10 Lal Bahadur Shastri

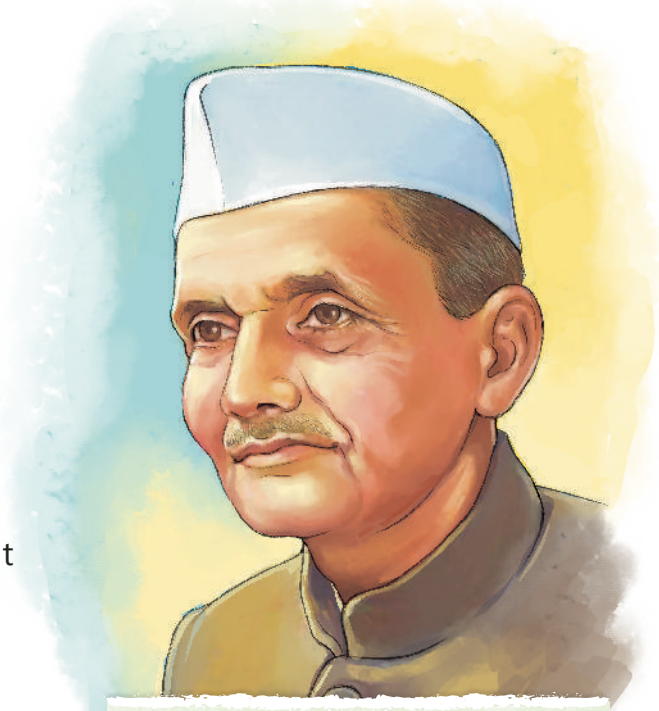
Many years ago, a young boy from a humble family had to cross the Ganga River every day to reach school. While the others took a boat ride, he swam with books tied on top of his head, in order to save money. This boy grew up to be a freedom fighter. Later, he became the second prime minister of India. We know him as Lal Bahadur Shastri.

Lal Bahadur Shastri was known for his simplicity and honesty. As a patriotic young boy, he was inspired by Mahatma Gandhi to join the freedom struggle at the young age of 16. In 1921, while studying in class 10, he attended a public meeting in Benares (now Varanasi), where Gandhiji called on students to withdraw from government schools and colleges. The next day, Lal Bahadur left school. He started taking part in protests against the British government and was even arrested. As a freedom fighter, he went to jail several times, but that did not deter him from taking part in the Satyagraha and the Quit India Movement.

Lal Bahadur attended Kashi Vidyapith, a college in Benares set up by freedom fighters in order to educate the young people of India. He passed out in 1925 with the title of 'Shastri' (scholar). The title referred to his degree, but it became part of his name.

After India's independence, Lal Bahadur held several powerful positions. He became a minister and later, the prime minister of India, after the death of Jawaharlal Nehru in 1964. But he never used his position for personal gain. There are many examples from his life to show how honest and humble he was.

Once he visited a textile mill, where the owner showed him around and offered him the best and most expensive sari for his wife. Lal Bahadur refused to take it, saying, "I cannot



call on ask

Satyagraha a peaceful struggle started by Mahatma Gandhi to fight injustice

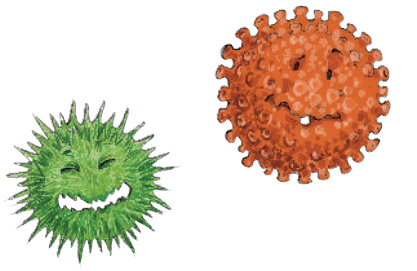
Quit India Movement a movement started on 8 August 1942, demanding an end to British rule in India

expensive costing a lot of money

Do and Learn

Let's learn the importance of washing our hands to protect us from germs and diseases.

Washing our hands is one of the best ways to protect ourselves from germs and diseases. Germs spread from person to person through little droplets when we cough, sneeze or talk. Germs also spread when we:



- touch our eyes, nose or mouth with unwashed hands
- eat or drink with unwashed hands
- touch surfaces or objects that have germs
- cough, sneeze or blow the nose into our hands and then touch other people's hands or things

How to wash hands

- Wet your hands with water (warm or cold), turn off the tap and apply soap.
- Rub the palms together, and also lather the backs of your hands, between your fingers, and around your nails.
- Scrub your hands for at least 20 seconds. (Singing or humming the song 'Happy Birthday' from beginning to end twice takes about 20 seconds.)
- Rinse your hands with water.



It is very important to wash your hands at these times.

before, during and after preparing food — before eating

after using the toilet — after blowing your nose, coughing or sneezing

after touching a pet or any other animal — after touching garbage



Make a poster on the importance of washing your hands and put it up in class.

Exercises

A. Fill in the blanks.

1. The _____ suffered from the heat and chilblains.
2. The table suggested that they go for a _____ to get some air.
3. The chair said it was _____ to say such things, as they could not walk.
4. The table suggested that they could try and walk on _____ legs.
5. When the two walked around the _____, everybody hurried towards them and cried, "See! The table and the chair have come out to take the _____!"

