# Theme 6: Living Together Chapter 10: Safety and First Aid

# Main Coursebook

#### I am ready





Icebreaker: weight loss

#### In-text Question

1. true

2. false

# In-text Question

1. Yes 2. No

#### I am a learner

- A. 1. a 2. b 3. c 4. a 5. b
- B. 1. True 2. True 3. False
- 4. False 5. True
- **c.** 1. A fracture is a crack or breaks in a bone.
  - 2. Different types of injuries often affect different body regions. Therefore, each body region usually requires different first aid.
  - 3. Tourniquet is a piece of cloth tied around a wound or an arm or leg.
- D. 1. A sprain is a torn tissue around a joint. A fracture is a crack or breaks in a bone. For a sprain, one should apply an ice pack or ice cube till the swelling subsides. For fracture, one should avoid unnecessary movement at the affected region.
  - 2. In case of minor burns, one should apply antiseptic lotion or cream to avoid infection. In case of severe burns, one should cover burns that may form blisters. In case of chemical burns, one should use plenty of water to rinse off the chemical.

#### I am a doer

Accept all relevant responses.

#### I am an all-rounder

A. English 1. an

2. a

- **B.** Maths: 16.2 x 100 = 1620 km
- c. Social Studies: Yes; one should rinse off the

chemical immediately using the plenty of water.

# Students' Worksheets (

#### Worksheet 1

- A. 1. everyone
  - 3. stay calm
- safety rules
   germs
- ' calm
- first aid
   CUTS
- INJURED
   SCRATCHES
- 3. ANTISEPTIC
- 5. EMERGENCIES
- C. 1. True 2. False 3. True 4. False 5. True

#### Worksheet 2

- A. 1. upright 2. doctor 3. breathe
- 4. sprain 5. cream
- B. 1. PATIENT 2. TETANUS 3. COTTON
  - 4. INJECTION 5. BANDAGE
- C. 1. False 2. False 3. False
  - 4. True 5. True

# Worksheet 3

- A. 1. Apply ice cubes to the sprained region.
  - 2. A sling can be made from a piece of cloth.
    - 3. Minor burns are painful and need urgent treatment.
  - 4. Dip a sterile cloth in baking soda solution and use it as a wet compress.
  - 5. One can suffer from burns from hot objects, such as boiling water, fire and so on.
- B. 1. FLARE 2. VICTIM 3. POISON
  - 4. BLISTERS 5. COMPRESS
- C. 1. consult the doctor
  - 2. minor burns are painful
  - 3. apply baking soda to burns
  - 4. one can suffer from hot objects
  - 5. avoid using water for fire caused by petrol

# Worksheet 4

 In case of minor burns, one should apply antiseptic lotion or cream to avoid infection.

In case of severe burns, one should cover burns that may form blisters.

In case of chemical burns, one should use plenty of water to rinse off the chemical.

- B. 4,5
- C. 1. should
- 2. should not
- 3. should
- 5. should not

# 4. should

Т

# Teacher's Worksheets (

#### Worksheet 1

| Α. | 1. | С | 2. | С |    | 3. | b |    |
|----|----|---|----|---|----|----|---|----|
| B. | 1. | F |    |   | 2. | F  |   | 3. |
|    | 4. | F |    |   | 5. | Т  |   |    |

#### Worksheet 2

- A. 1. Minor burns are painful, yet can be treated at home. One should keep the burned area under running and cold water till pain subsides. Apply an antiseptic lotion or cream to avoid infection. One can also apply baking soda and water instead of antiseptic lotion.
  - 2. A fracture is a crack or break in a bone. For this, one can use a splint and avoid unnecessary movement at the affected region.

We can make splints from newspaper folds, cardboard or pillows to support the fractured region. A sling, made from a piece of cloth, can also be used.

- 3. Avoid using water if the petrol caught fire, as petrol will float on water which will increase the flare.
- Remove clothing from the affected area. Use plenty of water to rinse off the chemical. Cover the area with sterile cotton or cloth and consult the doctor.
- A fracture is a crack or break in a bone. For this, one can use a splint and avoid unnecessary movement at the affected region.

