### **Fantastic World of Animals**

1.	can you answer the following questions with the help of the given pictures.											
	(a)	Octopus	(e)	Komodo Dragons								
	(b)	Owl	(f)	Black Mamba								
	(c)	Squirrel	(g)	Horse								
	(d) Wax moth											
2.	Rea	d the questions and tick	(√) t	he right options.								

3. State whether the following statements are true or false.

(c) Eagle

(d) Snake

(a) Omnivorous

(b) 1972

(a)	T	(c)	T	(e)	F
(b)	F	(d)	T		

4. Fill in the blanks by taking help from the hint box provided.

pro	provided.									
(a)	fruit bat	(d)	Humming birds							
(b)	Bioluminescence	(e)	Quagga							
(c)	North Pole									

5. Answer the following in one word.

(a) blubber

(d) 200-400

(b) amphibians

(e) catfish

(c) bat

Names of animals are hidden in this word grid. Search and shade them.

$\bigcirc$ H	I	Р	Р	0	Р	О	Т	A	M	U	S
G	I	R	A	F	F	E	Α	L	С	M	D
Œ	L	Е	Р	Н	A	N	T	В	L	V	О
Q	С	B	L	U	Е	W	Н	Α	L	Е	L
0	S	Т	R	I	С	Н	Н	Т	В	M	Р
M	A	M	M	0	Т	H	K	R	L	Y	Н
В	D	R	Н	G	J	U	L	О	K	M	I
T	N	Е	W	Р	Q	Χ	I	S	Z	N	N
C	R	I	С	K	Е	T	W	S	Χ	Е	W

8. They won't be flexible and they will have difficulty in moving on the ground.

### **Parts of Plants**

- 1. Answer the following questions with the help of the given pictures.
  - (a) Root

(d) Flowers

(b) Stem

(e) Seeds

(c) Leaves

- (f) Fruits
- 2. Match the following.
  - (d), (e), (b), (a), (c)
- 3. Fill in the blanks.
  - (a) tap

- (c) Leaves
- (b) Eucalyptus and Banksia
- (d) cactus(e) Redwood

- 4. Answer in a word.
  - (a) Vines

(c) Fibrous

(b) Tendrils

- (d) Stem
- 5. Give an example of each.
  - (a) Fern
  - (b) Cactus

#### 7. Complete the crossword using the hints given.

Acı	coss	Do	Down				
1.	Tap	2.	Photosynthesis				
4.	Nitrogen	3.	Blade				
5.	Adventitious	6.	Trunk				
8.	Carnivorous	7.	Ferns				

### Facts about Human Body

- State whether the following statements are true or false.
  - (a) T

(d) F

(b) F

(e) T

- (c) T
- 2. Match the following.
  - (d), (e), (a), (b), (c)
- 3. Explain the Term.

Hair follicle:

Hair located under the skin is called the hair follicle.

4. Give reason.

If our tongue is dry then we won't be able to taste the food because saliva mixes with food and makes the tongue able to feel the taste of it.

5. Find out the words in the following word grid using the given hint box.

U	K	N	S	Y	Z	Α	L	F	N	R	Н
D	Z	О	K	M	M	Р	Е	D	Χ	О	V
О	M	J	I	S	A	U	B	R	Α	I	N)
D	Y	T	N	Χ	G	L	В	V	J	Y	N
Q	U	L	M	N	Р	T	0	N	G	U	E
О	P	L	Α	S	M	A	R	Е	T	В	D
V	Y	T	K	R	Q	N	D	Е	S	Z	M
G	Y	F	Е	I	Z	В	L	N	Y	T	S
I	K	Н	С	I	N	Е	B	0	N	Е	S
L	V	W	О	Q	K	U	F	Н	I	J	G
U	Q	Е	A	S	U	D	В	I	В	U	Q
M	В	S	U	D	С	R	Н	Χ	С	D	T