B. Answer these questions.

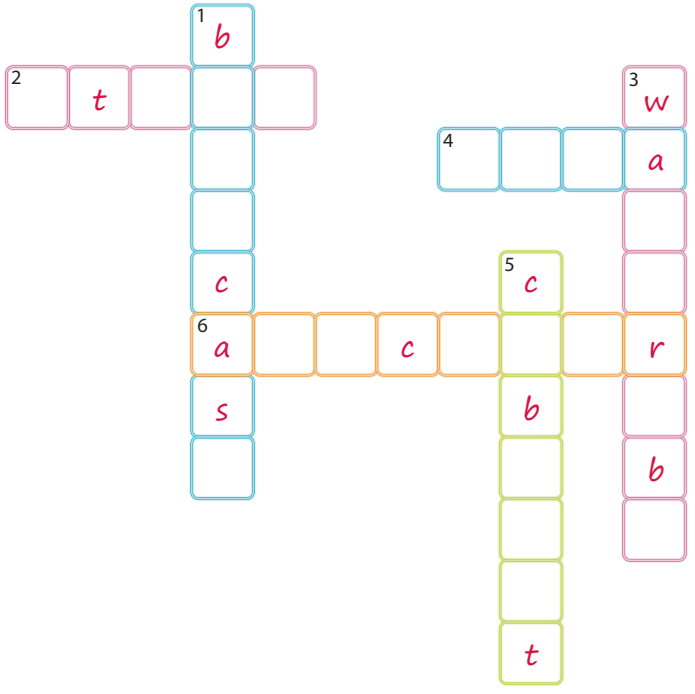
1. Why did the table and the chair go out for a walk?
2. "How foolishly you talk ..." Who said this and why?
3. The table thought there was no harm in trying to walk. Which lines tell us this?
4. What happened when the table and the chair went out for a walk?

C. Name these pieces of furniture with the help of the clues and complete the crossword.

1. 

2. 

3. 



4. 

5. 

6. 

I. Underline the words that represent the doer of an action or persons or things being spoken about, as shown.

1. The children entered the hall of the temple. They were amazed.
2. Parvati looked around the courtyard. She saw two monks.
3. The soldiers carried big swords. They wore boots and tunics.
4. King Ashoka turned towards them. He smiled at them.



Pana coins

The person, place or thing (noun/pronoun) that does (or is) something in a sentence is called the subject (Parvati, she). The part of the sentence that says something about the subject is the predicate (looked around the courtyard; saw two monks).

J. Match the subject to the predicate.

Subject	Predicate
1. Ashoka the Great	was the capital of his kingdom.
2. He	is now called Patna.
3. Pataliputra	ruled over the Mauryan Empire.
4. The city	was a powerful king of ancient India.

K. Use the clues to write a paragraph on the national emblem of India. You may begin as shown.

The national emblem of India is adapted from the Lion Capital of Ashoka at Sarnath ...

- Lion Capital of Ashoka at Sarnath
- Four lions back to back on a drum-shaped abacus
- On the side of the abacus—wheels and four animals (a lion, an elephant, a bull and a galloping horse)
- Wheel known as Ashoka Chakra also used on Indian flag
- Motto 'Satyamev Jayate', or 'Truth Alone Triumphs'



सत्यमेव जयते

H. Letters to family and friends are called informal letters. Complete this letter from Amit to his friend Nikhil, who is in Shimla, telling him how he helped the sparrow.

C15, Block 5
East Laxmi Bai Nagar
Ranchi

Sender's address

_____

Date

Dear _____,

Greeting

How are you? I was _____ to learn that your _____ is ill. I hope she gets _____ soon. I am missing you a lot, as I have no one to play with. I must tell you what happened soon after you left. When _____ and I sat in the _____ to watch birds, we saw an unhappy sight. The _____ in your house was shut. The _____ was desperately pecking at the _____ from outside. In his beak, he had _____. The little sparrow was inside the _____.

I wanted to help the sparrow enter the window. With the help of the _____, I fetched a _____ and put it against the wall. I climbed up and pushed open the _____ with a _____. The male sparrow went inside and both sparrows fed _____. Later, they flew _____. I felt on _____!

Do write to me soon.

Yours affectionately,

Closing

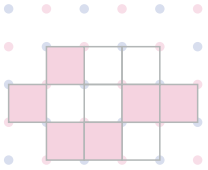
_____

Sender's name

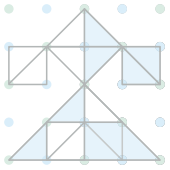
Explore

Fractions on a dot grid

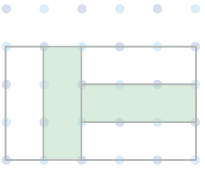
On a dot grid, we can make shapes by joining dots. A shape may have smaller, equal-sized parts like equal squares or triangles. We can shade some of the parts to show a fraction. Here are some examples.