We can make splints from newspaper folds, cardboard or pillows to support the fractured region. A sling, made from a piece of cloth, can also be used.

6. Snake bite injects poison into the body of the victim. This causes a lot of pain and swelling. One should treat the victim immediately otherwise the poison can kill the victim. Apply a tourniquet just above the bite to stop the blood flow to the heart and slow down the spreading of poison. Immediately take the victim to the nearby hospital or a doctor.

|              | Theme<br>Chapter                                   | e 6: Living<br>11: All Ak                              | Togetl<br>bout M                       | ner<br>atter                                   |
|--------------|----------------------------------------------------|--------------------------------------------------------|----------------------------------------|------------------------------------------------|
| Main         | Courseboo                                          | ok 🧹                                                   |                                        |                                                |
| l am re      | ady                                                |                                                        |                                        |                                                |
|              |                                                    | HOUL                                                   |                                        |                                                |
|              | · ]                                                |                                                        |                                        |                                                |
| Jui          | ce                                                 | Marbles                                                | Ai                                     | r in balloon                                   |
|              |                                                    | _                                                      | S                                      | team from                                      |
| Wa<br>Icebre | iter<br>aker: GAS                                  | Eraser                                                 |                                        | biling water                                   |
| In-text      | Question                                           |                                                        |                                        |                                                |
| 1.           | No                                                 |                                                        | 2. Yes                                 |                                                |
| In-text      | Question                                           |                                                        |                                        |                                                |
| 1.           | No                                                 |                                                        | 2. Yes                                 |                                                |
| l am a       | learner                                            |                                                        |                                        |                                                |
| A. 1.        | a 2.                                               | a 3. c                                                 | 4. k                                   | 5. b                                           |
| в. т.<br>4.  | False                                              | 2. IIUe<br>5. True                                     | э.                                     | TUBE                                           |
| C. 1.        | Molecules<br>which car<br>units calle              | s are small u<br>n be broken<br>ed atoms.              | nits of r<br>down i                    | natter,<br>nto smaller                         |
| 2.           | Chemical                                           | change                                                 |                                        |                                                |
| 3.           | A solution                                         | is formed w                                            | hen two                                | o or more                                      |
| D. 1.        | <b>Miscible li</b><br>in each oi<br>such as m      | i <b>quids:</b> Liquid<br>ther are cal<br>ilk and wate | ds that o<br>led miso<br>er.           | can dissolve<br>cible liquids,                 |
|              | Immiscible<br>dissolve in<br>immiscible<br>water.  | e liquids: Lic<br>a each othe<br>e liquids, suc        | quids the<br>r are ca<br>ch as ke      | at cannot<br>Illed<br>rosene and               |
| 2.           | Physical c                                         | hanges: Ap                                             | ohysical                               | change                                         |
|              | indicates<br>matter. Th                            | a change ir<br>Iese chanae                             | n the sto<br>es are re                 | ate of<br>eversible                            |
|              | and temp                                           | orary. For e                                           | xample                                 | , the                                          |
|              | Chemical<br>indicates<br>new subst<br>irreversible | changes: A<br>the formatic<br>ance. This c<br>and perm | chemi<br>on of a<br>change<br>anent. F | cal change<br>completely<br>is<br>For example, |

#### I am a thinker

Gases can be compressed easily because the molecules of gases are at a distance from each other. On compression, the molecules of gases come close together.

However, molecules of solids are in contact with each other, while molecules of liquids are also at a distance from each other but less apart than the molecules of gases. As a result, solids cannot be compressed, while liquids can be compressed up to a certain limit.