6. Read the question and tick ( $\checkmark$ ) the right option.

(a) Femur

(d) Heart

(b) 50 to 100

(e) 206

(c) 100 billion

### Some Medicines and Diseases

1. Read the questions and tick (	) the right options
----------------------------------	---------------------

(a) Polio

(d) Autism

(b) Cancer

(e) Tsetse Fly

(c) Penicillin

### 2. State whether the following statements are true or false.

(a) F

(d) F

(b) T

(e) T

(c) F

### 3. Write any two symptoms for each of the following diseases.

(a) Dengue: Body pain and rashes

- (b) Autism: Difficulty in playing with other people and social interaction
- (c) Sleeping Sickness: Fever and aching muscles
- (d) Bird Flu: Fever and sore throat
- (e) Lung Cancer: Chest pain and shortness of breath

4. Match the following.

5. Solve the crossword puzzle with the help of clues given below.

	D E											
	N		$^{2}A$					<sup>3</sup> A				
	G		U					<sup>4</sup> F	Е	V	Е	R
	U		Т					R				
<sup>5</sup> P	Е	N	I	С	Ι	L	L	Ι	N			
			S					С				
<sup>6</sup> N	Е	Е	M					A				

### **Renowned Scientists**

- 1. Match the following.
  - (d), (a), (e), (b), (c)
- 2. Identify and write the name of the following.
  - (a) C. V. Raman
  - (b) Homi Bhabha
  - (c) A. P. J. Abdul Kalam

- (d) Har Gobind Khorana
- (e) Subrahmanyan Chandrasekhar
- 3. Guess the scientists and unscramble their names.
  - (a) Galileo

(d) Robert Boyle

(b) Aryabhata

(e) James Watt

- (c) Marie Curie
- 4. Fill in the blanks with appropriate names.
  - (a) Madame Curie
- (e) 1928

(b) stethoscope

(f) James Watt

(c) 1886

(g) Chemotherapy

(d) Manhattan

(h) Willem Johan Kolff

5.	Identify the scientific instruments and write their
	name.

(a) Telephone

(e) Airplane

(b) Stethoscope

(f) Washing Machine

(c) Digital Thermometer

(g) Sphygmometer

(d) Laptop

Given below are some important inventions. Write down the year they were invented against their names from the help box.

(a) 1925

(d) 1928

(b) 1967

(e) 1902

(c) 1995

7. Find out the inventions in the word grid taking clues from the scientists' names.

S	Т	Е	Α	M	Е	N	G	Ι	N	E	Н	Α	N	D	z
G	Α	Е	T	J	J	Р	0	G	T	A	N	M	J	В	Е
F	D	С	Q	K	L	N	Е	Α	S	K	M	D	Χ	Y	R
P	Е	N	I	С	I	L	L	I	N)	Q	D	G	V	Х	
Q	V	F	F	M	D	Е	R	F	I	Р	D	K	A	Q	Y
R	Α	D	I	U	M	Α	T	S	I	С	Е	L	В	R	Z
Α	T	Е	Е	F	M	F	F	Α	J	R	I	M	С	U	Α
M	J	R	Α	D	L	N	R	Q	K	S	Н	L	D	V	О
Α	Y	R	F	G	R	K	0	M	0	T	I	0	L	Z	S
Α	В	С	M	Χ	Y	Z	S	L	N	О	Р	W	Χ	I	Z
P	Н	0	N	0	G	R	Α	P	Н	N	U	V	Z	Χ	N

### 6 Genres in Literature

- 1. Given below is the description of few literary works. Write their names.
  - (a) Phaedrus

(d) The Prince

(b) Torah

(e) Beowulf

- (c) Copernican heliocentrism
- 2. A travelogue is a film, book or experience shared by a traveller of that place. Match the travelogues.