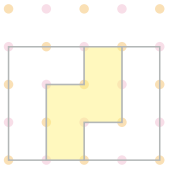
$\frac{6}{11}$



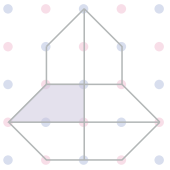
$\frac{9}{16}$



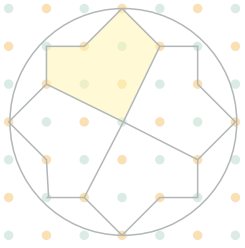
$\frac{2}{5}$



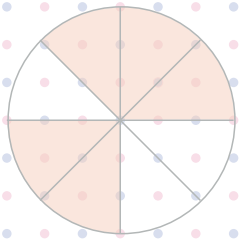
$\frac{1}{3}$



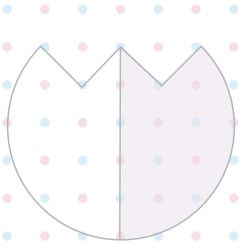
$\frac{1}{6}$



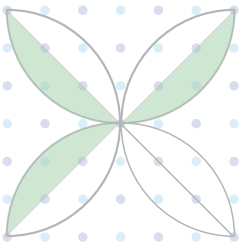
$\frac{1}{4}$



$\frac{5}{8}$

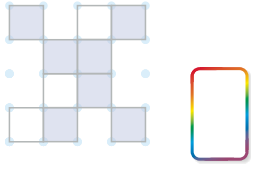


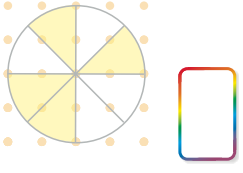
$\frac{1}{2}$

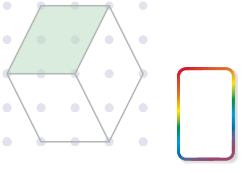


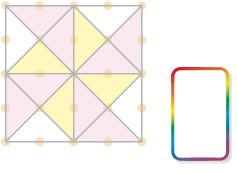
$\frac{3}{8}$

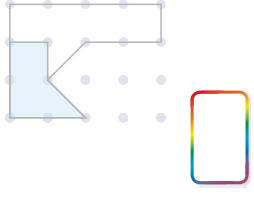
1. What fraction is shaded? Hint: Look at shaded squares or part squares.

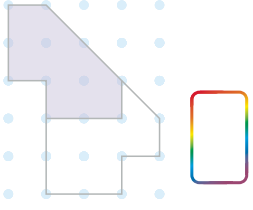
a. 

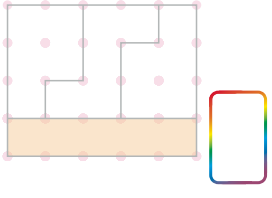
b. 

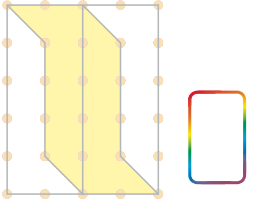
c. 

d. 

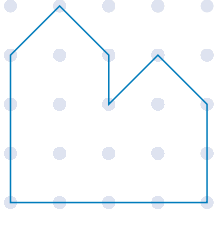
e. 

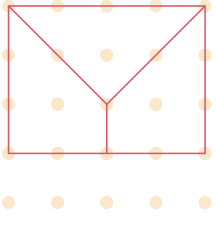
f. 

g. 

h. 

2. Colour to show the fraction. Hint: Count triangles.

a.  $\frac{3}{4}$

b.  $\frac{2}{3}$

c.  $\frac{5}{7}$

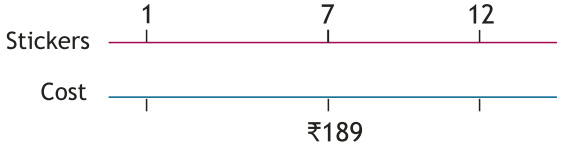
d.  $\frac{1}{5}$

11. The Unitary Method

Knowing the value of one helps us find the value for many. For example, if we know how much one toy costs, we can find the cost of 2, 5 or even 86 toys.

The double number line below shows that 7 stickers cost ₹189.
What is the cost of 12 stickers?

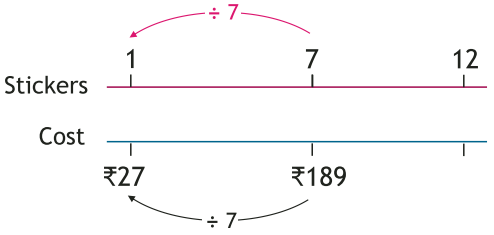




1. Sticker line: 7 ÷ 7 = 1. The divisor to reach the mark facing 1 will also be 7.

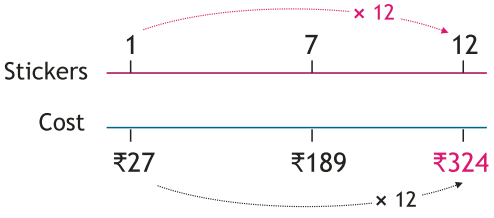
   Cost line: ₹189 ÷ 7 = ₹27.

   The cost of 1 sticker is ₹27.



