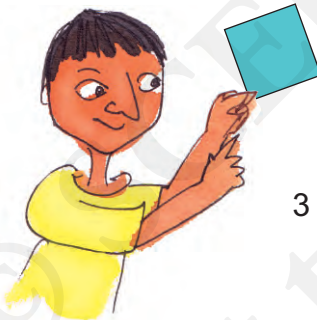


Phêk A

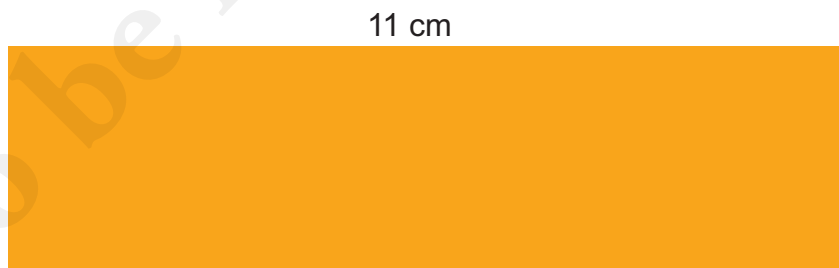
An pahnih chuan a khawi zawk nge lian zawk an hre thei lo va.

* A lian zawk zawn dan han ngaihtuah teh u.

Pari leh Rini-te ṭhian pakhat chuan square tē hmangin a lian zawk zawn dan a lo hre hlah mai a.



3 cm



Phêk B

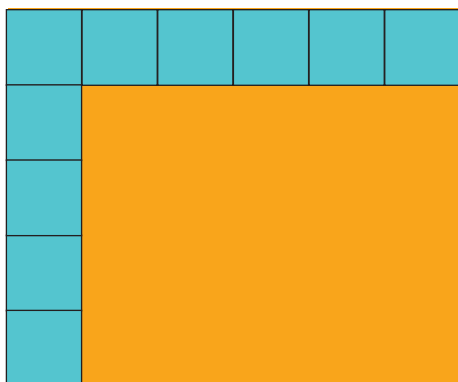
Phêk A zawk hi a dung 6 cm a ni a.

Chuvangin a dung zâwnng hian square-a sir 1 cm paruk a tlar pheih theih a ni. Phek A hi a vâng 5 cm a ni a.

A vâng zawng hian square 5 a rem theih thung a ni.

* A vaiin phek A chungah hian square eng zat nge rem theih? _____

* Tichuan Phêk A area chu _____ square cm a ni.



Phêk A



A vaia chhiar
chu a buaithlak!
Puntir mai tur!

* A hmaa mi ang khian phêk B area han zawng ve teh.

* Khawi nge lian zawk ni ta? Eng zatin nge?

Stamp-a khuh

Hemi stamp area hi 4 square cm a ni a. Rectangle lian hi khuh vek turin stamp eng zat nge ngaia i rin?



Naupangte chu stamp-te leh thil dang remchang hmangin thil chi hrang hrang area-te khaikhin dan chi hrang hrang sawi ho turin fuih rawh. Pawl IV-ah khan pianhmang mumal lo thenkhatte square awm zat chhiara khaikhin dan an zir tawh a. Rectangle-ah chuan square-a sir 1 cm eng zat nge leng tih awlsam takin a zawn theih a ni.

I ring dik em? Finfiah rawh

- a) Rectangle eng hi han teh la. A dung chu ____ cm a ni.
- b) A dung lamah hian stamp eng zat nge dah theih?
- c) Rectangle vâng lam hi eng zat nge?
- d) A vâng lamah hian stamp eng zat nge dah theih? ____
- e) Rectangle pum pui hi khuh turin stamp eng zat nge ngai? ____
- f) A hma khan i ring dik em? Han sawi ho teh u.
- g) Rectangle area hi eng zat nge? ____ square cm.
- h) Rectangle perimeter hi eng zat nge? ____ cm

Itih ve hun

- a) Hruaia chuan a choka chhuatah square tile hring phah a tum a. Tile sir sei zâwng chu 10 cm theuh a ni a. Choka dung lam chu 220 cm a ni a, a vâng lam chu 180 cm a ni a. Tile eng zat nge ngai ang?
- b) Huan pakhat square pianhmang nei hungna chu 20 m-a sei a ni a. Huan sir khat sei zâwng chu eng zat nge?



- c) Thirzai (wire) pakhat 20 cm-a sei hian rectangle siam a ni a. Rectangle vâng lam chu 4 cm a ni a, a dung lam eng zat nge?

Rin chhin leh finfiah hi hmanraw remchang hmangin class-ah tih mai theih a ni a. Mathematics bu chung a postcard dah theih zat te, classroom banga paper bel khah theih zat tih te. A remchanna apiangah naupangte chu thil zau zâwng rin dik leh dik loh finfiah nan phahtir tur a ni. Hetianga naupang hovin a zau zâwng an hriat theih chuan, square centimetre-a a zau zâwng zirtir leh tur a ni.

d) Carrom board pianhmang chu square a ni a. A perimeter chu 320 cm a ni. A area eng zat nge?

e) A var chinah hian triangle pianhmang nei tile eng zat nge leng ang?



He triangle hi
cm square
chanve a ni.



A hnuaia mi var chin area chu = _____
square cm a ni.



* Pianhmang dang, area 4 sq cm leh 6 sq cm nei han siam ve teh.

f) Sanga, Atea, Tluanga leh Zara chuan card an siam a. An card siam a tang hian table hi dah khat rawh.



Card siamtu	A vang	A dung	Perimeter	Area
Sanga	10 cm	8 cm		
Atea	11 cm		44 cm	
Tluanga		8cm		80 square cm
Zara	40 cm			100 square cm

Kawnghren sei ber!

Lehkha chhah angreng tak, a dung lam 14 cm leh a vang lam 9 cm la la. Card hlui pawh a hman theih e.

* Lehkha area chu eng zat nge? A perimeter eng zat nge?

* Lehkha chu a dung zawngin inchen theuhvin chep thla rawh.

I lehkha cheh thlak chu tape hmanga
zawmin kawngghren siam rawh.

* I kawngghren siam chu engtia sei nge?

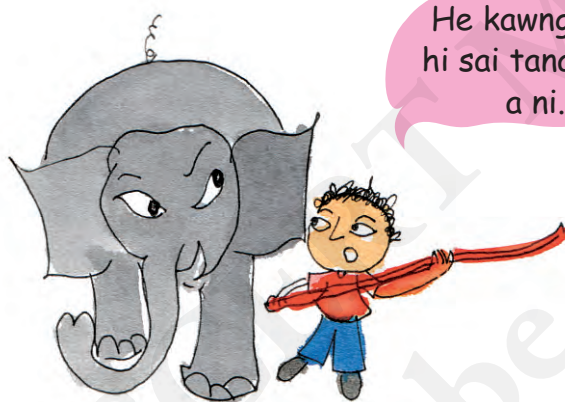
* A perimeter eng zat nge? _____

* In class-ah tu kawngghren nge sei ber?

Sawi ho tur

* Eng vangin nge i thian thenkhatte kawngghren chu mi dang ta aia a sei?

* In siam leh huna kawngghren sei zawk ngei turin engtin nge i tih ang?



Card-ah ka inthawlh tlang thei e. Ti bung miah lovin kua ka siam a.

Puzzle: Card a inthawlh tlang dan

Card tihkuaka inthawlh tlang dan i hria em? Han tum chhin teh. I tih theih loh chuan pheh hnung lam deuhvah a tih dan tur a inziak e.



Kawngghren kan siam khan tihlan a tum ber chu thil thenkhat area inang si, mahse pianhmang inang lo tak tak leh perimeter pawh inang lo a awm theih a ni tih hi a ni.

Mipui mipui, khawi hmunah pawh!

A) He infiamna hi kawt zawla tih tur a ni e.

Square pahnih, a zau zawng 1 square metre ve ve siam la.

In class chu pawl pahnihah inthen ula. Tichuan infiamna chu a tan theih ta!

Math-Magic lehkhahu
pali intlar hi metre khat
leh centimetre kua vel a
ni.



Hetiang hian in pawl pahnih kha inel rawh u –

- * Square metre khatah mi eng zat nge thu thei? _____
- * Square metre khatah mi eng zat nge ding thei? _____
- * Eng pawlin nge square metre khatah mi dintir hnem thei zawk? Engzat nge? _____
- * Eng pawlin nge square metre khatah mi thut tir hnem thei zawk? Eng zat nge? _____

B) In classroom chhuat kha a dung leh a vang sei zawng metre-in han teh ula.

- * In classroom chhuat area chu square metre eng zat nge? _____
- * In class-ah naupang eng zat nge awm? _____
- * Square metre khatah naupang eng zat nge thu thei? _____
- * Nuamsa deuh hleka che thei turin, square metre khatah naupang eng zat nge awm se tha i tih? _____



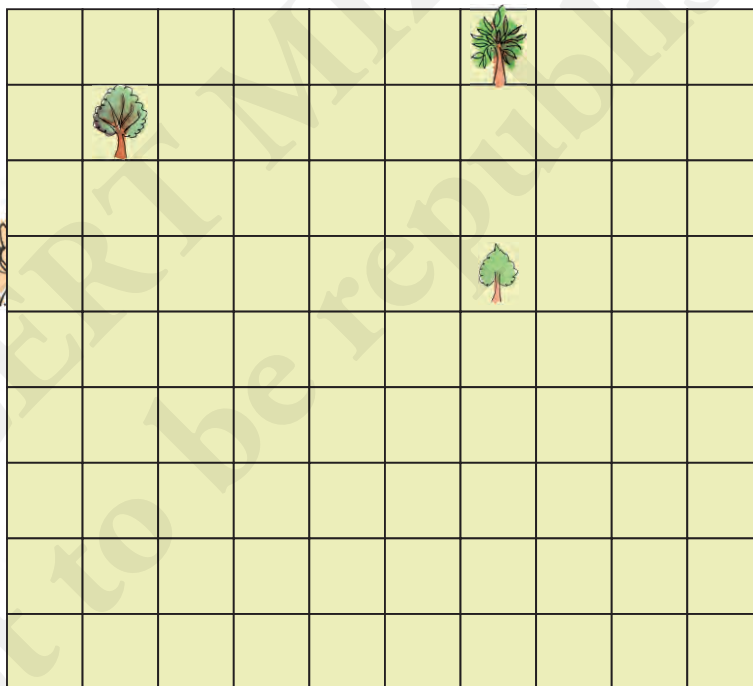
Square a sir 1 km hi engtia
zau nge i ngaihtuah thiam em?
A area chu _____ square km a
ni. A chhungah mi eng zat nge
cheng theia i rin?



West Bengal-ah chuan square
km khat chhungah mi 900 vel
an cheng a. Mahse Arunachal
Pradesh-ah chuan a
khawharthlak hle! Square km
khat chhungah mi 15 aia tlem
an cheng a ni.

Ram insem

Loneitu Nguri chuan a fate pathum - Chhuani, Zela leh Rama-te hnenah
a ram chu intiat tlang veka sem a duh a. A ram semah chuan thing kung
pakhat theuh awm turin a duh a. A ram awm dan chu a hnuaia tar lan
ang hi a ni.



* Ram chu unau pathum zingah intiat tlang takin i sem thei ang em?
Engtin nge i sem ang? Mi pakhatin thing kung pakhat theuh an chang
tur a ni a. Mi pakhat ram chan kha rawng hran zelin han chei teh.

Naupangte chu *sq m* leh *sq km*-a in chantir tawn dan hre tura beisei an ni lo. Exercise B-in a
tum ber chu *sq km* leh *sq m* zau zâwnng inthlauhzia zirtir a ni.

* Phek hmasa square pakhat hi 1 sq m zel ni ta se, a fate chuan engtia zau theuh nge ram chu an chan ang?
_____ square m

Chhuani, Zela leh Rama-te chuan an ram hung nan thirhrui an mamawh a.

* A hung nan tuin nge thirhrui mamawh sei ber?

* An vaia tan thirhrui eng chena sei nge ngai? _____



Itih ve hun

A. A hnuaia table hi en la, table-a inziakte hi a area zawng dawn ta la, eng column ber nge i hman ang? A dik bera i rinah thai (✓) rawh.

	Square cm	Square metre	Square km
 Rawmawl	✓		
 Puan			
 Lehkhabu phêk			
 Sikul ram			
 Khawpui huam chung			
 Classroom kawngkhar			
 Thutthleng			
 Blackboard			
 India flag			
 Lui dung			

B. Square, a area 9 square cm ziaak la. Square-ah hian A ziaak rawh.

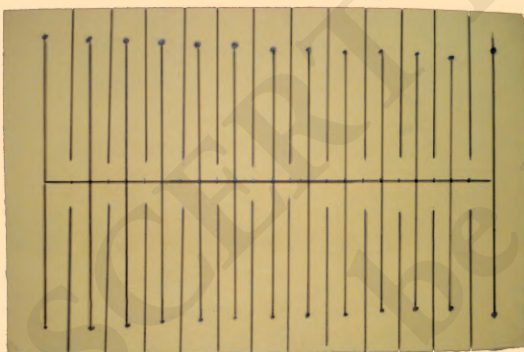
Square dang ziaak leh la, a sir sei zawng a hmaa mi let hnih ni se. B vuah rawh.

A hnuaia zawhnate hi chhang rawh —

1. Square A perimeter chu _____ cm a ni.
2. Square B sir sei zawng chu _____ cm a ni.
3. Square B area chu _____ square cm a ni.
4. Square B area chu square A area let _____ a ni.
5. Square B perimeter chu _____ cm a ni.
6. Square B perimeter chu square A perimeter let _____ a sei a ni.