A historical account of an explorer's tough journey to the Antarctica.	The Worst Journey in the World
A travelogue about the historical capital of India, Delhi, written by the author during his stay in New Delhi.	City of Djinns
A humorous account of the author's travels through all corners of Great Britain.	Notes from a Small Island: Travels in the United Kingdom

The early travels of the author, then a 23-year-old medical student, and his friend across South America.	The Motorcycle Diaries
An account of the author's seven year's journey through the Islamic world during the 11th century.	Safarnama

#### 3. Unscramble the proverbs.

- (a) A stitch in time saves nine
- (b) The pen is mightier than the sword
- (c) A friend in need is a friend in deed
- (d) It takes two to tango
- (e) Better late than never
- 4. Match the authors with their mother tongues.
  - (d), (c), (e), (a), (b)

## 7 Art Forms

- Name the place of origin of the following art and crafts.
  - (a) Rajasthan
  - (b) Lucknow
  - (c) Bihar
  - (d) Jaipur
  - (e) Kashmir
- 2. Answer the following.
  - (a) Monalisa painting
  - (b) Antonio Canova
  - (c) Portrait of Dora Maar
  - (d) Saint Mark
  - (e) Henry Moore
- 3. Match the names of dancers and singers with their images.
  - (c), (e), (a), (b), (d)

4.	Sta fals		who	ethe	er th	ie fo	ollo	wir	ıg s	tate	mei	nts	are	true	e or	
	(a)	F					(c)	T				(	e)	T		
	(b)	F					(d)	T								
5.	Ide fro				wr p b		he i	nan	ies	of t	he i	nst	run	ent	s	
	(a)	T	aml	bou	rine	)			(	(d)	Taı	npu	ra			
	(b)	F	lute	•					(	(e)	Vic	lin				
	(c)	G	uita	ar												
6.	Co	-					wor	d w	ith	the	hel	ро	f th	e		
	fol	low	vin	g cl	ues.											
								¹G								
								L								
				-				A								
				°R	Е	S	Ι	S	Т	D	Y	Е	Ι	N	G	
	Б	)						S								
2	$\rightarrow$	M			_	1		В			1					
<sup>3</sup> S	T	A	I	N	Е	D	G	L	A	S	S					
	-	C						0								
	-	R						W								
	-	A			40		ъ	I		<b>T</b> T		17	D		т	т
	-	M			*C	О	R	N	Н	U	S	K	D	О	L	L
	Ţ L	Е						G								

## 8 Pollution

1. Match the following.

(c), (d), (b), (e), (a)

2. Explain the term.

Radioactive substances are unstable and dangerous kinds of radiation. Radioactive pollution is caused due to the release of these substances.

3. Give reasons for the following.

We should conserve natural resources because it is the main source of our daily needs and they are available in limited quantity only.

4. State whether the following statements are true or false.

(a) F

(c) F

(e) F

(b) F

(d) T

5. Read the questions and tick ( $\checkmark$ ) the right option.

(a) Bhopal 1984, Ukraine 1986 (c) Deforestation

(d) 5th June

(b) decibels

- 6. Read the descriptions and name the unfortunate disasters which occurred due to carelessness by human beings.
  - (a) Atom bomb blasts at Hiroshima and Nagasaki
  - (b) Explosion at Chernobyl Nuclear Power Station
  - (c) Spill of oil from Exxon Valdez at Alaska, USA
  - (d) Hooding and landslides in Uttarakhand
- 7. Answer in one or two words.
  - (a) Greenhouse Gases
  - (b) Bicycle
  - (c) Hybrid car
  - (d) 22nd April
  - (e) Ozone Layer

- (f) Ecological Footprint
- (g) Solar Energy
- (h) Hydrogen
- (i) Natural Gas
- (j) Methane
- 8. Photographs of some great environmentalists are given below. Match them with their achievements.
  - (e), (a), (b), (c), (d)

### Important Dates in India

- 1. Match the following.
  - (b), (e), (a), (c), (d)
- 2. Read the questions and tick ( $\checkmark$ ) the right options.
  - (a) Pt. Jawaharlal Nehru