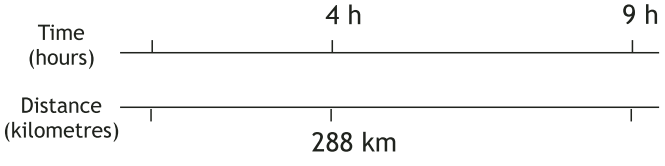
2. Sticker line: 1 × 12 = 12.
   The multiplier to reach the facing mark is also 12.

   Cost line: The cost of 12 stickers
   = ₹27 × 12 = ₹324.

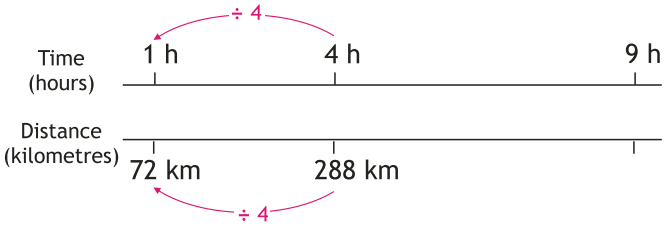


Find on the double number line how far the train travels in 9 hours.

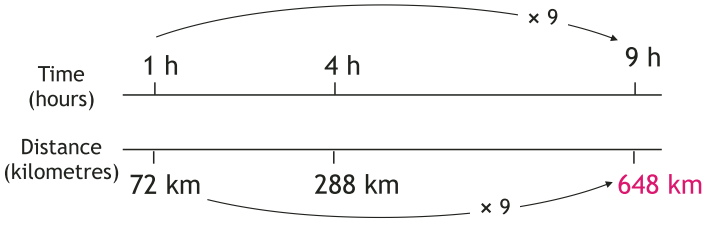




1. Hour line: 4 h ÷ 4 = 1 h.
   Distance line: 288 km ÷ 4 = 72 km.



2. Hour line: 1 h × 9 = 9 h.
   Distance line: 72 km × 9 = 648 km.
   The train travels 648 km in 9 h.



4. Write the kind of angle—acute, right or obtuse.

a.  .....

b.  .....

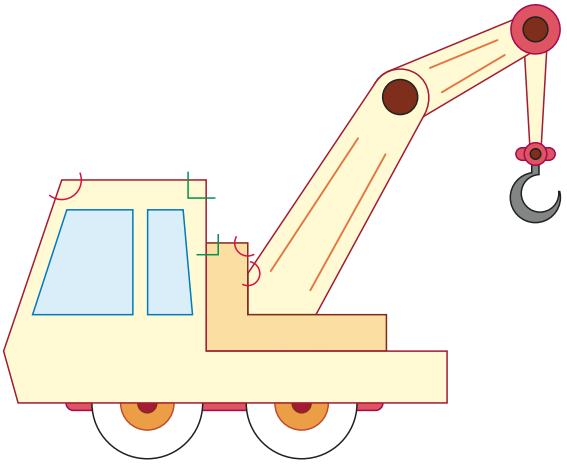
c.  .....

d.  .....

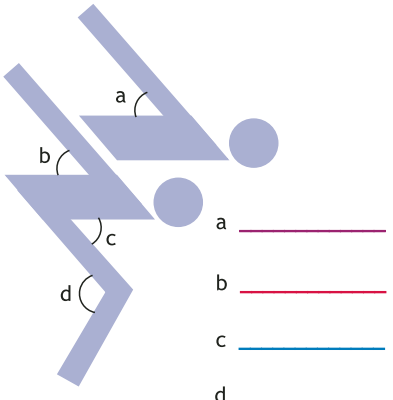
e.  .....