#### I am an all-rounder

A. English

1. fizz 2. puzzle

- **B. Maths**: ₹25
- c. Social Studies: Artillery, machine guns, tanks, U-boats

# Students' Worksheets

#### Worksheet 1

| Α. | 1. | matter    |   | 2. | atoms     |
|----|----|-----------|---|----|-----------|
|    | 3. | compounds |   | 4. | molecules |
|    | 5. | matter    |   |    |           |
| B. | 1. | ATOMS     |   | 2. | MATTER    |
|    | 3. | SOLIDS    |   | 4. | SOLUTIONS |
|    | 5. | MOLECULES |   |    |           |
|    |    |           | _ |    | _         |

C. 1. False 2. True 3. True 4. True 5. False

#### Worksheet 2

- A. 1. three 2. solution 3. solvent
  - 4. naked eyes 5. dissolved
- B. 1. SOLUTE 2. SOLVENT 3. SUBSTANCE
  - 4. CHEMICAL 5. COMPOUNDS
- C. 1. False 2. False 3. False
  - 4. True 5. False

#### Worksheet 3

- A. 1. Anything that occupies space and has weight is called matter.
  - 2. A solution is a mixture of two or more substances.
  - Molecules are small units of matter, which can be broken down into smaller units called atoms.
  - 4. Solid, liquid and gas.
  - 5. Sugar molecules find space among molecules of water.
- B. chemical; substance; new; burning; ash
- C. 1. No 2. Yes 3. Yes 4. Yes 5. Yes

### Worksheet 4

- A. 1. reversible
  - 3. ash
  - 5. dissolve
- **B**. 4, 5
- C. 2, 3, 4

# Teacher's Worksheets 4

#### Worksheet 1

ц F

- A. 1. matter
  - 3. miscible liquids
  - 5. state of matter
- B. 1. F
- C. chemical changes

Chemical change indicates a permanent change in a substance.

2. F

5. F

In a chemical change, a completely new substance forms

We cannot get back the old substance.

For example, heating the wood over fire changes it into ash. The molecules of wood are different from molecules of ash.

#### physical changes

Physical change is the change that indicates the change in the state of matter.

These changes are reversible and temporary.

We can get back the original state.

For example, on heating, solid wax turns into liquid wax. However, on cooling, the liquid wax turns into solid wax.

#### Worksheet 2

- 1. Accept all relevant answers.
- 2. A solute is a substance that dissolves, whereas a solvent is a substance in which the solute dissolves. For example, mixing salt in water forms a solution. In this mixture, salt is the solute and water is the solvent.
- 3. A solution forms when two or more substances mix together. A solution consists of a solute and a solvent.
- A chemical change indicates a <u>permanent</u> change in a substance. In a chemical change, a completely new substance forms, and we cannot get back the old substance.

For example, heating the wood over fire changes it into ash. The molecules of wood are different from molecules of ash. This change is irreversible.

- 2. heating
- 4. temporary

2. permanent

4. insoluble impurities

3. T



direction. For example, joints present in the knee.

• Pivot joint: This joint helps in

side-to-side movement of the head. For example, joint present at the neck.

- 2. Muscles are divided into three categories skeletal, smooth and cardiac muscles.
  - Skeletal muscles are voluntary in nature and help us move our different body parts. For example, the muscles of the arms.
  - Smooth muscles are involuntary in nature and are present in our internal organs. For example, the muscles of the stomach.
  - Cardiac muscles are the involuntary muscles present in the heart.

# l am a doer

Accept all relevant responses.

#### I am an all-rounder

- A. English:
  - 1. quickly 2. carelessly
- B. Maths: 6 hr; 360 minutes
- c. Social Studies: Skeletal muscle

# Students' Worksheets

# Worksheet 1

| Α. | 1. | heart       | 2. | heart     | 3. | tongue |
|----|----|-------------|----|-----------|----|--------|
|    | 4. | respiratory | 5. | different |    |        |
| Β. | 1. | HEART       | 2. | BRAIN     | 3. | lungs  |
|    | 4. | KIDNEYS     | 5. | TONGUE    |    |        |
| C. | 1. | True        | 2. | False     | 3. | True   |
|    | 4. | True        | 5. | True      |    |        |

# Worksheet 2

- A. 1. 22
  - 2. bones, joints and cartilage
  - 3. 206 4. 12 pairs 5. 33
- B. 1. SKULL 2. LIMB 3. GIRDLE
  - 4. RIBCAGE 5. BACKBONE
- C. 1. True 2. False 3. True 4. True 5. False

# Worksheet 3

- A. 1. Our body has multiple joints.
  - 2. A joint provides flexibility to the body.
  - 3. The joints present in the skull are immovable.
  - 4. A joint is the meeting point of two bones.
  - 5. The ball and socket joint is one of the movable joints,