(d) 9th August 1942

(b) Power

(e) Physics

(c) Literacy

- 3. Which day is celebrated on the following dates? Write the names.
  - (a) Republic Day
  - (b) International Literacy Day
  - (c) Children's Day
  - (d) World Health Day
  - (e) Teacher's Day
- 4. Find out the words in the following word grid with the help of the given clues.
  - (a) government

(d) May

(b) effect

(e) Science

(c) parade

Е	Z	V	N	W	U	(E	F	F	Е	С	T	Q	О	Y
M	Z	F	K	A	Е	О	K	M	О	W	U	L	L	Р
A	С	F	M	A	R	N	A	V	Α	$\boxed{\mathbf{M}}$	Α	Y	J	Q
Z	Y	Р	M	Y	V	Χ	Y	Z	L	Y	J	О	Н	D
A	T	T	В	V	Y	N	V	Р	В	W	L	О	T	V
Y	P	K	U	Х	Α	G	V	V	Е	T	V	Р	D	K
Χ	A	G	K	Q	G	О	V	Е	R	N	M	Е	N	T
Α	R	L	M	Y	Z	Ι	О	В	F	Α	Q	Y	V	О
J	A	Р	L	J	W	Н	F	Α	Α	В	Q	D	L	N
K	D	V	Е	K	Н	R	J	Н	Z	Y	J	Е	Y	Z
D	E	U	О	N	K	Α	W	G	Н	С	Н	Ι	D	Y
L	О	M	W	K	Q	Н	S	Н	R	Z	Н	Р	Ι	M
О	I	Q	Ι	W	D	S	W	Α	Z	Е	С	Н	M	G
F	Y	U	S	S	С	I	Е	N	С	E	U	F	I	С
Χ	Q	T	Х	Х	J	G	K	Χ	Р	Α	G	L	D	Z

### 5. Solve the crossword puzzle with the clues given below.

1. Education

4. Kisan

2. Chand

5. Youth

3. Teacher's

6. Nonviolence



### Amazing Places in the World

- 1. Identify and write down the names of the places from the given descriptions.
  - (a) Black Forest
  - (b) Mendenhall Ice Caves
  - (c) Socotra Islands
  - (d) Lake Retba
  - (e) Solar De Uyuni
- 2. Answer in one or two words.
  - (a) Mendenhall Ice Caves.
  - (b) The lake is known for its high salt content and like the Dead Sea the lake is sufficiently buoyant that people can float easily on it.
  - (c) Tunnel of Love stretches across a three to five kilometres railway section, which is a part of a private railway line.
  - (d) Zhangye Danxia landform in China is also known as 'The Eye Candy of Zhangye'.

- 3. Choose and tick ( $\checkmark$ ) the right options.
  - (a) Black Forest
  - (b) Moravian Fields
  - (c) Dunaliella Salina algae,
  - (d) 350 kilometres
- 4. Match the following pictures with their names.
  - (d), (a), (b), (c)
- 5. Find out the words in the following word grid with the help of the given clues.

Z	Р	S	Α	W	R	S	Е	F	J	R	Α	Н	С	K
K	D	Z	N	0	D	G	Е	R	M	Α	N	Y	N	Р
I	Y	R	N	G	V	T	Ι	U	J	Α	V	F	S	N
K	I	Α	Р	Α	N)	Y	W	В	Y	Е	D	I	Р	Н
Ι	С	V	L	Q	L	U	Р	D	I	W	Y	В	Е	S
L	Е	О	R	Χ	В	В	V	Y	С	T	D	G	С	S
N	L	V	I	Χ	L	T	S	В	W	Α	Χ	V	B	С
В	О	N	G	С	Е	D	Е	G	Z	С	I	S	О	F
Y	Е	M	Е	N	О	V	Y	С	Н	T	K	Е	L	F
Е	W	G	В	Χ	D	W	Z	F	L	N	L	N	Ι	S
О	R	Y	N	U	G	G	Α	V	С	Y	Χ	J	V	S
Ι	О	Χ	M	K	Е	О	Н	Н	L	Н	M	W	Ι	U
Y	K	M	M	В	K	Α	W	R	Н	Χ	N	K	A	V
K	T	О	S	Ι	L	F	S	Р	T	Α	Χ	F	Ι	K
В	С	C	Н	Ι	N	A	I	L	Р	V	N	Α	W	K