5. Mark the angles in the figure as shown.
Mark the right angles ⌞.
Mark the other angles ◠.

Hint:
⌝ = 9 in all
◠ = 13 in all

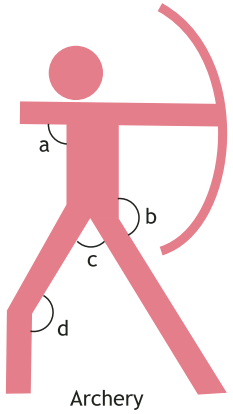


6. The figures show different sports. Write the type of the angle marked by each letter.



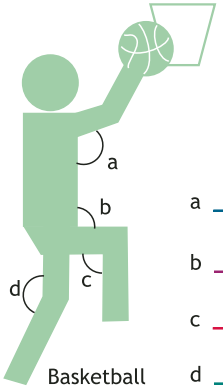
Aquatics

a _____
b _____
c _____
d _____



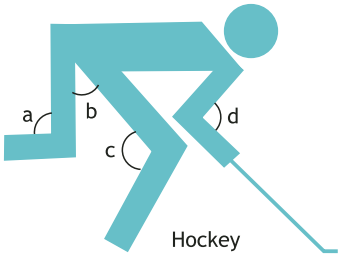
Archery

a _____
b _____
c _____
d _____



Basketball

a _____
b _____
c _____
d _____



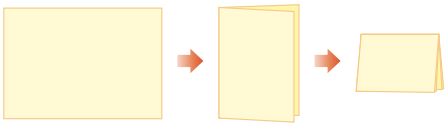
Hockey

a _____
b _____
c _____
d _____

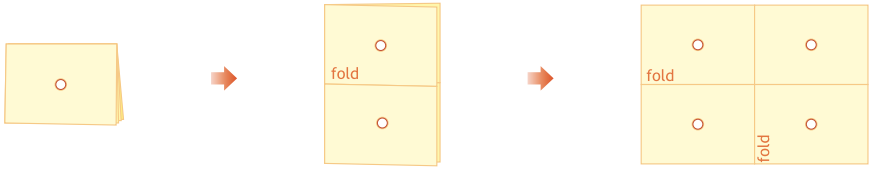
MATHEMATICS

Making designs using symmetry, folding and cutting

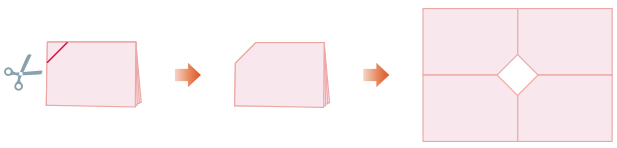
Fold a sheet of paper twice, as shown. Make a hole in the middle of the folded paper. Where will the hole be when you unfold the paper?

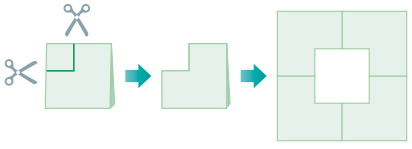


You will find that there is a hole on each side of every fold.



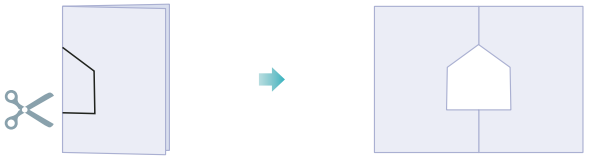
We may cut out shapes from the edges too. Shapes cut on the open edges stay at the edge of the paper after unfolding. Shapes cut on folded edges become holes inside the paper. Here are two ways to cut out a square at the middle of a sheet. One uses 1 cut, the other 2.



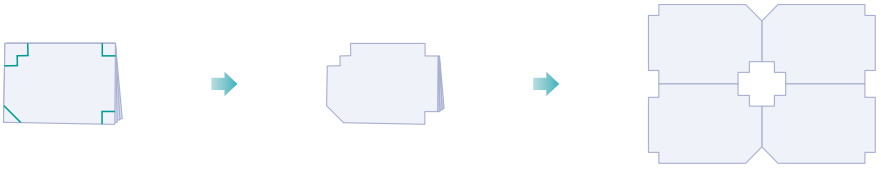


Fold a sheet of paper once. Draw a shape on the fold and cut it out. How many sides will the hole have after you unfold the paper?

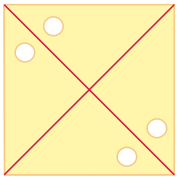
When you open the paper, each cut appears on both sides.
The cut at right angles to the fold becomes 1 straight side. The slanting cut becomes 2 sides, one on each side of the fold. The cut away from the fold becomes 2 sides.



Cut along the folds and edges as shown below to create the design.



Draw the fold lines so that one hole makes all the holes.

a. 

b.

c.

d.

e.

3. Look at the map of the market. Draw the shortest route between these places.

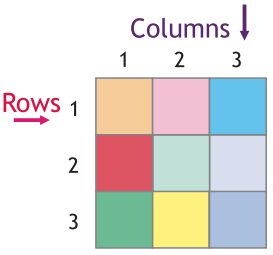
a. ATM and parking area

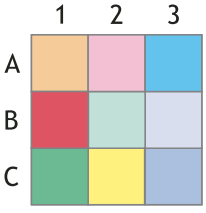
b. Plant nursery and ice-cream parlour



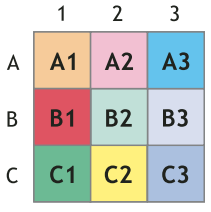
Positions in a grid

In a grid, boxes are in rows and columns. These boxes are called cells. A row goes across. A column goes down. We tell the position of a cell by its row and column, like seats in a hall. The blue cell is in row 1, column 3. The yellow cell is in row 3, column 2.



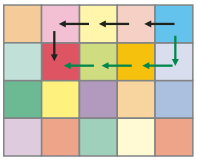


We can use letters for rows and numbers for columns. The blue cell is at A3. The yellow cell is at C2.