- B. 1. BALL
- 2. PIVOT 3. HINGE
- 4. SOCKET 5. GLIDING
- C. 1. movable joints can move
  - 2. a joint is the meeting point of two bones
  - joints provide stability and flexibility to the body
  - hinge joint is present at the knee and elbow
  - 5. the ball and socket joint is present at the hip and shoulder

#### Worksheet 4

- A. 1. Muscles work by contraction and relaxation.
  - 2. The muscular system is a system that is made up of voluntary and involuntary muscles.
  - 3. Voluntary movements are movements that occur when we decide to move them.
  - 4. Involuntary movements are movements that occur without our decision.
  - 5. Skeletal, smooth and cardiac muscles.
- B. 1. voluntary 2. muscle
  - 3. voluntary 4. involuntary
  - 5. muscular
- C. 1. False 2. True 3. True 4. False 5. False
- Teacher's Worksheets «

#### Worksheet 1

- A. 1. an organ system
  - **2**. 22
  - 3. vertebrae
  - 4. 12
- B. 1. Skull 2. Backbone
- 3. Rib Cage 4. Rib Cage
- C. 1. It is always advised to wear a helmet while driving a motorcycle. In case of accident, the helmet will protect the brain, as brain is the most important organ of the body.
  - 2. In that case, we will not be able to touch our knees as the backbone is made up of one single bone.



# Theme 7: Keeping Us Strong Chapter 13: Our Nervous System

# Main Coursebook 🤇

I am ready: NOSE; EYES; SKIN; EARS

Icebreaker: NOSE

#### In-text Question

1. True 2. False

#### In-text Question

2. No

#### I am a learner

1. No

- A. 1. a 2. a 3. b 4. b 5. c
- B. 1. Cerebrum 2. Medulla
  - 3. spinal cord 4. optic nerves
  - 5. skin
- C. 1. Nerves are thread-like structures that act as a messenger between the brain and the body.
  - Cerebrum is responsible for the working of the nose, eyes, tongue and ears. The cerebrum also helps us think, learn, remember, recall, speak and emote. In the absence of cerebrum thinking, learning, remembering, recalling and speaking will be affected.
  - 3. Reflex action is the quick response of the body.

- D. 1. The brain consists of three parts namely, the cerebrum, cerebellum and medulla oblongata. The cerebrum is responsible for the working of the nose, eyes, tongue and ears. The cerebellum helps in coordinating muscle actions and balancing the body in proper posture. The medulla oblongata forms a connection between the brain and the spinal cord and regulates the involuntary activities of the body.
  - 2. Accept all relevant responses.

#### I am a thinker

If a person lacks reflex action, then the body would be unable to respond timely to injury or shock.

#### I am an all-rounder

#### A. English:

- 1. smells 2. smoke
- B. Maths: 33.5 degrees Celsius; 36.88 degrees Celsius
- C. Social Studies: Sunderlal Bahuguna

# Students' Worksheets 🤇

#### Worksheet 1

| Α. | 1.  | control  |       |     | 2.            | infor | matic   | n    |       |
|----|-----|----------|-------|-----|---------------|-------|---------|------|-------|
|    | 3.  | three    |       |     | 4.            | large | est     |      |       |
|    | 5.  | 80%      |       |     |               |       |         |      |       |
| Β. | 1.  | True     | 2.    | Tru | е             | ;     | 3. Fa   | lse  |       |
|    | 4.  | False    | 5.    | Fal | se            |       |         |      |       |
| C. | 1 - | →C 2     | . →d  | 3.  | $\rightarrow$ | o 4.  | →a      | 5.   | →e    |
| Wo | rks | heet 2   |       |     |               |       |         |      |       |
| Α. | 1.  | skull    |       |     | 2.            | Cere  | brum    | 1    |       |
|    | 3.  | jerky    |       |     | 4.            | Med   | ulla o  | bloi | ngata |
|    | 5.  | Spinal c | ord   |     |               |       |         |      |       |
| Β. | 1.  | INFORM   | ATION | l   | 2.            | SKUL  | L       |      |       |
|    | 3.  | CEREBR   | UM    |     | 4.            | CERE  | BELLI   | JM   |       |
|    | 5.  | MEDULL   | A     |     |               |       |         |      |       |
| C. | 1.  | C 2      | . I   | 3.  | С             | 4.    | С       | 5.   | С     |
| Wo | rks | heet 3   |       |     |               |       |         |      |       |
| Α. | 1.  | medullo  | x     |     | 2.            | threa | ad-like | Э    |       |
|    | 3.  | Nerves   |       |     | 4.            | three | e       |      |       |
|    | 5.  | sensory  |       |     |               |       |         |      |       |
| Β. | 1.  | MESSEN   | GER   |     | 2.            | NETV  | VORK    |      |       |
|    | 3.  | SENSOR   | Y     |     | 4.            | MOT   | OR      |      |       |
|    | 5.  | MIXED    |       |     |               |       |         |      |       |
| C. | 1.  | True     | 2.    | Tru | е             |       | 3. Fa   | lse  |       |
|    | 4.  | False    | 5.    | Fal | se            |       |         |      |       |
|    |     |          |       |     |               |       |         |      |       |