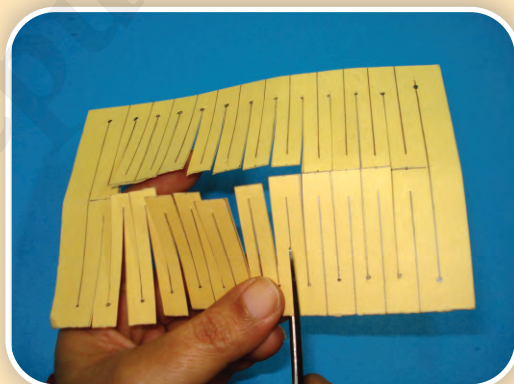


1.



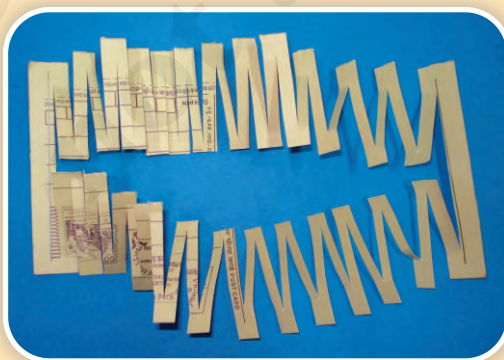
A chung a inziak ang khian Card-ah chuan line siam rawh.

2.



Line zawnah chiah chep rawh.

3.

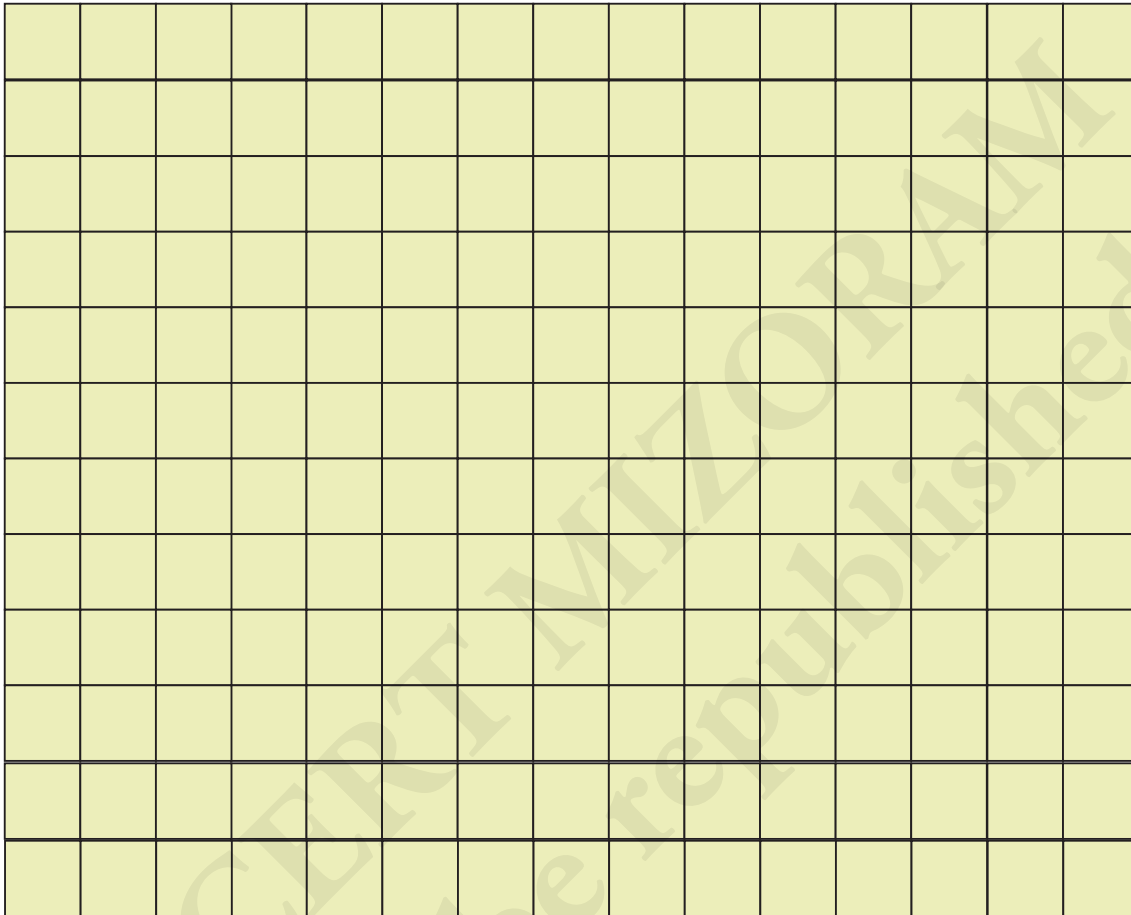


Khathi khan card-ah chuan i i thawlh tlang thei tawh ang!

* Card pawh pharh area chu i hre lo maw? A area chu _____ a ni.

La zai hmanga infiamna

La zai 15 cm-a sei la la. A hmawr suih zawmin a hnuaiah hian pianhmang hrang hrang siam rawh.



A) Eng pianhmang area nge zau ber? Eng zat nge? _____

A perimetre eng zat nge? _____

B) Eng pianhmang area nge zim ber? Eng zat nge? _____

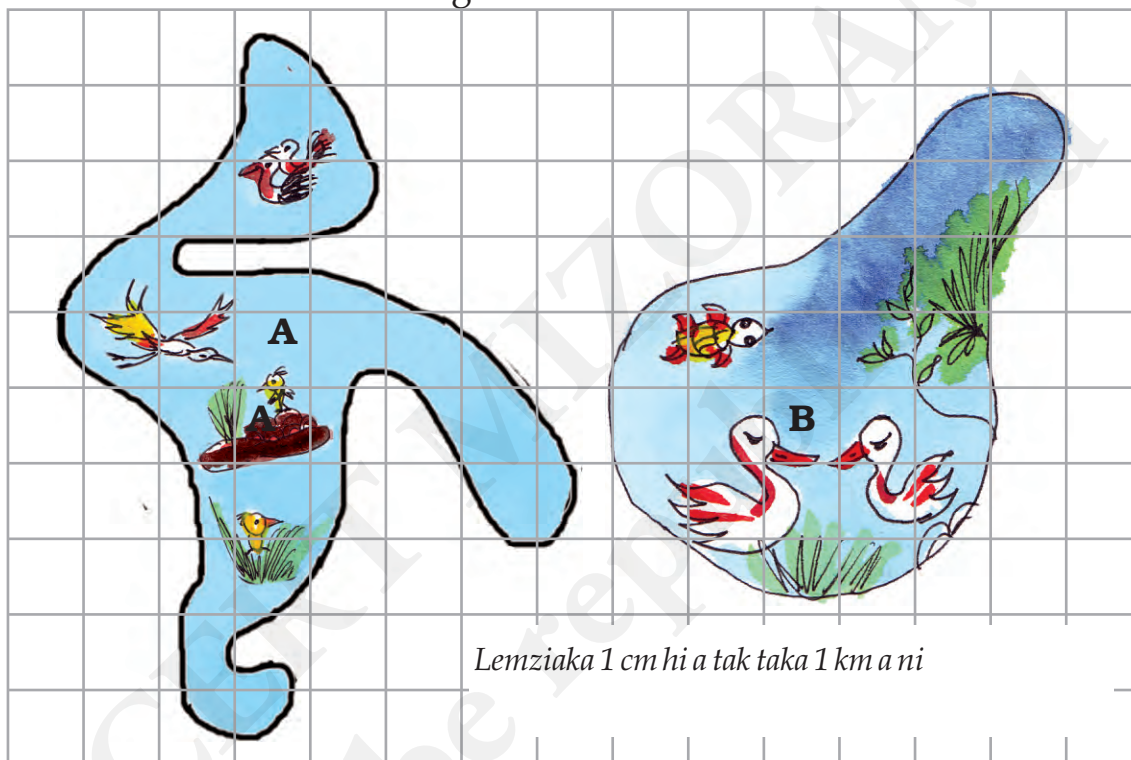
A perimetre eng zat nge? _____

Triangle-te, square-te, rectangle-te leh circle-te siam la. Eng pianhmang hian nge area nei zau bera engin nge area nei zim ber zawng rawh.



Sava humhalh rawh

Thingtlang khaw pakhtah hian dil mawi tak mai pahnih hi a awm a. Dilah chuan mi tam tak lawnga chuang tur leh picnic turin an kal thin a. An khaw VC chuan lawnga chuangte leh lawng thawm avangin dilah chuan savate an lo kal duh lo vang tih an hlau va. An VC chuan dil pakhtah chauh lawng dah phal ni se an ti a. Dil pakhat zawk chu savaten bu chheh nan hmang se an ti a.



- A lema dil A tlâng teh kual sei zâwng eng zat nge? _____
(Lazai hmangin teh rawh)
- A lema dil B tlâng teh kual sei zâwng eng zat nge? _____
- Dil A tlâng teh kual sei zâwng chu km eng zat nge? _____
- Dil B tlâng teh kual sei zâwng chu km eng zat nge? _____
- Dil kam a sei chuan sava tam zawkin bu an chhep thei ang a. Khawi dil zawk hi nge sava tana humhalh tur ni a, khawi zawk nge lawng chuan nan hman tur?

f) Dil B hi square cm-in a area han zawng teh. A area dik tak chu sq km-in eng zat nge?

Lal thawnthu

Mistiri pahnih Chhana leh Atea chuan lal tan khum lian leh mawi tak an siamsak a, Lal chu an chungah a lawm hle a. Lawmman atan lal chuan Chhana hnenah ram pek a tum a. Atea hnenah chuan rangkachak pek a tum bawka.

Chhana, hrui 100 metre in a kualkhung zau thei ang ber ram i duh lai thlang rawh.



Chhana chu a lawm hle mai a. Hrui 100 metre-a sei a la a, rectangle hrang hrang siam a tum ta a.

Rectangle $10\text{ m} \times 40\text{ m}$ a siam phawt a. A area chu 400 square metre a ni.

A dawt lehah rectangle $30\text{ m} \times 20\text{ m}$ a siam leh a.

* A area eng zat nge? Rectangle hmasa zawk aiin a zau zawk em?

* Hrui 100 metre-a sei khan rectangle dang engte nge siam theih? Eng rectangle-in nge area nei zau ber? Sawi ho ang che u.

A nupui chuan Chhana chu hrui hman chuan circle siam turin a ti a. Circle chuan area 800 square metre a nei tih a hre sa a.

* Chhana chuan engati nge rectangle a thlan? Han sawi fiah teh u.

He ram hi ka duh e. 800 square metre laia zau a aw h e.



Aw le, Chhana'n ram, a area 800 square metre a nei ta e. Ate, nang chu rangkachak zai 800 square metre kualkhung thei ka pe ang che

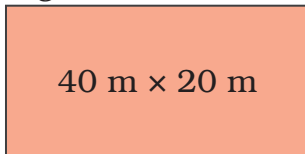


Atea chuan ram 800 square metre a zau hung kual dan tur kawng hrang hrang a ngaihtuah a.

* A hnuaia mi ang hian rectangle A, B leh C, an area 800 square metre theuh a siam a. Hetiang rectangle hung kual nan hian rangkachak zai engtia sei nge a dawn ang?



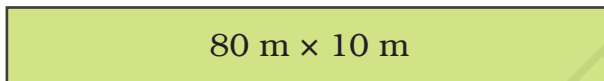
A



40 m $\times$ 20 m

Rectangle A tana rangkachak zai ngai zat = _____ metre

B



80 m $\times$ 10 m

Rectangle B tana rangkachak zai ngai zat = _____ metre

C



800 m $\times$ 1 m

Rectangle C tana rangkachak zai ngai zat = _____ metre

Atea chuan rectangle a hma zawnga mi aia sei zawk a siam leh a A sei dan êm êm hi!

D



8000 m $\times$ 0.1 m

A rangkachak hrui dawn zat tur chu _____ metre a ni.

Khai a! Hetiang êm êm a tam rangkachak ka pe thei dawn em ni?



Khati khan lal luhaina chhan chu i hre thiam thei tawh em!

Rectangle tlang kual la sei leh zual turin i siam thei em? Rectangle a vâng 1 cm leh a dung 80000 m-a sei ka siam a, a tlang kual sei turzia chu han ngaihtuah teh. Chutiang zat rangkachak zâi ka neih chuan lal ka ni thei dawn asin!