### Countries and their Interdependence

1.	Read the c	questions	and tick	(<	) the ri	ght o	ptions.
----	------------	-----------	----------	----	----------	-------	---------

(a) Trade

(d) Interdependence

(b) Natural Gas

(e) International

- (c) ECOSOC
- 2. Match the following.
  - (c), (d), (b), (a)
- State whether the following statements are true or false.
  - (a) F

(c) T

(c) F

(b) T

- (d) F
- 4. Answer in one or two words.
  - (a) Cotton and sugar
  - (b) Brazil and Colombia
  - (c) Coffee and sugar
  - (d) China and The United States
  - (e) United Nations Economic and Social Council

5. Find out the words in the following word grid using the given clues.

		U												
Ι	V	B	Ŋ	Е	Q	S	(I)	H	О	Z	Н	I	D	T
D	T	C	R	U	D	Е	V	M	H	Q	S	K	F	Y
W	В	С	Y	A	N	K	Т	A	P	0	K	Т	W	Y
S	D	G	V	X	Z	K	Р	Α	F	0	Ţ	Q	В	R
G	U	В	M	S	Y	I	N	U	W	В	R	F	Р	С
T	Z	V	Q	X	N	T	L	Е	J	Q	9	T	Y	Q
T	I	G	V	Z	N	Р	В	Z	I	Z	N	D	W	О
Ι	L	Q	С	E	Ť	L	S	J	Z	M	N	J	С	В
Ι	T	V	Q	A	X	R	Q	N	Н	R	N	Q	Q	A
Т	N	О	С	Y	F	P	F	В	Α	R	Т	Е	R	K
Q	Х	Т	Q	J	Н	Z	0	E	М	I	Н	G	Е	Y
G	V	0	T	С	F	G/	D	R	s	W	Н	M	J	W
Р	I	В	U	S	S	U	R	M	T	J	В	T	Ι	О
С	Q	U	G	9/	R	A	С	С	U	F	Н	В	Y	Е
Ι	K	N	F	C	Z	W	G	U	О	Z	L	В	Ι	N

(a) Import

(d) Crude

(b) Export

(e) Barter

(c) Brazil



# 12 Ancient India

- 1. Read the questions and tick ( $\checkmark$ ) the right options.
  - (a) Aryans
  - (b) Ashoka
  - (c) Nadir Shah
  - (d) 500 BCE
  - (e) Babur
- 2. Why is the Vedic Age known as the 'Dark Age'? What is its significance?

The Vedic Age is known as the 'Dark Age', in the Indian history as it was a time of violent upheaval, and no written records from that period have survived to shed light on it. It was, however, one of the most formative eras of the ancient Indian civilization.

- 3. Match the following.
  - (d), (a), (e), (b), (c)

#### Arrange the following events in order to the time line of their occurrence.

- (a) Cotton cultivation began in India.
- (b) The Indus Valley civilization vanishes.
- (c) The infiltration of Aryan tribes.
- (d) Alexander the Great conquers the Indus Valley.
- (e) Ashoka becomes the Mauryan emperor.
- Write down the names of these monuments of ancient India.
  - (a) Mysore Palace

(b) Sanchi Stupa

### Facts About Computer and Network

#### 1. Answer the following questions.

- (a) Minicomputers are small and midsized machines that fall between mainframes and personal computers in processing speed, cost and power. Supercomputers are the most powerful computing machines on the planet. They use thousands of processor chips and cost millions of dollars.
- (b) PARAM 8000 and SahasraT
- (c) Network Topology is the schematic description of a network arrangement, connecting various nodes (sender and receiver) through lines of connection.