#### Worksheet 4

- A. 1. Brain 2. Skull 3. Cerebrum
  - 4. Cerebellum 5. Medulla
- B. spinal cord, medulla, thread-like, Sensory, Motor
- C. 1. CORNEA 2. IRIS 3. PUPIL 4. RETINA 5. OPTIC NERVES

# Teacher's Worksheets

#### Worksheet 1

B. 1. cerebrum

- A. 1. F 2. F 3. F 4. T 5. F
  - 2. motor nerves
  - 3. sounds 4. thread-like
  - 5. Reflex action
- C. 1. signal 2. heart 3. think

#### Worksheet 2

- A. 1. To protect ourselves from shocks and injuries, the body needs to respond rapidly. Such types of quick responses are processed by the spinal cord. These actions are called reflex actions. The brain is not usually involved in reflex actions.
  - 2. A clear fluid is present within the space between the brain and the skull and also within the inside of the brain. This fluid acts as a cushion against various injuries and jerks.
  - 3. The nervous system consists of:
    - a. Brain
    - b. Spinal cord
    - c. Nerves and
    - d. Sense organs
  - 4. Nerves are thread-like structures that act as a messenger between the brain and the body. They form a wide network that extends throughout the body. Some of them are directly connected to the brain and others are connected to the spinal cord.
  - 5. The three types of nerves are sensory nerves, motor nerves and mixed nerves.
  - 6. The brain is made up of three parts the cerebrum, the cerebellum and the medulla oblongata.

**Cerebrum:** It is the largest part of our brain and constitutes around 80 percent of the weight of the brain. It is responsible for the working of our nose, eyes, tongue and ears. The cerebrum also helps us think, learn, remember, recall, speak and emote. **Cerebellum:** This part of the brain lies below the cerebrum. It helps in coordinating the muscle actions and balancing the body in proper posture. If the cerebellum does not work properly, our body makes jerky movements.

**Medulla Oblongata:** Below the cerebellum, lies the medulla oblongata or medulla. It forms a connection between the brain and the spinal cord.

It regulates the involuntary activities of the body, such as respiration and heartbeat. The medulla remains active even when we are sleeping.

# Theme 8: From Satellite to Satellite Chapter 14: The Earth's Satellite



#### I am a learner

| Α. | 1. b     | 2. | а  | 3. b  | 4. C 5. | а |
|----|----------|----|----|-------|---------|---|
| B. | 1. False |    | 2. | True  | 3. True |   |
|    | 4. False |    | 5. | False |         |   |

- C. 1. The surface of the Moon is rough due to huge mountains, and some round and hollow structures called craters.
  - 2. There is no air and water on the Moon. So, no life exists there.
  - 3. Rakesh Sharma
- D. 1. Lunar eclipse: In lunar eclipse, the Earth casts a shadow on the Moon, as the

Earth comes in between the Sun and the Moon.

In partial lunar eclipse, the Moon is only partly hidden by the dark shadow of the Earth.

In total lunar eclipse, the Moon is completely in the dark shadow of the Earth.