11 Chart Changkang

Billi Billi, Ngiau Ngiau

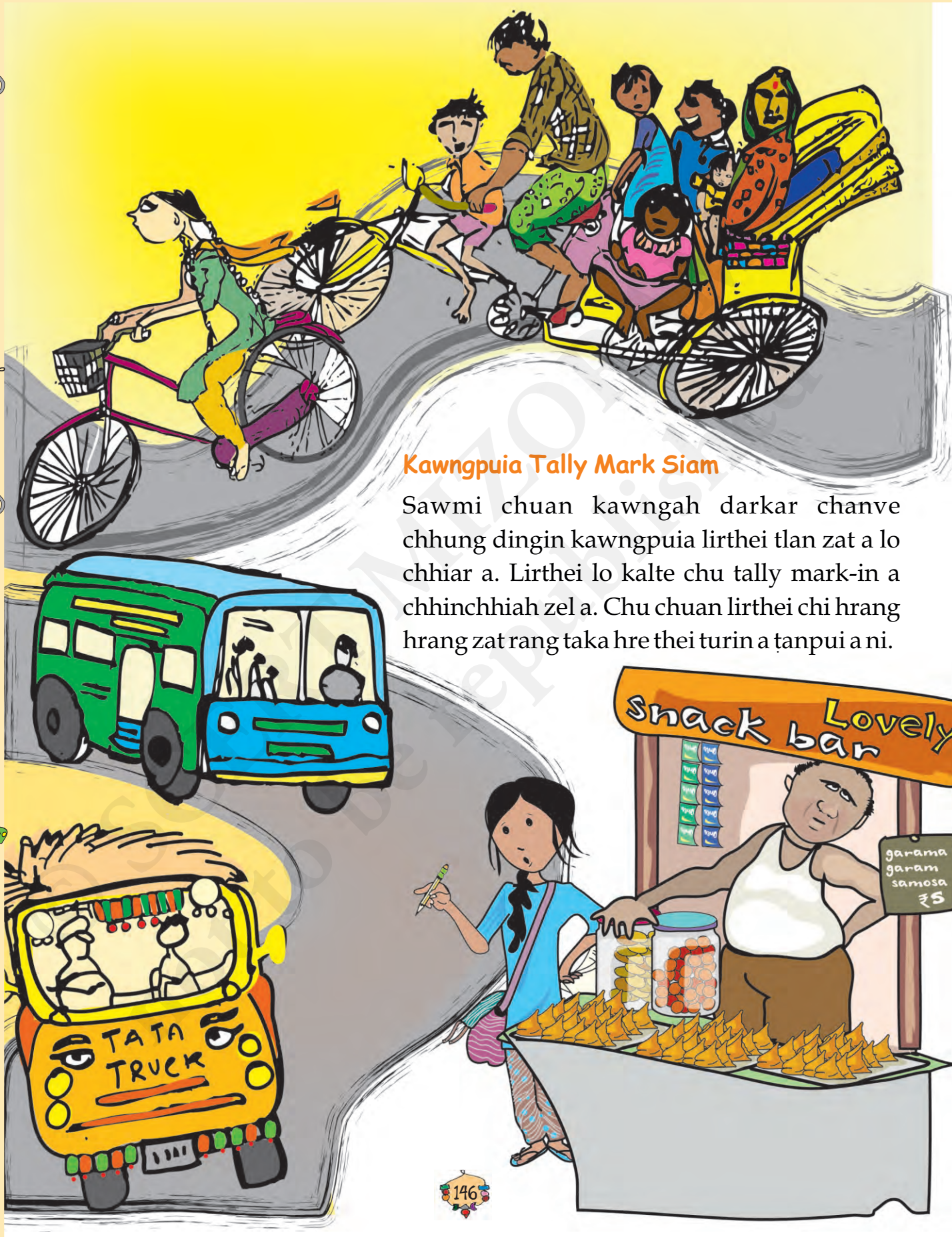
Mami chuan "Ran leh Savate" tih project a slam a. An class naupangte chunungcha khawin gam theihthe zinga an ngainat ber a zawthlawma.

An sawi chu tally mark hmangin a chhinchhiah zel a. Entir nan, tuin emaw 'zawhte' a tih chuan zawhte zawnah rin | pakhat a dah a, zawhte titu dang an awm leh chuan a rin belh leh a. Tichuan ☐ chu zawhte 2 tihna a ni a. ☒ chu zawhte 5 tihna a ni. Naupang zingah zawhte ka ngaina ber ti 24 an awm a.

❖ A hnuaia table hi dah kim rawh le.

Nungcha	Tally Mark	Nambar
 Zawhte	☒ ☒ ☒ ☒ ☒	24
 Ui	☒ ☒ ☒ ☒ ☒ ☒ ☒ ☐	
 Sazupui	☒ ☒	
 Bawng	☒ ☒ ☒ ☒ ☐	
 Vaki	☒ ☐	
 Kel	☒ ☒ ☒ ☒	
 Thehlel	☒ ☒ ☒	

- ❖ Tally mark hi en la, table-a nungcha awm zat theuh hi ziaak rawh. Naupang eng zat nge Mami hian a biak le?
- ❖ Table-ah hian eng nungcha in nge ngainat hlawh ber?
- ❖ Nungcha eng hi nge neih i duh ber? Eng nge a hming i vuah ang? Nungcha dang engte nge ina vulh ve theih chi le? Sawi ho rawh u.



Kawngpuia Tally Mark Siam

Sawmi chuan kawngah darkar chanve chhung dingin kawngpuia lirthei tlan zat a lo chhiar a. Lirthei lo kalte chu tally mark-in a chhinchhiah zel a. Chu chuan lirthei chi hrang hrang zat rang taka hre thei turin a tanpui a ni.

Lirthei	Tally Marks	Nambar
Cycle		
Car		
Auto rickshaw		
Bus		
Cycle rickshaw		
Truck		



- ❖ Lirthei chi hrang hrangte chu a zat table-ah chhinchhiah rawh.
- ❖ Sawmin darkar chanve chungin lirthei kawnga lo tlan eng zat nge a hmuh?
- ❖ Auto rickshaw chu truck let thumin a tam - Dik/Dik lo?
- ❖ Bus tan tally mark 7 leh Truck tan tally mark 2 han ziah/ thai belh teh.

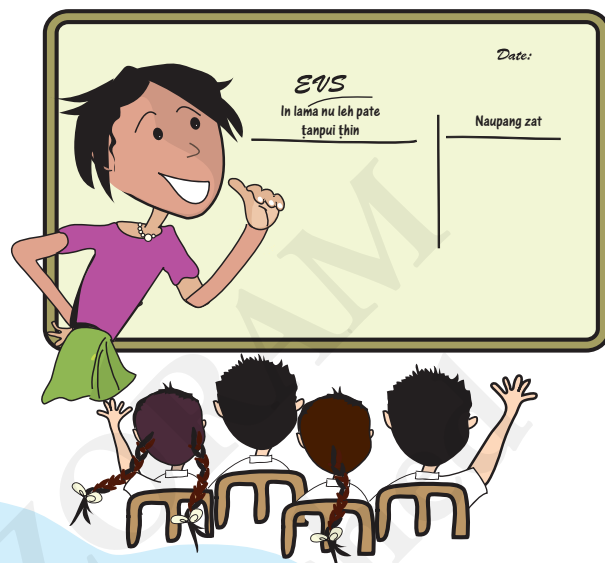
Mahnia tih han tum teh

- ❖ In awmna kawtthler fang kual la, thing chi hrang hrang eng zat nge i hmuh theih? An hming i hre hlawm em? A lemte chu ziak la, tally mark hmangin chi hrang hrangte chu a zat chhinchhiah rawh.

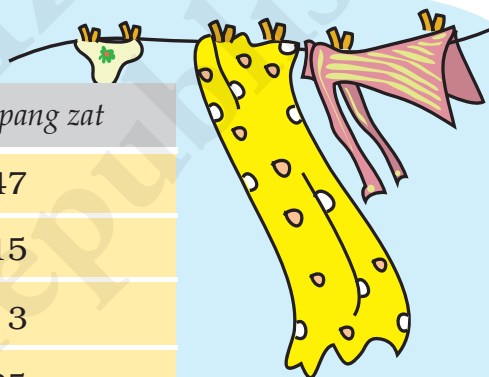
Naupangte chu tally mark hmangin thil chi hrang hrang an chhinchhiah zung zung theih nan fuih tur a ni.

Tanpuitu nih

Zirtirtuin EVS hunah naupangten an in lamah an nu leh pate an tanpui em tih a zawt a. Chi hrang hrangin an chhang hlawm a. Naupangte chuan eng hnaah nge an tanpui nasat ber tih an sawi a. An sawite chu zirtirtuin table-ah a lo chhinchhiah zel a.



In lama an thawh nasat ber	Naupang zat
Bazara kal ve	47
Thleng sil	15
Puan su	3
Ei siam	25
Hmun phiat fai	10
Nu leh pa tanpuia insawi naupang zawng zawng	



Tunah table-a a zat tar lan ang hian pie chart hi i dah khat thei tawh ang.

1) *En Chiang la, zawng chhuak rawh le.*

Chaw chhum emaw chaw ei siam emaw puitu naupang zat chu

- a) Naupang zawng zawng $\frac{1}{3}$
- b) Naupang zawng zawng zatve
- c) Naupang zawng zawng $\frac{1}{4}$



2) *I tih ve hun*

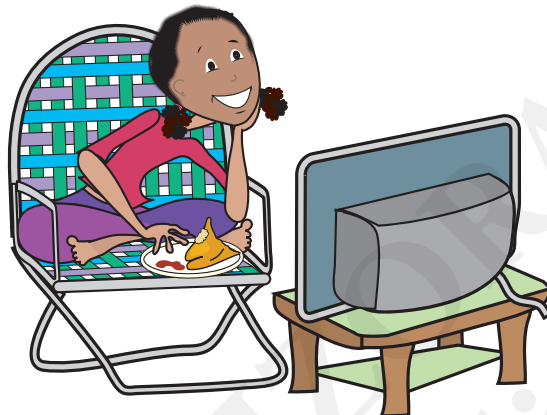
I thiante 10 hnenah sikul ban hnua tih an chak ber zawt rawh.

Sikul ban hnua tih chak ber	Naupang zat
TV en	
Football khelh	
Thawnthu Chhiar	



Fakna buaipuil!

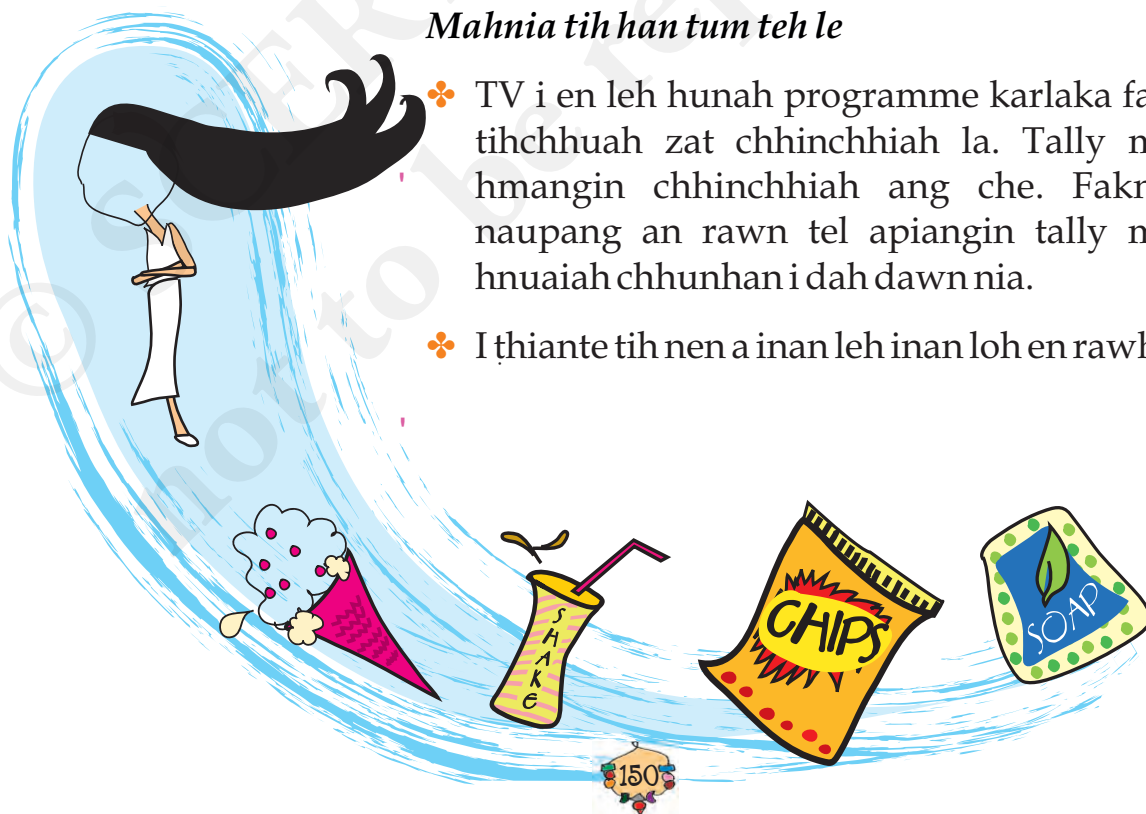
Rami chuan TV-a cartoon en a hrat hle a. Ni khat chu programme karlaka fakna an tihchhuah zat hriat a tum a. Programme karlak zela fakna chhuak chu 14 theuh a ni tih a hre ta a. Fakna tihchhuah zinga 10-ah chuan a changtute zingah naupang an tel ve a ni.



- ❖ Fakna tam taka naupangte telna chhan chu eng vang nge ni a i rin?
- ❖ Programme karlaka fakna tihchhuah zat chu tally mark hmangin chhinchhiah rawh.

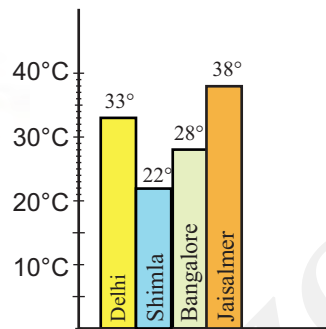
Mahnia tih han tum teh le

- ❖ TV i en leh hunah programme karlaka fakna tihchhuah zat chhinchhiah la. Tally mark hmangin chhinchhiah ang che. Faknaah naupang an rawn tel apiangin tally mark hnuaiah chhunhan i dah dawn nia.
- ❖ I thiante tih nen a inan leh inan loh en rawh.

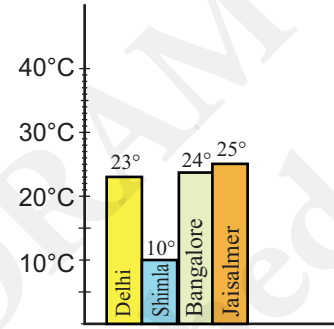


Lum leh Vawt

Khaw chin thlir lawkna (weather report) hi chanchinbuah emaw TV-ah emaw i hmu tawh em? Heta hi bar chart pahnih a awm a. Khawpui pali-a ni hnih chhunga khaw lum lai ber theuh Celsius Degree zat tar lanna a ni. Chung khawpuite chu Delhi, Shimla, Bangalore leh Jaisalmer te a ni.



1 June



1 December

Bar chart atang hian zawng chhuak teh —

- ❖ June ni 1-ah khawi khawpui nge lum ber?
- ❖ December ni 1-ah khawi khawpui nge vawt ber?
- ❖ June ni 1 leh December ni 1-ah khawi khawpui nge sik leh sa (temperature) danglam nep ber?