Suppose you may move only one cell at a time, up, down, left or right. Each move is a step. How many steps to another cell? For example, there are two ways to move from the blue cell to the red cell in fewest steps:

3 steps left and 1 step down (4 steps in all)
1 step down and 3 steps left (4 steps in all)



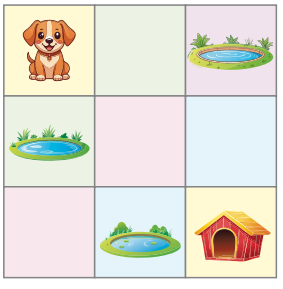


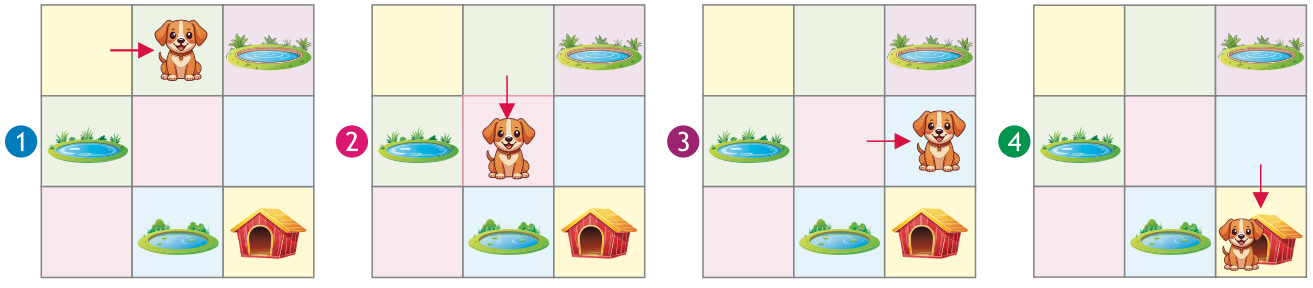
Making codes for paths

Suppose we want to write 'move left' in short. We can write ←. We say that ← is a code for 'move left one cell'. Similarly, → is move right one cell, ↑ is move up one cell and ↓ is move down one cell.

Let us write in codes how Toby reached his kennel without wetting his feet.

We write: → ↓ → ↓





Why does a spinning object slow down?

While a spinning object (spinner) turns, its tip or edge rubs against the surface. The moving spinner also pushes against the air around it. These effects gradually slow it down. A fast-spinning top often stays almost upright, but tends to tip as it loses speed. It may lean, wobble and finally fall.

Wooden spinning tops have been popular toys in India for many generations. A string is wound tightly around the top. The top is thrown towards the ground while the string is pulled back quickly, making it spin on its pointed tip. Children may compete to see whose top spins the longest. Spinning tops have different names in different parts of India. What is a spinning top called in your mother tongue?

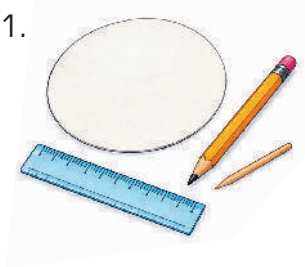


Lattu

The axis of a spinner

A spinner turns around an imaginary line called its axis. In round objects, the axis usually passes through the centre.

Let's Do Let us make a card spinner. You will need a thick card, a pencil, a ruler, a toothpick or short wooden stick and a little glue.

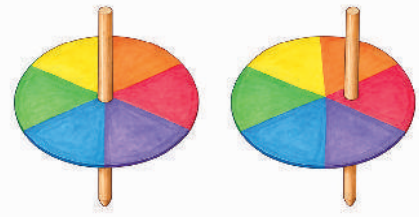
1. 
Cut or use a circular piece of card. Use a ruler to help mark its centre.

2. 
Ask a teacher or any other grown-up to help you make a small hole at the mark.

3. 
Push the stick through the hole and make sure that the card sits level. If needed, use a little glue to hold the card firmly in place.

4. 
Spin the spinner on a smooth, flat surface and watch how steadily it turns.

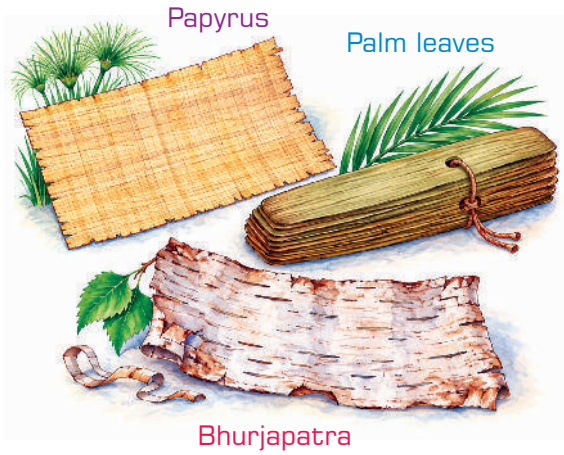
Once your spinner works, change just one feature and test it again. You could move the stick away from the centre, change the length of the stick below the card, use a larger card or try another shape. A spinner may not work well on the first try. Straightening the stick, adjusting the card or moving the axis can make a difference.



If several things are changed together, you will not know which change has caused the difference. Keeping everything else the same makes the comparison fairer.

Handle the toothpick carefully. Do not point it towards yourself or anyone else.

Before Paper Became Common



Bhurjapatra

You have already learnt that people once wrote on materials such as papyrus, palm leaves and bhurjapatra. Bhurjapatra is the thin bark of the Himalayan birch tree. Palm leaves could be dried, cut into strips and prepared for writing. Several leaves could be tied together to make a manuscript (a book or document written by hand).

Papyrus sheets were made from the soft inner part of the papyrus stem. This was cut into thin strips. The strips were laid side by side to form one layer, and a second layer was placed crosswise above the first. The layers were pressed or beaten together, then dried and smoothened. The damp strips held together as they were pressed and dried. Several sheets could be joined to make a long roll.