#### 2. Read the questions and tick ( $\checkmark$ ) the right option.

(a) TREE

(d) BUS

(b) MESH

(e) 1936

(c) STAR

#### Identify these parts of the computer and unscramble their names.

- (a) hard drive
- (b) Webcam
- (c) headphone
- (d) modem
- 4. Complete the crossword using the clues given.

#### Across

- 1. RAM
- 2. MOTHERBOARD
- 3. CPU
- 5. Fill in the blanks.
  - (a) Sundar Pichai
  - (b) Tim Berners -Lee
  - (c) URL
  - (d) Modem
  - (e) Mosaic

#### Down

- 4. KEYBOARD
- 5. ENIAC
- 6. MOUSE

### Materials, Matter and Machines

1.	Some	of	the	most	common	electronic	gadgets	have
	been g	ive	n be	low. V	Vrite their	names.		

(a) Television

(d) Microwave

(b) Washing Machine

(e) Thermometer

(c) Laptop

2. Fill in the blanks.

(a) minerals

(c) Polyethylene

(b) dwarf willow

(d) humidity

3. Match the items with the materials they are made up of.

(d), (e), (a), (b), (c)

4. Write two uses of each of the following material.

(a) Containers

(c) Bottles

Windowpane

Tiffin box

(b) Furniture

(d) Bags

Door

Jackets

5. Read the description about the following machines that we use in our day to day life. Match them with their pictures.

	It cleans carpets and floors by sucking up dirt, crumbs and dust.
W223598012	It can help us do difficult sums very quickly and easily.
	A handy machine for preparing soups, milk shakes, cold coffee, etc.
	It is used to take photograph of a person, animal, nature or a thing.
1-6	It is used for stitching clothes.

### Famous Authors, Books and Quotes

- 1. Read the questions and tick ( $\checkmark$ ) the right options.
  - (a) Holocaust
  - (b) Dr Seuss
  - (c) Alice's Adventures in Wonderland
  - (d) Agatha Christie
  - (e) The Little Prince
- 2. State whether the following statements are true or false.
  - (a) T

(d) T

(b) F

(e) T

- (c) F
- 3. Find out the words in the following word grid using the given clues.
  - (a) William
  - (b) Anne Frank
  - (c) Mousetrap
  - (d) Little Prince
  - (e) Oscar Wilde

I	M	M	Р	K	J	Е	R	Н	D	Q	Е	D	W	A
L	Z	0	N	Y	J	M	L	V	Ι	L	0	S	K	A
С	T	U	I	N	I	Α	I	W	U	Р	S	Н	D	N
U	Y	S	L	Χ	О	Р	T	В	L	Q	С	M	L	N
Е	L	Е	U	Q	G	С	T	С	Z	N	A	Е	S	Е
W	R	T	A	Χ	N	V	L	M	U	Z	R	Н	Τ	F
K	F	R	Н	Α	G	T	E	R	T	Е	W	V	Е	R
Y	M	A	L	В	0	K	Р	Р	S	С	I	L	K	A
D	J	P	Y	Y	W	W	R	T	Χ	D	L	M	Ι	N
J	U	I	Р	N	Z	J	ĺ	R	V	N	D	Q	Н	K
Z	R	V	J	G	0	M	Ń	L	S	Y	E	Р	В	W
О	Χ	Р	M	В	С	U	C	K	T	W	D	A	K	С
J	С	Y	Χ	S	F	W	E	J	В	I	F	Q	Р	S
Ι	О	Ι	K	L	W	Н	В	I	J	D	A	Ð	T	A
G	T	K	J	D	M	Н	A	Е	M	W	0	M	О	С

#### 4. Write the name of the author against the book.

(a) Jules Verne

(d) Anne Frank

(b) Dr Seuss

(e) Oscar Wilde

(c) Lewis Carroll

#### 5. Answer in one or two words.

(a) Alice and The White Rabbit

(d) 'Oh, The Places You'll Go!'