Mahniin tih han tum teh

- ❖ Eng ni emawa TV emaw chanchin thar emawa khawpui pathuma khaw lum leh vawh dan an sawi chhinchhiah rawh.
- ❖ I note bu-ah bar chart siam la, i chart siam chungchang chu i thianta zawt rawh. I chart siam an hriat thiam leh thiam loh hre rawh.

Naupangte chu India map en a, khawpui hrang hrangte awmna lai zawng hmu turin fuih rawh. Khawpui lum leh vawh dan atangin sik leh sa dinhmun pawh an ngaihruat thei ang.

Australia rama sazupui

Tunhma chuan Australia ramah sazupui hi a awm lo va. Kum 1780 vel khan he ramah hian sazupui lak luh a ni a. Chutih lai chuan Australia ramah sazupui eitu ramsa pakhat mah a awm loh avangin sazupuite chu an inthlah pung chak em em mai a. Thlai an ei chhiat nasat dan tur han ngaihtuah teh.

Kum tina sazupui inthlah pun dan table-ah hian entir a ni.

A hun chhung	Sazupui zat
A tirah	10
1 year	18
2 year	32
3 year	58
4 year	108
5 year	
6 year	

1) Kum khat hnu zela sazupui awm zat chu —

- A hma kuma sazupui awm zat let aiin a tlem hret.
- Kum kal taa awm zat let hnih a ni.
- Kum kal taa awm zat aiin 8 in a tam.
- Kum kal taa mi let hnih aiin a tam.

2) Kum 6 tawpa sazupui awm zat chu heti zat hi a ni ðep

400

600

800

3) Kum eng zat hnuah nge sazupui hi 1000 aia a tam ang?

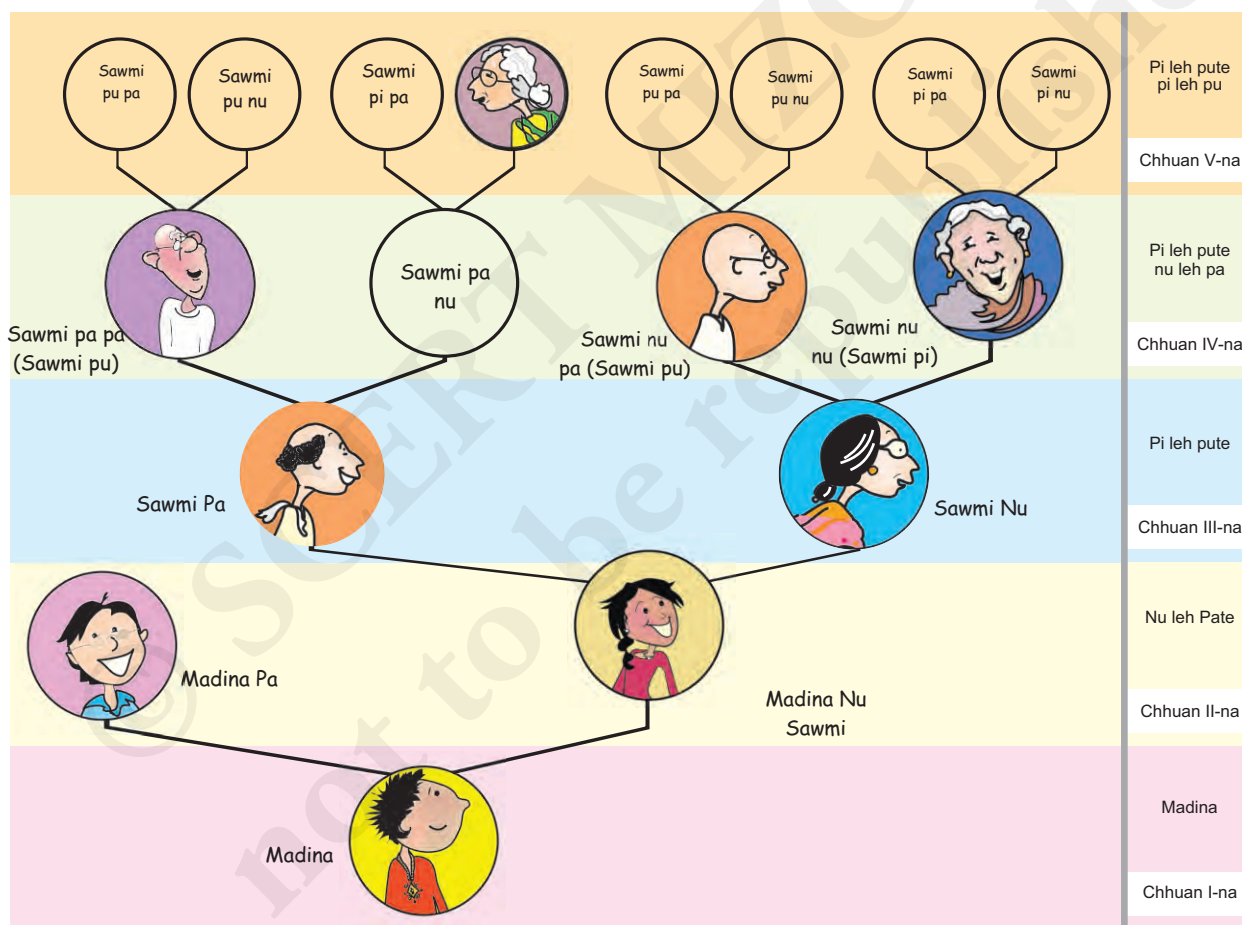
Class-ah entirna dangte siam tur a ni. Naupangten a vel tham âwm ang (approximation) ngaihruat dan an thiam a pawimawh.

Family Tree

Madina chu a nu leh pate rualin inneihnaah a kal ve a. Tahchuan an chhung leh khatte a hmu teh va.

Mahse a hre kim vek lo va. A nu pa, a pu a hmu a, a pi erawh a dam tawh lo tih a hre chauh va. A pi nu, kum 100 chuang lai ni tawh pawh damin a hmu a.

Madina rilru chu a buai map mai a. A nu pi pi leh chu tu nge tih reng a ngaihtuah thiam lo. Tichuan a nuin an chhungkaw inthlah chhawn dan chart (family tree) a siamsak ta a —





Madina tan a nuin he chart hmang hian an chhungkaw chanchin a hrilhfiah a. Nang pawhin i pi leh pute leh an thlahtu zelte pawh hetiang family tree hmang hian i zawng chhuak thei ang.

Heng zawhnate hi han chhang teh:

- 1) Sawmin pi leh pu eng zat nge a neih?
- 2) Madinan a pi leh pute pi leh pu leh chhawng eng zat nge a neih?
- 3) An chhungkaw chhuan 7-naah a pi leh pu eng zat nge awm?
- 4) Family tree hi chhunzawm ta zel se, chhuan engzat naah nge pi leh pu 128 a neih ang?

Thlai Than Chak Dan Chart

Amawiin behliang a ching a. Behliang tiak chu ni li chhungin 1.4 cm a thang hman a. Chumi hnu lamah phei chuan a thang chak lehzual a.

Amawii chuan a thlai chin chu ni li dan zelah a san zawng tehin, chart-ah chuan chhunhan (dot) hmangin a chhinchhiah zel a. Entir nan, ni linaa chhunhan i en chuan ding lamah 1.4 cm i hmu ang.

Chhinchhiahna chhunhan san zâwng hi en la, chhunhan a dahna hi a dik leh dik loh han en fiah teh le.

Ni zat	Thlai san zâwng (cm-in)
0	0
4	1.4
8	5.3
12	9.5
16	10.2
20	10.9



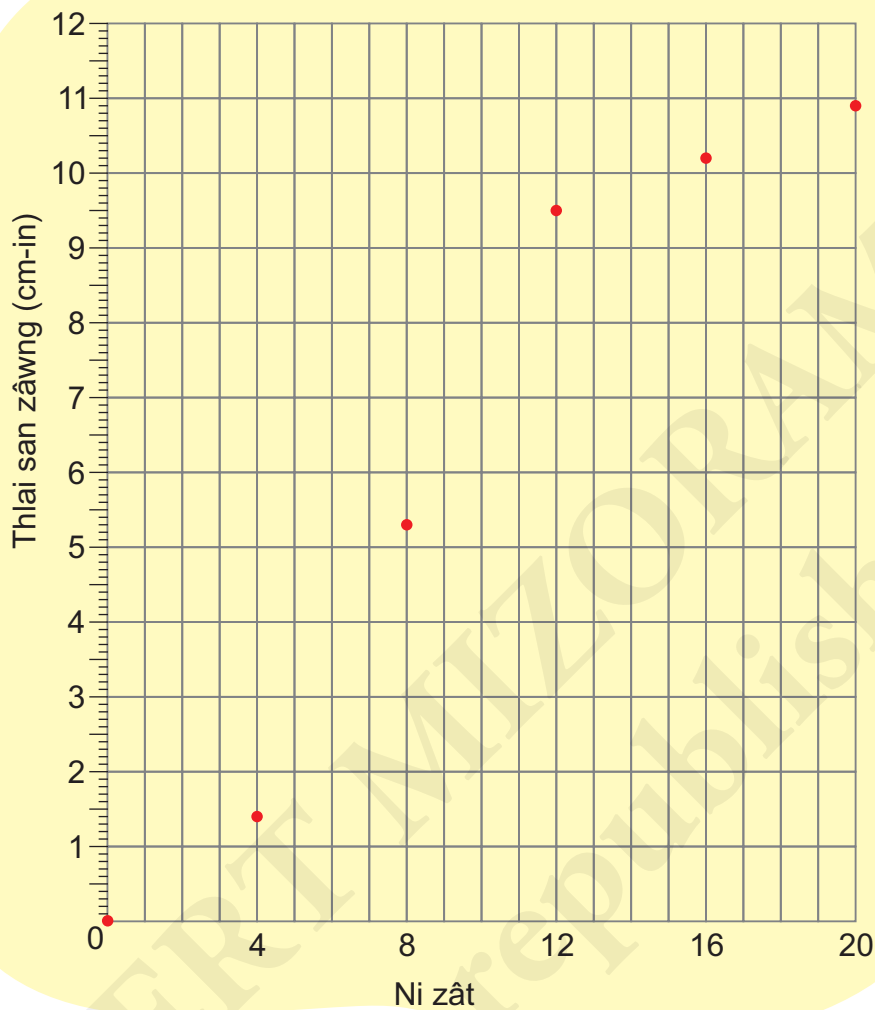


Chart aţang hian heng hi zawng chhuak rawh

a) Eng ni inkarahte nge a san zâwng a danglam nasat ber?

- i) 0-4 ii) 4-8 iii) 8-12 iv) 12-16 v) 16-20

b) Ni 14-naah thlai hi engtia sang nge a nih theih ang? Han ring teh!

- i) 8.7 cm ii) 9.9 cm iii) 10.2 cm iv) 10.5 cm

c) Thlai hi a  ang chhunzawm reng ang em? Ni 100-naah engtia sang nge a nih ang? Han ring chhin teh!

Zawhna hnunhng ber sawi hona hun tlem awm se. Thlai dangte leh nungchate  an dan chik turin naupangte chu fuih tur a ni.

12

Puntir leh Sem Dan Kalhmang

Maniratnam - Sumvawngtu

Maniratnam-a chu Lal Jayan-a tangka vawngtu a ni a. A hna ber chu lal tana thawktu zawng zawngte hlawh siamsak a ni. He bawmah hian hnathawktu tin te ni khat hlawh chu chhinchhiah a ni a.



Hnathawktu	Nikhat hlawh
Khawnbawl	₹ 195
Sakawr pu	₹ 76
Chawchhumtu	₹ 65

Maniratnam-a chuan chawchhumtu January thla hlawh chu chhût chhuah a duh a. Ti hian a zia a —

	60	5
30	60 × 30 1800	5 × 30 150
1	60 × 1 60	5 × 1 5

Cheng $1800 + 150 + 60 + 5 = ₹$ _____

Maniratnam-a fanu Bela-i chuan puntir dan thar a zir a. Hetiang hian a unaupa Bhanu-a hnenah zia kin a entir a.

Ka u, i va'n thiam. Engtin nge i tih a?



$$\begin{array}{r}
 65 \\
 \times 31 \\
 \hline
 65 \quad (65 \times 1) \\
 + 1950 \quad (65 \times 30) \\
 \hline
 \hline
 \end{array}$$

65 leh 31 hi chhawng hnihin kan puntir thei. 31 hi 30+1 a ni a. Tichuan 65 in 1 puntir la, 30 nen i puntir leh ang.



Tunah chuan Bhanu-a chuan lal khawnbawl January thla hlawh tur chhutsak a tum ta a. 195 leh 31 puntir a duh a.

$$\begin{array}{r} 195 \\ \times 31 \\ \hline 195 \\ + \quad _ _ _ 0 \\ \hline \end{array}$$

(195 × 1)

(195 × 30)

30 a puntir turin, tah hian bial ka dah phawt a. Tichuan 3-a puntir chauh a ngai tawh a ni.

Kan thiam em le?

1) Bela-i tih dan hmang khan hengte hi han puntir ve teh.

a) 32×46

b) 67×18

$$\begin{array}{r} 32 \\ \times 46 \\ \hline 192 \\ + \quad _ _ _ _ \\ \hline \end{array}$$

(32 × 6)

(32 × 40)

$$\begin{array}{r} 67 \\ \times 18 \\ \hline \quad _ _ _ \\ + 670 \\ \hline \end{array}$$

(67 × 8)

(67 × _)

2) I leh khabuah khan hengte hi Bela-i tih danin han ti ve teh.

a) 47×19

b) 188×91

c) 63×57

d) 225×22

e) 360×12

f) 163×42

Chawchhum thiam Shantaram-a

- * Shantaram-a chu chaw chhum thiam tak, intihhlum huna lo kal thin a ni a. Nikum khan ni 28 koh a ni a. Ni khatah ₹ 165 zel pek a ni a. A vaia a hlawh chu eng zat nge ni ang?
- * Kum khat chhung ni tin thawk ta se, eng zat nge a hlawh ang?

$$\begin{array}{r}
 165 \\
 \times 365 \\
 \hline
 \text{---} \quad (165 \times 5) \\
 \text{----} \quad (165 \times 60) \\
 + 49500 \quad (165 \times 300) \\
 \hline
 \hline
 \end{array}$$

- * Khawnbawl leh sakawru pu khan kum 1-ah eng zat nge an hlawh ang?