Making papyrus sheets



Shadows can be useful and fun Long ago, people used shadows to make a sundial. A sundial tells time from the position of a shadow.



Jantar Mantar in Jaipur

Large sundials can be seen at the Jantar Mantar observatories. An observatory is a special building that has powerful instruments used by scientists to study heavenly bodies like the sun, moon and stars.



Shadow puppetry uses shadows of puppets for storytelling.

You too can have fun making shadows with your hands.





Sun temple at Konark

The sun temple at Konark in Odisha is shaped like the chariot of the sun god Surya. Each wheel of the chariot is a sundial. The shadow of the rod at the centre of a wheel falls on the spokes to show the time. The 8 thick spokes are set at gaps of 3 hours. That makes 24 hours in all.

The Night Sky

After sunset, the sky slowly becomes dark. On a clear night, we usually see the moon and many stars. You may notice that some groups of stars seem to make patterns.

Let's Do On a clear night, look at the stars from a safe place near your home. Draw any star pattern that catches your eye. Compare your drawing with those of your classmates. Different children may find different patterns.

In a city, it is difficult to see the stars because of the many lights switched on at night. It is easier on a moonless night.

12 How the Land Shapes Life

The surface of the earth is not the same everywhere. Some parts of it are high, some are low, some are flat, and some have ups and downs. The different natural shapes of land are called landforms. Mountains, plains and plateaus are types of landforms.

There are water bodies too, like seas, lakes and rivers, on the earth's surface. A coast is a place where the land meets the sea. An island is a piece of land surrounded by water.

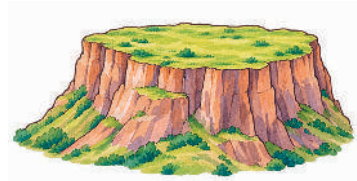
A desert is a place that has very little water. Deserts are dry because they get very little rain.

Landforms affect the climate, plants and animals found in a place. This in turn shapes many things in our lives, like houses, clothes, crops, food, travel and even local crafts and festivals.

Let's Do The pictures show different kinds of land. Can you match each one with its name? One has been matched for you.







plain **desert** **mountain** **plateau** **island** **coast**







E. Give short answers.

1. Why are terraces made on mountain slopes?
2. Why are India's northern plains good for farming?
3. Give an example to show that climate affects the kind of house we build.
4. Why do people in Rajasthan store water? Mention one way in which this is done.
5. Write three ways in which people living near the sea earn a living.

A Few More Steps

When nature becomes a danger

A natural happening can sometimes harm people, animals, homes and their surroundings. Different places may face different kinds of natural dangers.



Flood Heavy rain can make rivers overflow and cover low-lying land with water. Floods can damage crops, roads and homes.

Cyclone A cyclone is a huge storm that forms over warm ocean water. It has very strong winds that spin around a centre. Cyclones can bring heavy rain, high waves and floods to coastal areas.



As a cyclone moves onto land, it can damage trees, houses and roads. Weather experts track cyclones and warn people early so they can move to safer places. India's coasts, especially the eastern coast, face cyclones from time to time.

Landslide On steep slopes, soil and rocks may come loose and slide downhill, especially after heavy rain. A landslide can block roads and damage buildings.



Pottery

People learnt to make pots, dishes and bowls from clay. Such clay objects are called pottery.



At first, people probably shaped pots by hand. They dried the pots in the sun. Later, they found that baking clay pots in a fire made them harder and stronger.

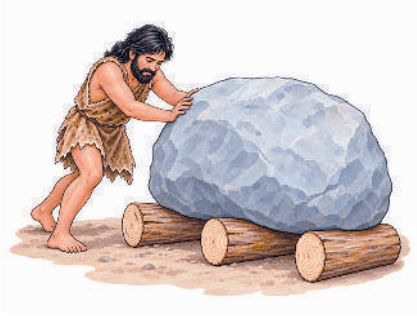
Clay pots were useful for storing things like food, water and milk. Food could also be cooked in pots.

Let's Do Take a small ball of playdough and press it flat. Roll another lump of dough into a long 'rope'. Coil it round and round over the flat piece. Press them gently together. Have you got a pot? Early humans might have made pots this way.



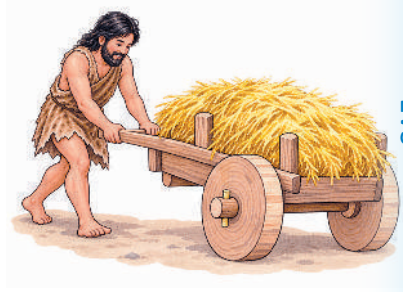
The Wheel

People noticed that logs and round stones could roll. They found that heavy things were easier to move on rollers made of logs or on a sledge placed on logs. Later, people learnt to make wheels and fix them to carts. The carts could travel more easily. They helped carry people and heavy loads.









Let's Do Take a thick book and three round pencils on a table. Place the pencils under the book. Push the book gently. The book moves forward. Now, place the book on the table without the pencils and push it forward. Which is the easier way to move the book?