(b) Eighty two

- (e) 'The Night Train at Deoli'
- (c) Axel Lidenbrock

### 16 Puzzle Time

1. Using the numbers 2, 2, 2, 3, 4 and 7 (in any order), write a mathematical expression with a result equal to 145.

The sequence of numbers 2, 2, 2, 3, 4 and 7 has the property that you can using mathematical operators:  $7 \times 4 + 2 \div 2 \times (3 + 2) = 145$ 

2. In the following circles, the four outer numbers are used to calculate the number in the middle. Can you figure out the rule to determine what number should replace the question mark in the third circle?



In figure 1, 
$$(8-4) \times (3+2) = 4 \times 5 = 20$$

In figure 2, 
$$(10 - 7) \times (3 + 1) = 3 \times 4 = 12$$

Similarly,

In figure 3, 
$$(9-3) \times (4+4) = 6 \times 8 = 48$$

3. Break down the seven-digit number 1234567 and insert plus signs between certain digits (or groups of digits) in such a way to produce a result of 100.

The sequence of numbers 1 2 3 4 5 6 7 has the property that you can insert mathematical operators in between the numbers from 1 to 7 and make the expression evaluate to 100.

$$1 \times (-2) + 3 \times 4 \times 5 + 6 \times 7 = 100$$
  
 $\Rightarrow -2 + 60 + 42 = 100$   
 $\Rightarrow -2 + 102 = 100$   
 $\Rightarrow 100 = 100$ 

- 4. You are a participant in a race. You overtake the person in the second place. What position are you in? If you overtake the person on the second place, you will be on the second place itself.
- 5. You are given three jugs with a capacity of 8, 5 and 3 litres, respectively. The 8-litre jug is filled to the top with water, whereas the other two jugs are empty. You are asked to divide the 8 litres of water into two equal parts of 4 litres and in as few steps as possible. Each step involves pouring water from one jug into one of the other two jugs. How will you go about it?

	Jug 1	Jug 2	Jug 3
Start	8	0	0
Step 1	3	5	0
Step 2	3	2	3
Step 3	6	2	0
Step 4	6	0	2
Step 5	1	5	2
Step 6	1	4	3
Step 7	4	4	0

- 6. A farmer keeps three types of animals on his farm: cows, pigs and horses. Can you guess how many of each animal he has, based on the following information?
  - 1. Three of the animals are NOT cows.
  - 2. Four of the animals are NOT pigs.
  - 3. Five of the animals are NOT horses.

Let the number of pigs be x, number of horses be y and number of cows be z.

1. Three of the animals are not cows.

$$\therefore x + y = 3 \qquad \qquad \dots (i)$$

#### 2. Four of the animals are not pigs.

We have, cows + horses = 4

$$\therefore z + y = 4 \qquad \qquad \dots \text{(ii)}$$

3. Five of the animals are not horses.

We have, cows + pigs = 5

$$\therefore z + x = 5 \qquad \qquad \dots \text{(iii)}$$

Subtracting (ii) from (iii), we get

$$z + x - z - y = 5 - 4 \implies x - y = 1$$
 .... (iv)

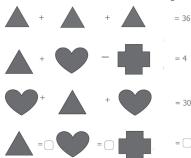
Adding (i) and (iv), we get

Y = 1

x = 2, Y = 1 and z = 3

Thus, the number of pigs = 2, number of horses = 1 and number of cows = 3

#### 7. Work out the value of each shape.



We have,

$$\Delta + \Delta + \Delta = 36$$

$$\Rightarrow 3\Delta = 36$$

$$\Rightarrow \Delta = 36/3 = 12$$

$$\mathbf{v} + \Delta + \mathbf{v} = 30$$

$$\Rightarrow$$
  $\forall$  + 12 +  $\forall$  = 30  $\Rightarrow$  2  $\forall$  = 30 - 12 = 18

$$\Rightarrow$$
 **v** = 18/2 = 9

And, 
$$\Delta + \nabla - \Box = 4$$

$$\Rightarrow$$
 12 + 9 -  $\Box$  = 4

$$\Rightarrow = 21 - 4 = 17$$

Thus, 
$$\Delta = 12$$
,  $\nabla = 9$  and  $\Box = 17$ 

8. If 1 = 3

$$2 = 6$$

$$3 = 9$$

Then 5 = ??