Kum tluanin

a) Muanan ni tin tui no 8 a in ziah a.

- * Thlakhat chhungin no eng zat nge tui a in ang? _____
- * Kum khat chhungin tui no eng zat nge a in ang?
- * Mi 1 in ni tin tui no 8 zel in se, mi 125-in kum khat chhungin tui no eng zat nge an in zawh ang?



b) Rawna lungphu chu minute khatah vawi 72 a phu
a. Darkar khatah vawi eng zat nge a phut ang?

* Ni khatah vawi eng zat nge a phut hman ang?

* I lungphu zat kha han chhiar chhin la,
chuta tang chuan kar khat chhunga a
phut zat tur han chhût teh.

Kum khatah vawi
eng zat nge a
phut i rin?



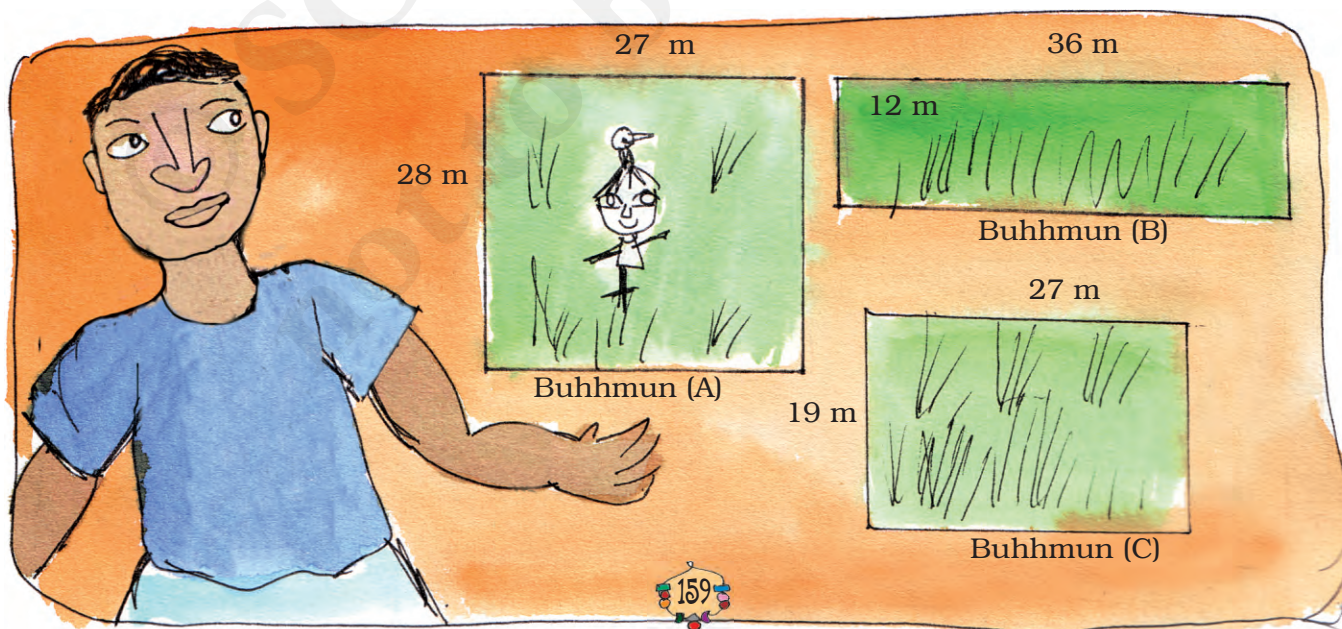
c) Sai notê chuan ni khatah hnute
tui 12 L a hne ziah a. Kum hnih chhungin hnute tui eng
zata tam nge a hnek hman ang?

d) Blue whale notê chuan ni khatah hnute tui 200 L vel a
hne thin a. Hnute tui chutiang zat a tam chu han
ngaihtuah teh! In chhungkua khan ni eng
zah chhungin nge bawnghnute 200 L hi in
in ang le. Thlariat chhungin blue whale
notê in hnute tui eng zata tam nge a in
zawh ang?



Khumtira — Ram neitu

Khumtira chuan buhmun pathum a lei a.



* Buh hmun pathumte zau zâwng han zawng teh.

Buh hmun A _____ square metre .

Buh hmun B _____ square metre.

Buh hmun C _____ square metre.

Buh hmun A chu square metre-a ₹ 95 in a lei a, Buh hmun B chu square metre-a ₹ 110-in leh Buh hmun C chu square metre a ₹ 120-in a lei a .

* Buh hmun pathumte man zat chu han zawng chhuak teh.

Ha, cheng nuai
khat ai a tam a
seng em le?



Duhi leh a pasal chuan inhlawhin Khumtira lo chu an enkawl a. Sawrkar chuan lo enkawltute chu ₹ 71 tal ni khata hlawh pe turin a ti a. Mahse Duhi chu ₹ 55 leh a pasal ₹ 58 chauh hlawhtir an ni a.

Duhi chuan ni 49 thawk se, cheng eng zat nge a hlawh ang? _____

A pasalin ni 42 thawk ta se, cheng eng zat nge a hlawh ang? _____

An pahnih hlawh belh khawm chu eng zat nge ni ang? _____

Aw! Hlawh tlem
thei ang ber a
bituk pawh a pe lo
em ni?



Chu chauh a ni lo,
Duhi kha eng vanga
a pasal aia hlawh
tlem nge a nih?
Sawi ho r'u.



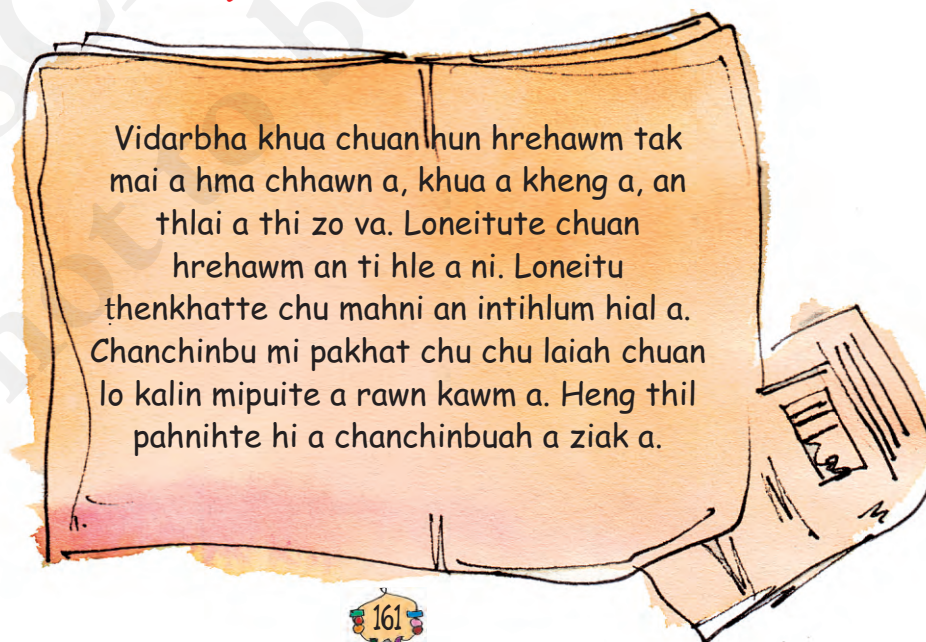
Hei hi chanchinbuah ka hmu a. State hrang hranga sawrkarte chuan thuchhuah an siam a, lo enkawltute chu sawrkarin ni khat hlawh tura a bituk aia hniam ni khatah an hlawh tur pek phal a ni lo.

State	Ni khat hlawh
Haryana	₹ 135
Rajasthan	₹ 73
Madhya Pradesh	₹ 97
Orissa	₹ 75

State pali ten a hlawh pek tur chin an siam chu a chung a entir ang hi a ni.

- Lo neitute tana hlawh bituk sang ber eng state nge ni? Khawi state-in nge ti hniam ber?
- Bhairon Singh-a chu Rajasthan-a lo neitu a ni a. Lovah chawlhkar 8 chhung hna thawk se, eng zat nge a hlawh ang?
- Neelam-i chu Haryana-a hnathawktu a ni a. Thla 2 lovah thawk se, eng zata tam nge a hlawh ang?
- Madhya Pradesh-a hnathawktu hian Orissa a hnathawktu aiin chawlhkar 9 ve ve an thawh hnuah eng zatin nge a hlawh tam zawk ang?

Vidarbha (Maharashtra)-a lo neitu



Satish-a chanchin

Satish-a chu mipa naupang kum 13 mi a ni a. A pa in lo neih nan pawisa a puk a. Mahse thlaite an chhiat vek avangin Satish-a nu chuan thla tin ₹5000-in an pawisa puk chu a rulh ziah a ngai a.

Naupang hle mah se Satish-a chuan hna a thawh a ngaih avangin, an khuaa kel 17 a enkawl a.

Ni tinin kel pakhatat cheng 1 a hlawh a.

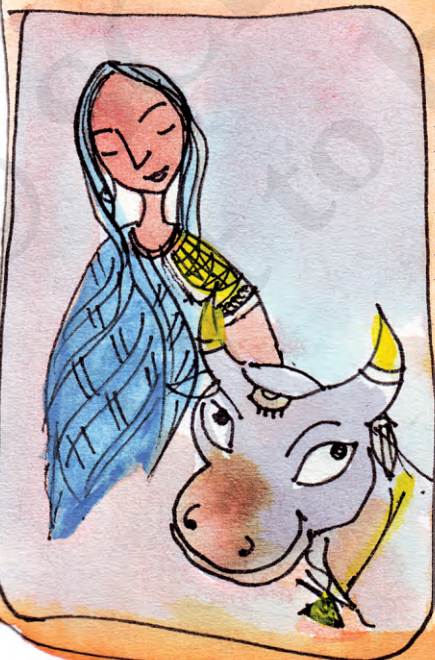
- * Thla khatah cheng eng zat nge a hlawh ang?
- * Thla tina an pawisa puk rulhna daih a hlawh chhuak em?
- * Kum khat chhungin eng zat nge a hlawh ang?



Kamla Bai-I chanchin

Lo neitute tanpui nan state sawrkar chuan bawng a sem a. Kamla Bai Gudhe-i pawh chuan bawng a dawng ve a. Bawng man chu ₹17500 a ni a. ₹5500 a pek ve tur a ni a, a bak zawng chu sawrkarin a peksak ang.

- * Sawrkar hian bawng pakhatat eng zat nge a sen?



- * An khuaa mi 9-in bawng dawng ta se, sawrkarin eng zat nge a sen ang?

Mahse Kamla Bai-i chu a hlim hauh lo. Bawng enkawl nan ni tin ₹85 a sen a ngai a. Bawngnute hralhin sum tlem a la lut a. Mahse tun thlengin a bawng chu hralh a la duh reng tho.

- * Kamla Bai-in ni khat a ₹85 a sen chuan thla khatah eng zat nge a sen ang?
- * Bawngnute ni khatah litre 8 a sawr chuan, thla khatah eng zat nge a sawr ang?

* Litre 1 hi cheng 9-in hralh ta se Kamla Bai-i
hian thla khatah cheng eng zat nge a lei chhuah
ang? _____

Bawng enkawl nan a sum ngai zat chu ₹ _____

Bawnghnute hralhna atanga pawisa hmuhzat chu
₹ _____

Eng zawk nge tam? Bawng enkawl na senso nge
tama bawng atanga pawisa hmuh? Engzatin nge?

* A bawng hralh a duhna chhan chu han sawi fiah teh.

Bawnghnute litre 1
manah eng zat nge
in pek?



Han ti ve teh

a) Zova chu lovah a thawk a. Ni khatah ₹ 98 a hlawh a. Ni 52
chhung a thawk a. Eng zat nge a hlawh ang?



b) Zama chuan insak nan sum a pûk a. Thlatin
₹ 2750 in kum hnih chhung a rulh a ngai a. Kum 2 chhung
chuan eng zat nge a pek ang?



c) Sawma chu khawpuia bawnghnute hralhtu a ni a.
Bawnghnute litre 1 cheng 23-in ni tin litre 13 a hralh
ziah a. Eng zata tam nge a lei chhuah ang?



d) Lo neitu chuan bawnghnute litre khat ₹ 11-in a
hralh a. Thla khatah litre 210 a hralh chhuak a. Thla khatah
cheng eng zat nge a lei chhuah ang?



e) Tui in tur litre khat hi a siamtu ten ₹ 12-in an
hralh a. Dawr nghaktu chuan litre 240 a lei a.
Eng zata tam nge a pek ngai ang?



Awi karei leh! Tui hi
bawnghnute aiin a to zawk nia!
Khawpuiah chuan tui hi litre
khat ₹ 12-in an lei thin zuk nia.



Puntirna Hlimawm

A) A hnuaia tih dan phung hi en la, han chhunzawm ve|teh.

$$\begin{aligned}(0 \times 9) + 1 &= 1 \\(1 \times 9) + 2 &= 11 \\(12 \times 9) + 3 &= 111 \\(123 \times 9) + 4 &= \underline{\hspace{2cm}} \\(1234 \times 9) + 5 &= \underline{\hspace{2cm}} \\(12345 \times 9) + 6 &= \underline{\hspace{2cm}}\end{aligned}$$

B) A hnuaiah hian **a**, **b**, **c** hi nambar ang an ni.

$$\begin{array}{r}aaa \\ \times aaa \\ \hline aaa \\ aaa0 \\ aaa00 \\ \hline abcba\end{array}$$

a = 1 han hmang la, tichuan **b** leh **c** hi eng zat nge an nih ang?



C) Kum zat hmanga infiamna.