01. Around the World

A. Name each landmark.

Tower Bridge　Great Wall of China　Brandenburg Gate　Merlion　Grand Canyon
Burj Al Arab　Petronas Towers　Golden Gate Bridge　Big Ben　Colosseum



1. _____



2. _____



3. _____



4. _____



5. _____



6. _____



7. _____



8. _____

Go! GK Challenge

Which city is home to the Golden Gate Bridge?

_____

GK

C. Write the correct letter in each box.

a. a mouse in a human family b. a bear fond of honey c. a book by Ruskin Bond

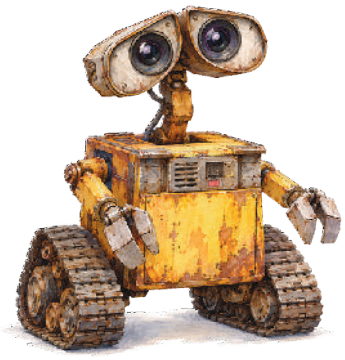
1. *Winnie-the-Pooh* ☐
2. *Rusty: The Boy from the Hills* ☐
3. *Stuart Little* ☐

D. Complete each sentence.

Shrek *WALL-E* Jadoo Moana *Home Alone* *Jumanji* *Finding Nemo*
kidnappers *Up* *Minions* *Ratatouille* *Ice Age*

1. _____ features a cooking rat.
2. Kevin faces burglars in _____.
3. _____ has a rubbish-collecting robot.
4. _____ has a mammoth and a sloth.
5. The film _____ has a flying house.
6. _____ restores Te Fiti's heart.
7. Bob and Stuart appear in _____.
8. *Koi...Mil Gaya*'s alien is called _____.
9. *Baby's Day Out* has 3 _____.
10. _____ has a magic board game.







E. Write T for true and F for false.

1. *The Incredibles* is about a family with superpowers. ☐
2. In *Night at the Museum*, exhibits wake only at sunrise. ☐
3. Ishaan reads easily at first in *Taare Zameen Par*. ☐
4. "Dabba" in *Stanley ka Dabba* means lunchbox. ☐

GK

3. Who was the first person to walk on the moon?

a. Yuri Gagarin b. Valentina Tereshkova c. Neil Armstrong d. Rakesh Sharma

4. Which mission made India's first soft landing on the moon?

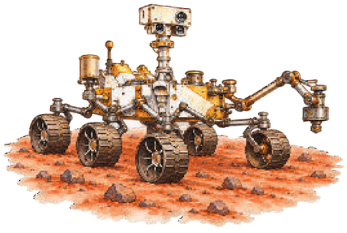
a. Chandrayaan-1 b. Mangalyaan c. Chandrayaan-3 d. Aditya-L1

C. Name each picture.

International Space Station rover Venus space shuttle Jupiter







1. _____ **2.** _____ **3.** _____

D. Find the answers in the word grid.

C	U	[1]C	V	X	N	F	D	[4]S
Y	S	O	X	E	Z	I	V	A
O	H	M	Y	Y	B	I	H	T
T	V	E	M	Z	X	V	V	E
D	T	T	O	B	A	P	E	L
M	I	Y	S	Z	N	O	S	L
[2]A	S	T	E	R	O	I	D	I
Z	S	N	M	A	W	L	E	T
G	[3]O	R	B	I	T	M	Q	E

1. Icy body that forms a tail near the sun

2. Rocky body found in large numbers between Mars and Jupiter

3. Curved path followed by a planet around the sun

4. Object that travels around a planet

Go! GK Challenge

How can satellite pictures of a cyclone help people on the coast?

_____

10. First, Last, Biggest, Smallest...

A. Choose the correct answer.

1. What was the first artificial satellite called?
   a. Apollo 11 b. Chandrayaan-3 c. Sputnik 1 d. Aryabhata

2. Who was the first woman in space?
   a. Sally Ride b. Kalpana Chawla c. Sunita Williams d. Valentina Tereshkova

3. Who was the first President of India?
   a. A P J Abdul Kalam b. Rajendra Prasad c. Sardar Patel d. Jawaharlal Nehru

4. Who was the first Asian to receive a Nobel Prize?
   a. Rabindranath Tagore b. C V Raman c. Amartya Sen d. Har Gobind Khorana

5. Which Indian city had the first metro railway?
   a. Delhi b. Kolkata c. Mumbai d. Chennai

B. Name each picture.

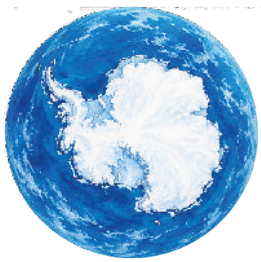
Antarctica Bahadur Shah Zafar Neptune Martha Akbar Australia



Last Mughal emperor



Last known passenger pigeon



Last continent to be discovered

1. _____ 2. _____ 3. _____



Go! GK Facts

- *Omega is the last Greek letter.*
- *Antarctica's first recorded sightings were in 1820.*
- *India's public telegram service ended in 2013.*

GK