We have,

$$1 \times 3 = 3$$
,  $2 \times 3 = 6$ ,  $3 \times 3 = 9$  and  $4 \times 3 = 12$ 

Similarly, 
$$5 \times 3 = 15$$

9. If A + B = 76

$$A - B = 38$$

$$A/B = ???$$

Given,

$$A + B = 76$$
 .... (i)

$$A - B = 38$$
 .... (ii)

Adding equations (i) and (ii), we get

$$A + B + A - B = 76 + 38 = 114$$

$$\Rightarrow$$
 2A = 114  $\Rightarrow$  A = 57

Putting the value of A in equation (i), we get

$$57 + B = 76 \Rightarrow B = 76 - 57 = 19$$

$$\therefore \frac{A}{B} = \frac{57}{19} = 3$$

10. Which number has a head and a tail but no body?

Any number on a coin.

# 17 Abbreviations

#### 1. Read the questions and tick ( $\checkmark$ ) the right options.

- (a) Memory
- (b) Estimated
- (c) Soon
- (d) Amusement
- (e) Post

#### 2. Write the full form of.

Saint

Department

Professor

Established

Et Cetera

3. Write the full forms of 'ft', 'km', 'kg', 'Mt' and 'vs', in the space given below and find them in the word grid.

Т	P	Q	U	О	J	Y	V	Q	Z	N	S
V	D	Z	(K	I	L	0	M	Е	T	R	E
E	Е	(K	I	L	О	G	R	Α	M)	K	F
R	Z	0	G	Q	I	T	Y	Q	О	J	A
S	M	S	S	K	M	I	A	G	W	J	F
U	О	S	A	F	F	S	J	Е	Х	T	K
S	U	W	I	Q	M	Р	K	K	F	F	Z
U	N	G	N	M	R	Е	U	R	E	L	R
В	T	Q	T	С	W	Р	V	F	E	T	S
Y	D	О	F	U	В	V	F	M	T	В	Е
G	Н	W	T	Y	A	О	Q	L	F	S	С
Р	V	Y	F	Q	Е	Y	I	С	С	Χ	I

Feet, Kilometre, Kilogram, Mount, Versus

#### 4. Create a sentence using the following abbreviations.

- (1) Hon. Judge Rajiv Mehra gave away the prizes
- Ms Lilly's company name is Premier Coffee Private Ltd.
- (3) My laptop has a 500 GB hard drive.
- (4) The two cities are 250 kms apart.
- (5) Taj Mahal was built in the 17th century C.E.

#### 5. Write down the acronyms.

- 1. RIP
- 2. RSVP
- 3. ETA
- 4. USB
- 5. DIY
- 6. RAM

### Things to Know About Sports

- 1. Fill in the blanks.
  - (a) Football
  - (b) Alan Shepard
  - (c) William George Morgan
  - (d) polo
  - (e) rugby
- Given below are the photographs of some famous sports persons. Write the names of sports they are famous for.
  - (a) Badminton

(d) Tennis

(b) Athletics

(e) Car-Racing Lawn

- (c) Chess
- 3. Who am I?
  - (a) Tiger Woods

(d) Dola Banerjee

(b) Dhyan Chand

(e) Steffi Graf

(c) Sunil Gavaskar

#### 4. Name these record makers.

- (a) Althea Gibson
- (b) Michael Schumacher
- (c) Brian Lara
- (d) Sachin Tendulkar
- (e) Anil Kumble

#### 5. Match the following.

(e), (d), (c), (b), (a)

#### 6. Choose and tick ( $\checkmark$ ) the right options.

- (a) Football (soccer)
- (b) England
- (c) Japan
- (d) 18
- (e) Russia