I kum zat zia k rawh _____

7 in puntir rawh _____

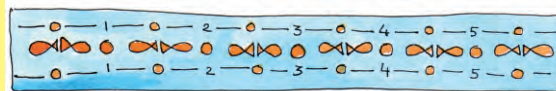
A chhuak chu 13-in puntir leh rawh _____

A chhuak chu 11-in puntir leh rawh _____

A tawp bera chhuak hi han en teh. I kum zat i hmu em? Vaw i eng zat nge i kum zat inziak?

Mi dang kum zawn nan han hmang chhin teh.

D) A ngaia kual kual!



142857	142857	142857	142857	142857
$\times 1$	$\times 2$	$\times 3$	$\times 4$	$\times 5$
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Thil awmze nei eng emaw hmuh i nei em?

I thiante nen han sawi ho teh u.

Sem

Muani chuan a thian hnen atangin scooty leina tur ₹9588 a pûk a. Thla ruk chungin thla tin inzatz vekin a rulh a ngai a ni.

✱ Thla tin eng zatin nge a rulh ang? A fate chu chhût chhuahsak turin a ti a.



A fanu chuan hetiang hian a chhût a.

$$500 + 500 + 500 + 90 + 8$$

$$\begin{array}{r} 6 \overline{) 9588} \\ \underline{-3000} \\ 6588 \\ \underline{-3000} \\ 3588 \\ \underline{-3000} \\ 588 \\ \underline{-540} \\ 48 \\ \underline{-48} \\ \hline \end{array}$$

A fapa chuan heti zawng hian a ti ve thunga. Han tihzawhsak teh.

$$1000 +$$

$$\begin{array}{r} 6 \overline{) 9588} \\ \underline{-6000} \\ \hline \end{array}$$

An pahnih hian an hmuh chhuah a inang em? Sawi ho teh u.



Kan thiam em le?

Hengte hi a tawi thei ang berin han chaw k chhuak teh.

a) $4228 \div 4$

b) $770 \div 22$

c) $9872 \div 8$

d) $672 \div 21$

e) $772 \div 7$

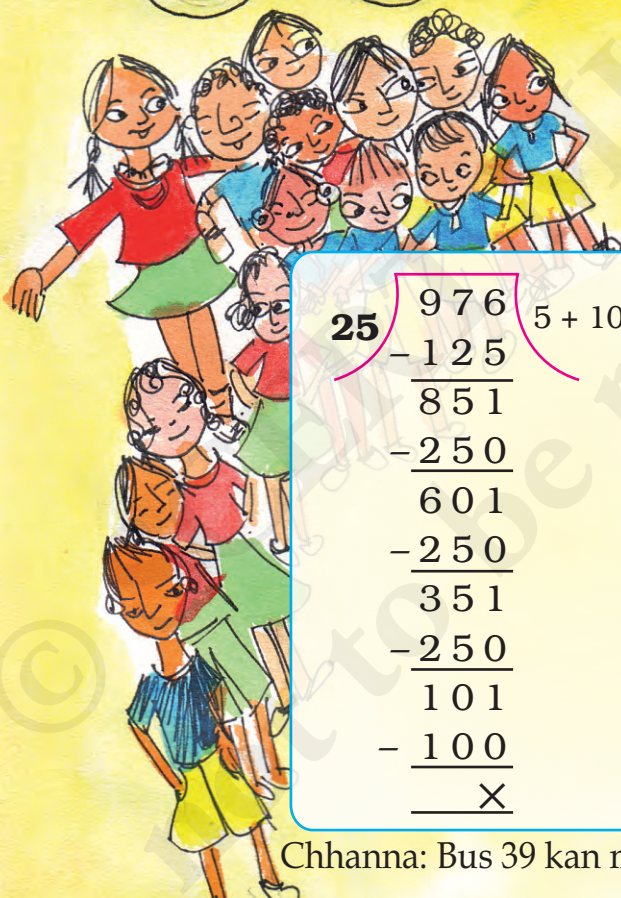
f) $639 \div 13$



A vaw eng zat nge?

Naupang 976-te chu an picnic dawn a. Bus t  chi a chuang tur an ni a. Bus pakhat a naupang 25 an leng a. Bus eng zat nge an mamawh ang?

* Naupang pahnihin an chh t chhuak tlat mai. Tih dik loh an nei em en la - an tihsual siam tha ang che. Sawi ho raw hu.



$$\begin{array}{r}
 25 \overline{) 976} \quad 5 + 10 + 10 + 10 + 4 \\
 \underline{- 125} \\
 851 \\
 \underline{- 250} \\
 601 \\
 \underline{- 250} \\
 351 \\
 \underline{- 250} \\
 101 \\
 \underline{- 100} \\
 \underline{\quad} \times
 \end{array}$$

$$\begin{array}{r}
 25 \overline{) 976} \quad 20 + 10 + 4 + 1 \\
 \underline{- 500} \\
 4767 \\
 \underline{- 250} \\
 226 \\
 \underline{- 125} \\
 101 \\
 \underline{- 100} \\
 \underline{\quad} 1
 \end{array}$$

Chhanna: Bus 39 kan mamawh e. Chhanna: Bus 40 kan mamawh e.

Naupangte chu hun remchang siamsak a, a dik lo laite zawn chhuah leh sawi hona hunte pek hian a tahtawl tea sem dan te hre thiam turin a pui a. A hmasa zawkah hian, naupangtena an tihsual nasat em em thin, an theihngihl emaw, sem chuang an hriat thiam lohna ang thin kha pek a ni a. A hnuhnung zawkah hian ho tea an puntir sualna thin, mahse zawhna hlimawm tak ni si, naupangten bus pakhat hi naupang chuang pakhat tan hman a ni dawn em tih an sawi hona tur kha pek a ni.



Petrol eng zata tam nge?

Zuali chuan ₹ 1000 a nei a. Petrol lei a duh a. Petrol chu litre khatah ₹ 47 a ni a. Litre eng zat nge a lei theih?

Zuali pawisa neih = ₹ 1000

Litre 1 man = ₹ 47

Petrol litre a lei theih zat = ₹ 1000 ÷ ₹ 47 = ?

Zuali chuan petrol litre _____ a lei thei.

Zawng chhuak rawh

Zuali chu in khuaah lo kal ta se, a pawisa sen zat tho sengin petrol litre eng zat nge a lei theih ang?

Children's Day

Naupangte chuan vawiin chu nuam an ti hle mai. Children's Day an lawm a ni. Naupang tinte chu pencil rawng chi li sikulin a pe dawn a. Sikulah chuan pencil 969 a awm a. Naupang eng zatin nge pencil dawng dawn tih chu zirtirtuten zawng chhuak turin an ti a.



Lawmi tih dan

$$\begin{array}{r} 4 \overline{) 969} \quad 100 + \\ - 400 \\ \hline \end{array}$$

Zovi tih dan

$$\begin{array}{r} 4 \overline{) 969} \quad 200 + \\ - \quad \quad \quad \end{array}$$

Lawmi leh Zovi-te tih hi an tih dan ve ve hian han zawhsak teh u. Eng nge i hmuh chhuah?

Lawmi chuan a tawi chiin a rawn ti a .

Vawi tam ka tihchhin hnua ka zir chhuah a nih hi. Hetah hi chuan thil tam tak i hriat reng tur a awm a ni.



Lawmi tih dan

$$\begin{array}{r} 4 \overline{) 969} \quad 242 \\ \underline{-8} \\ 16 \\ \underline{-16} \\ 09 \\ \underline{-08} \\ 1 \end{array}$$

Ka hria e 969 hi 4-in ka sem dawn a. Mahse 9 ka en hmasa ber phawt ang. 6 hi lak thlak tur a ni tih ka hriat reng nan fei zum ka dah ang.



Engtin nge 9-a i tan?

Zovi



Tunah chuan $16 \div 4$ chauh i en tawh a ni maw? A dawtah engtin nge ni leh ang?



9 lak thlak a 4-a sem tur a nih ka hre reng e.



Mahse 1 hi i ti chuang a nia.



Nia hei hi a chuang a nih hi. Pencil 1 a chuang.



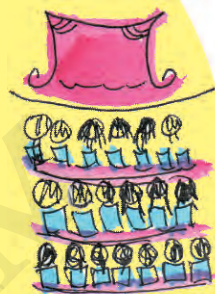
Aw! Hetianga tam deuh hi ka hre reng thei lo. Keima tih danin ka ti mai ang.



Kan thiam em le?



- * Lehkhabu 576-te chu bâwma khung tur a ni a. Bâwm pakhat lehkhabu 24 zel a leng a, bâwm eng zat nge lehkhabu dah nan ngai ang?



- * Mi 836 in YMA hall-ah ennawm an en a. Hall-ah chuan thutthleng tlar 44 awm ta se, tlar khatah mi eng zat nge thu thei ang?

- * Huan neitu chuan apple tiak 458 a lei a. Tlar khatah kung 15 zel phun a duh a. Tlar eng zat nge phun nan ngai ang?



Apple tiak eng zat nge chuang ang?



Thluak sawizawina

- * Sawmin battery a lei a. Darkar 2000 chung hman theih tih inziak chu a chhiar a. Nileng leh zankhuain a hmang a. A battery chu ni eng zat hman daih nge ni ang?

Puntir leh Sem i tih belh ang

- * Tuizem chu tui 300L in a khat a. Tui eng zata tamin nge tuizem 25 tikhat ang? Tuizem pakhatin bucket 15 tikhat thei ta se, tuizem 25-in bucket eng zat nge a tikhah theih ang?



- * Laddoo 28 chu 1 kg a ni a. Laddoo eng zata tam nge 12 kg ni ang? Bâwm 1-ah laddoo 16 awm ta se, heng laddoo zawng zawngte dah nan bâwm eng zata tam nge ngai ang?

- * Sikul-ah chuan room 26 a awm a. Room tinah thlai 4 zel a awm a. Thlai pakhat chuan tui no 2 zel mamawh ta se, thlai zawng zawng tan tui eng zat nge kan mamawh ang?



Thawnthu atanga zawhna tha ber

Tlar tinte hian thawnthu an nei zel a. Thawnthu mil tur zawhna tha ber thlan chhuah tur a ni. A hmasa ber hi tih sa a ni.

- 1) Dawrkai chuan bâwm 50 a nei a. Bawm khatah thei 48 zel a awm.

A chungu thu nena inhmeh ber zawhna pakhatath thai rawh.

- a) Dawrkai hian eng zat nge a vaiin a pek ngai ang? ☐
- b) A vaiin thei eng zat nge awm? ☒
- c) Bawm eng zat nge a mamawh belh ang? ☐
- (a) leh (c) te hi eng vanga thlan tura tha taw lo nge an nih?



- 2) Sikul naupang 352-te chu sikul thilah an zin a. Pawl khatah mi pali zela awmin puan in an inṭawm a.

- a) Puan in pakhatath naupang eng zat nge awm? ☐
- b) Puan in eng zat nge an mamawh? ☐
- c) Sikul-ah khan naupang eng zat nge awm? ☐

- 3) Dawrkai chuan artui 204 a nei a. Artui bâwmah a dah a. Bâwm khatah artui 12 zel a awm a.

- a) Artui eng zat nge a mamawh belh? ☐
- b) Artui tharlam eng zat nge a hralh? ☐
- c) Artui bawm eng zat nge a mamawh ang? ☐



Heng tih turte hian naupangte chu puntir leh sem awmzia an hriat chianna hmanga zawhna siam thei turin remhriatnaah a pui dawn a ni.

4) Lehkhabu pakhat chu ₹47 man a ni a. Sawmi chuan 23 a lei a.

- a) Pawisa hi eng zat nge a neih?
- b) Lehkhabu lei nan cheng eng zat nge a pek?
- c) Lehkhabu 47 man eng zat nge?



Pu Kapa finfiahna

Pu Kapa chuan a fapa palite hnenah ₹ 2456 hi sem a duh a. A fa upa ber hnenah chuan eng zat theuhvin nge an insem ang tih a zawt a.

Apa, ti hian kan insem thei $2456 \div 4 = ₹ 624$.



Pu Kapa chuan ₹624 chu a'n sem a, a naupangber chan tur chu a tlem ta bik tlat mai.



I chhutnaah tihsual i nei a ang hle mai. Kan endik ang e.

Pu Kapa chuan 624 chu 4-in a puntir a. A hmuh chhuah chu = ₹ 2496.

Hmm! Ti hian a Chiang e. I semnaah khan tihsual i nei a nih hi.



A fapa chuan a sem tha leh a. $2456 \div 4 = 614$.

A pa a hrilh hmain a tihdik leh dik loh aman a endik nghal a.

$614 \times 4 = 2456$. A dik ta e. Kan vaiin ₹614 theuh kan chang thei e.

Kan thiam em le?

1) Han sem teh. I hmuh chhuah chu puntirna hmangin i finfiah dawn nia.

a) $438 \div 9$

d) $900 \div 10$

b) $3480 \div 12$

e) $678 \div 6$

c) $450 \div 7$

f) $2475 \div 11$



2) A hnuaia mite hi chhût chhuak la. A hnuaia bâwmah hian i hmuh chhuah chu i chei dawn nia. Eng nge i hmuh en teh.

21×16

15×7

93×2

17×5

10×10

26×26

77×10

50×10

11×11

59×7

31×19

85×30

64×42

$3200 \div 40$

19×3

$248 \div 8$

$432 \div 18$

$729 \div 9$

$825 \div 5$

$221 \div 13$

$576 \div 12$

$288 \div 4$

$869 \div 11$

$847 \div 7$

$981 \div 3$

$475 \div 19$



545	110	434	642	709	623	919	341	12	168
984	16	561	608	236	413	529	62	259	905
709	907	367	632	336	121	492	178	431	25
166	806	584	186	100	589	72	717	248	676
624	82	105	24	165	17	85	770	327	500
247	997	485	2688	81	80	48	901	126	121
742	427	756	531	79	2550	347	1001	314	57
945	1000	687	854	1200	31	124	3126	918	53
109	799	845	1999	864	955	123	1234	678	56
549	459	614	1864	834	559	900	1111	268	171

13

Engtianga Lian Nge? Engtianga Rit Nge?



Mawii chuan thil chi hrang hrang marble, pawisa thir, nawhreh leh a dangte a la khawm a. Rial novin tui a la bawka a, tui chim chin chu '0' tiin a chhinchhia a.

Novah hian marble 5 thlak ta ila, tuiin a rawn chim chin tur chu han ring chhin teh.



Hemi thleng hi a nih ka ring.

Rial novah chuan marble 5 chu a thlak ta a. Tui chim chin san belhna chu marble 5 anga ngaiin a chhinchhia a.

Aw! I va ring dik thiam ve. Marble volume kha i hre lawk em ni?



Marble 5-in tui chim chin a rawn tihsan tur chu ka lo ring chhin mai mai a nia. Engtin nge a volume chu i zawn chhuah ang le?



En rawh le. Marble tin hian tui hi a rawn nawr sang a ni. A dik em? Hei hi a chhan chu tui chhungah hmun a zuk luah tihna a ni a, chu chu volume a ni.

Rin chhin phawt leh teh pangngai hman lem lovin, entir nan marble, pawisa thir, nawhalh bawm leh a dangte hmanga thil sakhatte volume khaikhin hi, a tehna pangngai litre leh cubic centimetre- te an hman hmam waw tam tak tihchhin a tul a ni.

I tehna no

Cheng 5 thir sawm volume hi marble 10 volume aiin a tam zawkin i ring em? Han ring chhin teh le.

Heng volume te hi han ring chhin teh:

- ❖ Ball hi marble _____ nen a intluk vel ang.
- ❖ Nawhreh hi marble _____ nen a intluk vel ang.
- ❖ Nimbu hi marble _____ nen a intluk vel ang.
- ❖ Pencil hi marble _____ nen a intluk vel ang.
- ❖ Alu hi marble _____ nen a intluk vel ang.



Marble 35 hmangin tehna no siam chawp ve rawh le.

Tehna no atana hman i tumah chuan tui chhung la. Tuiin a chim chin chu '0' tiin chhinchhiah la. Chumi hnuah marble 5 thlak la, tuiin a rawn chim chin chu 5 M tiin chhinchhiah la.

Marble 5 dang thlak belh leh la, tui chim chin chu 10 M tiin chhinchhiah leh la. Chutiang chuan marble 5 zel thlak belh in 15 M, 20 M, 25 M, 30 M leh 35 M tiin chhinchhiah ang che.

A chung a i lo rin chhin te chu tehna no i siamah chuan pakhat tē tea thlakin i rin dik leh dik loh en rawh le.

Thil chi hrang hrang, nawhalh bawm te, lung tē te leh thil dang hmangin volume han teh leh la, table hi dah khat ang che.

Nawhalh bawm hi a lāng ania aw. A volume engtin nge i zawn tak ang?

Lei nawi emaw perek emaw thun mai ang.



Thil hming	A volume (marble eng zat vel nge a tluk ang?)

Naupangte chuan tehna burah chuan lehkha phêk sei deuh belin, tuiin a chim chin zel chu pen emaw pencil hmangin emaw chhinchhiah se. Hei hian a tum chu volume awmzia hi entirna leh tih ve chhin atanga hrilhfiah a ni a. Thil hrang hrang volume khaikhin hi sei zāwng leh zau zāwng khaikhin ai chuan hriat mai a har deuh zawk awm e.

Engin nge volume nei tam zawk?

Marble 6
volume hi mL
in min hrilh
thei em?



Tehreng mai.
Tehna bur kan
siam chuan
hrilh thei ang.

Pawl 4-ah khan 250mL tehna bur i siam tawh a.

10 mL, 20 mL, 30 mL, _____, 60 mL-te teh theihna tur bur siam dan i ngaihtuah thiam em? I thiante nen sawi ho ula.

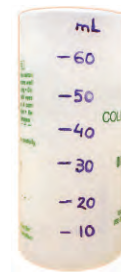
Thana leh Rengi-te chuan tehna bur hetiang hian an siam a.

Thana chuan inchiuna hmanrua a nei a. Tehna bur siam nan a hmang a. Rengi chuan damdawi bur ruak a hmang ve thung a.

Inchiunaah hian tui
hi vawi khatah 5
mL ka hip lut a.
Vawi hnih ka kah
luh chuan 10 mL
tiin burah ka
chhinchhiah.



10 mL dawng bur hi
tehna bur siam nan
ka hmang.



Rengi chuan a tehna bur chu cheng nga thir volume zawn nan a hmang a. Cheng nga thir 9 chuan tui chu 10 mL-in a tisang tih a hmu a. Tichuan cheng nga thir 9 hmang pawhin tehna bur i siam thei. Han siam teh le!

I tehna bur chuan hengte hi teh rawh le:

a) Marble 6 volume chu _____ mL a ni.

b) Cheng khat thir 16 volume chu ____ mL a ni.

Tunah chuan hengte hi i rilruin chhang rawh le.

c) Marble 24 volume chu ____ mL a ni.

d) Cheng khat thir 32 volume chu ____ mL a ni.

e) Rengi chuan cheng nga thir eng emaw zat chu a tehna burah a thlak a. Pawisa thir eng zat nge a thlak ang?

* Tui chu 30 mL thleng nawr chho turin? _____

* Tui chu 60 mL thleng nawr chho turin? _____

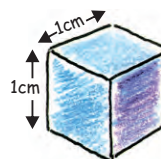
Thil dang volume (mL in) ring chhin la, tichuan i tehna bur hmangin an volume zawng chhuak rawh.

Thil	An volume (mL in)

I taksa khan tui litre eng zat nge a nawr chhoh theiha i rin?



Eng zat nge leng ang?



Hei hi cube, a sir sei zâwn 1 cm a ni a. In Math-Magic bu hi 1 cm-a chhah a ni a. Tichuan in Math-Magic buin hmun a luah zat chiah luah turin chutiang cm cube eng zat nge ngai ang han ring teh!

Tehna bur siam tur hian naupangte chu bur rawng zau leh lang tlang thei, chhinchhiah remchang hmantir rawh. Hei hian Maths class-ah naupangte thil teh dan thiam, tehna hmanrui siam leh hman thiamtir a tum a ni.

Hei, ka Math-Magic bu hi
cm vela sei a ni a. Anih
chuan cm cube _____ hi a
dung lamah a leng tawk
ang.



A vâng lam hi _____ cm vel a ni
a. A nih chuan a vâng lamah
hian cm cube _____ a leng
tawk ang.



A vaiin Math-Magic
buah hian cm cube
_____ a leng ang.



* A nih leh, chung cube-te chu tlar khatah rem ta ila, engtia sei nge ni
angle? _____ cm.



Tih ve hun

1. Dawh san hi Math-Magic bu 5-a siam a ni a. Dawh san volume chu
cm cube _____ nen a hmang ang.
2. A hnuaia mite hi an volume (cm cube-in) han ring chhin teh.

* Nawhalh bawm hi cm cube _____ vel a ni.

* Geometry box hi cm cube _____ vel a ni.

* Nawhreh hi cm cube _____ vel a ni.

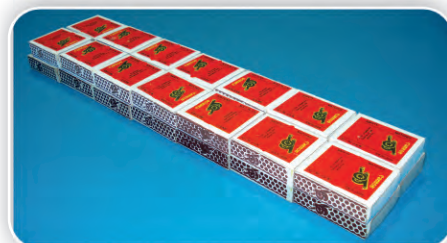


I rin dan chu engtin nge i finfiah ang? Sawi ho ula.

Nawhalh bâwm hmanga infiamna

Tanu-i chuan nawhalh bâwm hmangin dawh
san a siam a.

Nawhalh bâwm 14 hmangin a chhawng
khatna heti hian a rem a.



Eng zat nge kan hman ngai ang tiha tih tur pekahte hian naupangte chuan cm cube len zâwnng an
hriat a ngai a. Pianhmang hrang hrangte volume zawn nan zirtirtuin cm cube siam sela, nawhalh
bâwm hmangin model hrang hrang siam bawk se. Tanu-a dawh san emaw, Mohan-a model-te
chu naupangten volume chu nawhalh bawm ngai zat ațanga chhut chhuah a ni a, chu chu a
hnuaa cm cube-a dah leh tur a ni.



Hetiang chiah hian chhawng 4 a siam a, dawhsan lan dan chu hetiang hi a ni.

* Heta dawhsan siam nan hian nawhalh bâwm _____ a hmang.



* Nawhalh bâwm pakhat volume hi cm cube 10 nen a inang chiah a. Tichuan dawh san hi cm cube _____ nen an volume a inang.

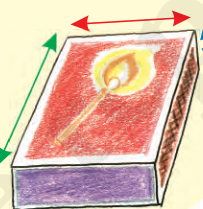
* Heng cube zawng zawngte hi tlar khatah rem ila, a sei zawng chu _____ a ni ang.

* Math-Magic bu volume nge Tanu-i dawh san volume chu tam zawk?

I thiante nen nawhalh bâwm ruak, a len dan inang lakhawm ula. A sir sei zâwng tehin ziaak rawh u.

Ka nawhalh bâwm hi _____ a hlai a ni.

_____ cm a sei a ni.



_____ cm a sang a ni..

* Nawhalh bâwm 56 hmangin dawh san san zâwng inang lo siam la, a hnuaia mi hi dah khat rawh le.

	San zâwng	Sei zâwng	Zau zâwng
Dawh san 1			
Dawh san 2			
Dawh san 3			

Dawh san tin volume hian nawhalh bâwm _____ a tluk.

* Dawh san i siam chu a deep drawing nalh takin ziaak rawh.

Tih ve hun

Muana chuan nawhalh bâwm hetiang hian a rem thung a.

- * Hetianga rem tur hian nawhalh bâwm eng zat nge a hman ang? A volume tluk chu nawhalhbawm _____ a ni.
- * Nawhalh bâwm ruak lakhawm la. Nalh i tih dan berin rem rawh. A deep drawing ziaik ang che.



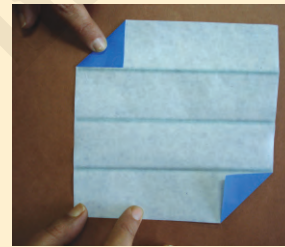
Lehkha hmanga cube siam

Aanan-a leh a thiante chuan lehkha hmangin cube siam an tum a. Lehkha phek chu square, a sir **19.5 cm**-a seiin an chep thla a. Chutiang square chu 6 an siam a. A hnuaia thlalakte hi entawnin lehkha cube chu siam ve rawh le.

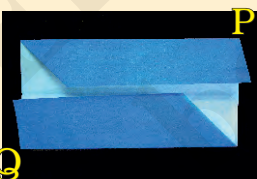
1. Lehkha phek chu hetiang hian intiat chiaah 4 a thlepin line siam rawh.



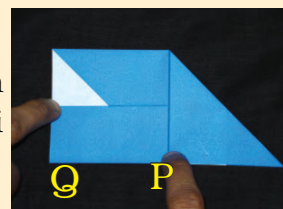
2. A tlang sir vei lam leh a ep chiaah dang chu heti hian thlep rawh.



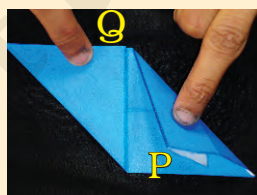
3. Chung lam leh hnuaia lam line-ah chuan thlepin a laiah inhmu chiaah sela, a kil P chu thlep leh rawh.



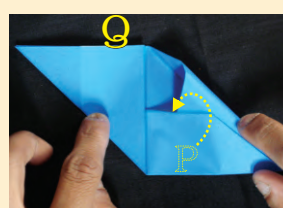
4. I lehkha thleh lan dan tur chu hetiang hi a ni.



5. Chutiang baw k chuan a kil Q chu thlep leh rawh. A lan dan tur chu hetiang hi a ni.

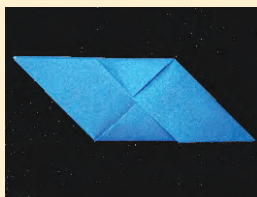


6. A kil P chu la chhuakin lehkha inthlep karah zep lutrawh.

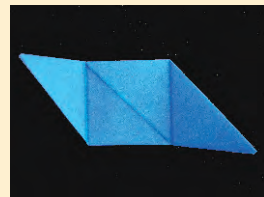


Naupangte chu tehna inang hmanga pianhmang hrang hrang volume inang si siam dan thiamtir ni se, entir nan, leirawhchan leh nawhalh bâwm. Dawh san sir sei zâwnge tehna ah chuan a teuh ber centimetre-ah dahtir mai ni se.

7. Chutiang chiah chuan a kil Q pawh ti leh la. A lan dan tur chu hetiang hi a ni.



8. Lehkha chu herin a line hetiang awm tur hian thlep rawh.



9. Naupangte chuan hetiang pakhat theuh hi siam se. Naupang paruk chuan an thil siam chu mi dangte siam chhungah dah zel se.



Note: Square a sir 19.5 cm-a sei khera tan tur tih i hre reng dawn nia. Step 2-naah hian a vaiin a dang sir vei lam theuh atangin i thlep dawn nia.

I cube chu engtia lian nge?



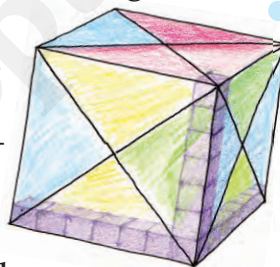
1. a) I cube sir sei zâwnng chu eng chen nge? _____

b) Centimetre cube eng zat nge rem theih ang:

* A dung zâwnngin? _____

* A vâng zâwnngin? _____

* A sang zâwnngin? _____



Thimpu

c) Thimpu-a zawhna hi chhang rawh:

A inthuah hnuai ber siam nan hian cm cube eng zat nge ka hman ang? _____



Paper cube siam turin chutianga inthuah eng zat nge ngai ang? _____

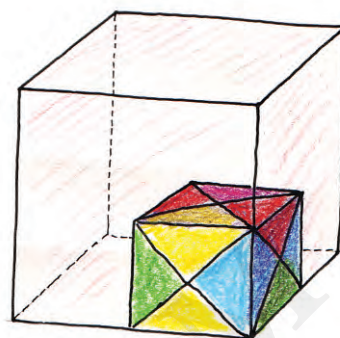
d) Cm cube zawng zawng zat chu _____

e) Lehkha cube volume hian cm cube _____ a tluk.

Lehkha square a sir 19.5 cm a sei kan hman chuan cube a sir 7 cm a sei kan siam chhuak ang.

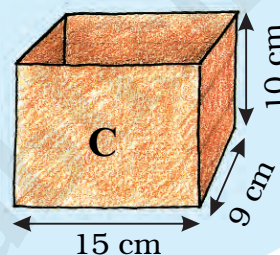
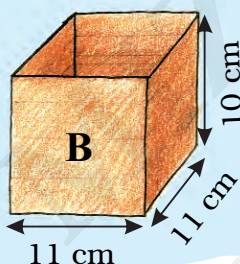
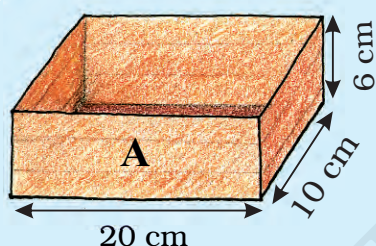
2. Aanan-a chuan i cube siam sir sei zâwnng let hnih a sei hmangin cube a siam a.

A chhungah chuan i paper cube engzat nge rem theih ang? I thiante siamsa kha lakhawmin dah han tum chhin teh.



Cube rem khawm

Ganesh-a leh Dinga-te chuan centimetre cube 4000 chu bâwmah khung an duh a. Chung bâwmte chu sikulah thawng tur a ni. A dah khawmna tur atan bâwm chi hrang pathum an nei sa bawk.



Heng cube 4000 lai hi bâwm pathumah kan khung thei dawn em ni? Ka ngaih dan chuan bâwm dang pakhat ka la mamawh belh a ni.

Dinga



Ganesh

Kei chuan heng cube 4000-te dahna tur hi kan neih sa hian a daihin ka hria.

* Nang eng nge i rin dan? Tu nge dik zawk?

* Ganesh-a leh Dinga-te hian bâwmahte hian cube-te chu an rem luh hmain engtin nge an rin dan chu a dik leh dik loh an fiah ang? I thiante nen sawi ho rawh u.



Ganesh

Bâwm A-ah hian a mawng berah cube $20 \times 10 = 200$ kan rem thei a. Chutiang zat 6 chu kan thuah a. Tichuan, bâwm A-ah chuan $200 \times 6 = 1200$ cube kan rem thei a ni.

Ganesh-a tih danin chhang rawh:

- * Bawm B-ah hian centimetre cube _____ te kan rem leng thei ang.
- * Bawm C-ah hian centimetre cube _____ te a leng ang a.
- * Tichuan bawm thumah hian a vaiin centimetre cube ____ a leng ang.

Eng pipe hian nge dawng hlawk?

Postcard hlui zawng khawm la. Lehkha chhah $14 \text{ cm} \times 9 \text{ cm}$ pawh a hman theih.

Postcard chu a vâng zâwnga khawrin pipe-1 siam la. A inzawmna chu cello tape-in char bet ang che.

Postcard dang la lehin a dung zawngin khawr leh la pipe-2 siam leh ang che. A hmasa ang bawkin a inzawmna chu char leh ang che.

- * Pipe pahnihahte hian a eng zawkah nge vaivut leng hnem zawk ang tih ring chhin teh. Thlengah tungin vaivut chhung khat la, i rin dan chu fiah rawh le. I ring dik em?

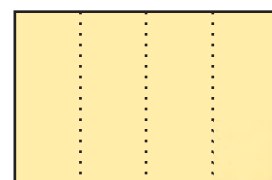
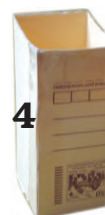
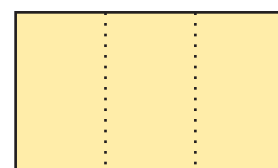
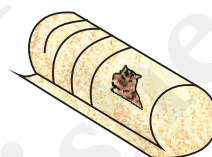
A lema entir ang hian pipe dangah a hmaa i tih ang chuan ti ve rawh le.

Triangle pianhmang nei pipe-3 siam tur hian postcard chu hmun hnihah rin la. I rinnaah thlep la, a hmawr chu tape-in char ang che.

Chutiang bawkin square pianhmang nei pipe-4 siam leh la.

Khawi pipe-ah hian nge vaivut leng hnem ber tih zawng chhuak rawh. A nih chuan khawi pipe nge volume tam ber?

Phek 141-na a la zai sei zâwng ngai reng hmanga pianhmang hrang hrang an siamah circle pianhmang hian area a nei zau ber tih an zir kha hriattir nawn ni se. Hetah hian lehkha a len zâwng inang reng si, a volume lian thei ber pianhmang hmuh chhuah an tum dawn a ni.





Gangotri tlang lawn

Pawl 12 zirlaite chu Gangotri tlangah lawn tumin an inpuahchah a. An phur kher mai. An bag-ah chuan ni ruk ei tur an khung a ngai a. A zangkhai thei ang bera siam an tum a. Mahni bag theuh ak chungin tlang an lawn dawn a ni !

Purun leh tomato te pawh a zân zawk nan an tiro vek a. Purun emaw tomato emaw 1 kg hi a ro chuan 100 g lek a ni thei a ni.

Mi pakhatin ni khata chaw a mamawh zat chu hetiang hi a ni a:

- * Buhfai :100 g
- * Chhangphut (Atta): 100 g
- * Chana/Dal: Buhfai leh chhangphut rihna $\frac{1}{3}$
- * Tel: 50g
- * Chini: 50g
- * Bawnghnute phut: 40g (thingpui, buhhawp, etc., a hman tur)
- * Thingpui: 10g vel
- * Dalia: 40g tukthuan ei tur
- * Chi: 5 g
- * Purun ro: 10 g
- * Tomato ro: 10 g



a) Ni 6 atana mi pakhat mamawh tur chu

Buhfai leh chhangphut - _____ g Chana/Dal - _____ g

Purun ro - _____ g

b) Mi 10 tan ni 6 tla tomato tihro tur eng zat nge ngai ang?

c) Mi pakhat bag-ah chuan ei tur rih zâwng chu eng zat nge?



Gram 1 lek dah belh pawhin kal a tiharsa mai dawn alawm!

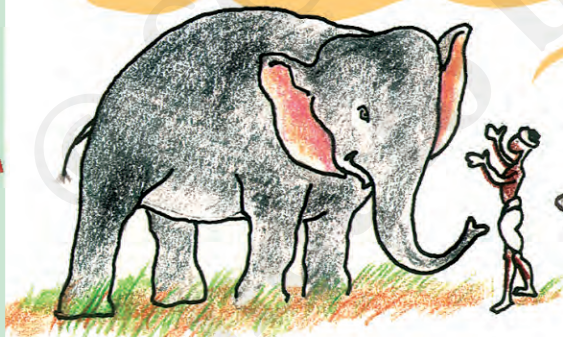
Keimahni ang eng zatin nge gram 1 buk tawka i rin? 100 vel kan nih a ngai ang em?



Engtianga rit nge ka nih?

Vaidika-i fanuin sai rih zawng a hriat dan thawnthu kha i la hre reng em? (Math-Magic Pawl 4 Phek 142)

Khawvela nungcha zinga rit ber hi eng zata rit nge ni ang? I ngaihtuah thiam em? Kei chu ka ni lo a nia aw. 5000 kg chauhva rit ka ni.



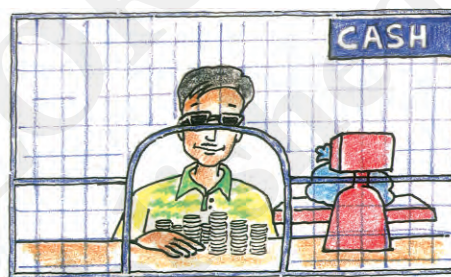
Blue whale alawm rit ber. Ani chu ka let 35 vela rit a ni. A nih chuan kg sang eng zata rit nge a nih ang?

- * Sai 5000 kg-a rit buk turin nangmah anga rit naupang eng zat nge ngaia i rin?
- * Sai notê hi a pian tirhin 90 kg vel a ni a. Nang i pian tirhin engtia rit nge i nih? Zawng chhuak rawh. Sai notê hi i pian tirha i rih zâwng let eng zata rit nge a nih?
- * Sai puitling hian ni tin chaw 136 kg a rit ei ta se, thla khatah chuan _____ kg vel a ei hman ang.

Kum khatah eng zata tam nge a ei ang han ring chhin teh.

Shahid-an bank a chhanhim!

Shahid-a chu bank-a thawk a ni a. Pawisa peknaah a thu thin. Pawisa thir a tam chuan chhiar lovin a bûk mai thin..



Bûk mai hi a awlsam zawk. Cheng nga thir pakhat hi 9 g-a rit a ni a. A ip chawp hian a rih zâwng min hrilh theih chuan a chhunga pawisa thir awm zat ka hrilh thei ang che.



Heng pawisa thirte hi chawi la, khawin nge rit ber?

Ka cheng 5 thir ip hi 9 kg-a rit a ni a. A chhungah hian pawisa thir eng zat nge awm ang?



1 kg hian 1000 g a tluk a. A nih chuan 9 kg hi 9000 g a ni ang a. Pawisa thir pakhat 9 g a ni a, tichuan ip 9000 g a rit chhungah chuan pawisa thir $9000 \div 9 = \underline{\quad}$ a awm ang. Kha kha ni mai alawm!

* Ip chhungah cheng nga thir eng zat nge awm ang, ip pakhat rih zâwng chu hetiang zat hi ni ta se:

- a) 18 kg? _____ b) 54 kg? _____
c) 4500 g? _____ d) 2 kg leh 250 g? _____
e) 1 kg leh 125 g? _____

2250g hi 2kg leh 250g tiin a ziah theih. A chhan i sawifiah thei ang em?



* Cheng hnih thir pakhat rih zawng chu 6 g a ni a. Pawisa thir chu heti zat hi ni ta se, a ip rih zâwng tur chu :

- a) Pawisa thir 2200? _____ kg _____ g b) Pawisa thir 3000? _____ kg

* Cheng khat thir 100 chu 485 g a rit ni ta se, 10000 rih zawng tur chu _____ kg _____ g a ni ang.

Maitmitchhing la, a rit zawk sawi rawh - cheng 100 note nge cheng 50 note? Hei hi sawi a har deuh mai thei; mahse, Shahid-a erawh chu a danglam bik avangin hmu thei lo mah se, a khawih mai hian a hre hrang tlat zel.

Shahid-a chuan bank a pawisa tel hrang hrang lo lut chu a danglama a hriat apiangin a manager chu finfiah turin a hrih thin a. Danglam deuh nia a hriat chu mi dangin danglamin hre ve lo mah se, ani chuan khawla en leh kher a phut thin. Khawla an han en leh chuan pawisate chu a lem a ni tih a rawn finfiah thin a. "Shahid, Bank i chhanhim leh ta!" an ti thin.

Zawng chhuak la, sawi ho teh u

* Engtin nge mitdelte hian pawisa note hrang hrang an thliar theiha, pawisa thir hlutna an hriat hran theih? (Kaihhruaina: Heng pianhmang hrang hrang, pawisa note ₹ 20, 50, 100, 500 leh a dangte a awm, ▲, ■, ●, ■ leh a dangte hi ngun takin en la, khawih ringawta hriat hran theih dan hriat tum rawh le)

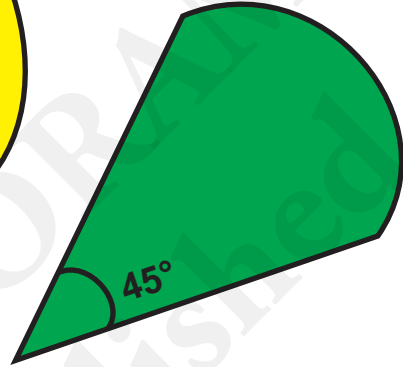
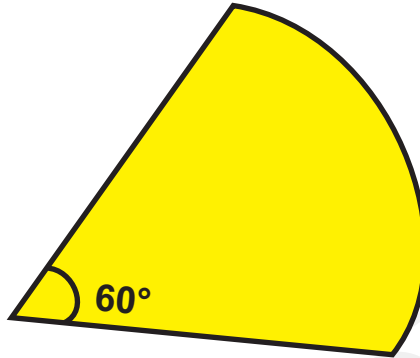
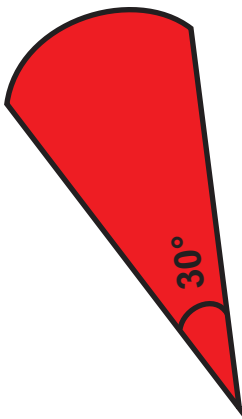
* Cheng 100 tlang hi a lem leh tak hre hrang turin eng laite nge kan en fiah ang?



Pawisa lem leh a tak finfiahnaah hian thil hrang hrang en fiah tur a ni a. A lem chu a len zâwngah te, lehkhah hmanah te, pawisaa thil inziak chhut danah te emaw nambar inziah danah te danglamna a awm a. Watermark (a var lai, Gandhi-a thla awmna) leh a thu 'भारत' leh 'RBI' ziahna lai security thread tlête hi pawisa lem siam venna atana dah a ni.

Cheh Thlak Tur

Angle



Sweet Bâwm

A rin dum zui hian chep thla la. Lehkha chhah deuh zawkah bel rawh. Dot line zui hian thlep/khawr la, phék 112-na a mi ang sweet bâwm a lo chhuak ang.