A lunar eclipse occurs at night.

**Solar eclipse:** In solar eclipse, the Moon casts a shadow on the Earth as the Moon comes between the Sun and the Earth.

In partial solar eclipse, the Sun is only partly hidden by the dark shadow of the Moon.

In total solar eclipse, the Sun is completely in the dark shadow of the Moon.

A solar eclipse occurs during the day.

2. Artificial satellites are man-made satellites. The names of some satellites are APPLE, INSAT-1B, INSAT-2A, INSAT-2B, Oceansat and IRNSS-1A.

Uses of artificial satellites: Artificial satellites were designed for scientific research. They are also used for sending messages from one country to another. Satellites are also used for communication (communication satellites), weather forecasts (weather satellites) and so on.

#### I am a doer

Accept all relevant responses.

#### I am an all-rounder

- A. English
  - 1. Rahul has some chocolates in his bag,
  - 2. Ritika has kept her shoes under the table.
- **B.** Maths: 3,84,400 x 1000 = 38,44,00,000 m.

#### C. Social Studies:

Satellite data help forecast the weather or climate by images and numerical data.

# Students' Worksheets «

#### Worksheet 1

| Α. | 1. | Moon      | 2. | 3,84,400  | 3. | Earth's |
|----|----|-----------|----|-----------|----|---------|
|    | 4. | satellite | 5. | smaller   |    |         |
| Β. | 1. | False     | 2. | True      | 3. | True    |
|    | 4. | False     | 5. | False     |    |         |
| C. | 1. | SUN       | 2. | MOON      | 3. | EARTH   |
|    | 4. | PLANET    | 5. | SATELLITE |    |         |
|    |    |           |    |           |    |         |

#### Worksheet 2 A. 1. water

- 2. Moon 3. gravity
- 4. Sun 5. cold
- B. 1. NEW MOON
  - 2. FULL MOON
  - 3. WAXING GIBBOUS
  - 4. WANING GIBBOUS
  - 5. WAXING CRESCENT
- C. 1. True

3. False

3. T

- 4. True Worksheet 3
- A. 1. The surface of the Moon is rough due to huge mountains, and some round and hollow structures called craters.

2. True

5. True

- 2. When the sunlight falls on the surface of the Earth and the Moon, their shadows form. These shadows are called eclipses.
- 3. A satellite is an object that revolves around a planet.
- 4. 4,500 million years old
- 5. 3,84,400 km
- B. one-sixth; heavy; atmosphere; Sun; sound
- 2. yes 3. yes C. 1. yes 4. yes 5. no

# Worksheet 4

- A. Rakesh Sharma; in space; spacecrafts; spacesuit; atmosphere
- B. 1. LUNAR 2. SOLAR 3. ECLIPSE
- 4. APOLLO 5. CRATERS C. 1. no 2. yes 3. yes
- 4. no 5. yes

# Teacher's Worksheets 4

# Worksheet 1

- 2. F A. 1. F 5. F
- 4. F
- B. 1. Sputnik
  - 2. communication
  - 3. 1975
  - 4. Major Yuri Gagarin
- C. Accept all relevant answers.

# Worksheet 2

- A. 1. b 2. b 3. C 4. C
- B. Accept all relevant answers.

# Theme 9: From/Signs to Signals Chapter 15: Artificial Intelligence



Icebreaker

Accept all relevant responses.

# In-text Question

1. No 2. Yes

# I am a learner

| Α. | 1.c      | <b>2</b> . a | 3. C | 4. C   | 5. C |
|----|----------|--------------|------|--------|------|
| Β. | 1. True  | 2.           | True | 3. Tru | Je   |
|    | 4. False | 5            | True |        |      |

- C. 1. Self-driving cars are the vehicles that uses AI to sense their surroundings and move safely with little or no human input.
  - 2. Humanoids are robots that look and act like humans. However, these robots cannot feel, eat, move on its own and grow like the human beings.
  - 3. Smart-speaker is a voice-activated speaker that uses AI to do everyday tasks.
- **D.** 1. When machines think, learn and act as humans, it is called Artificial intelligence. With the help of this some fascinating technologies are possible, namely, humanoids, futuristic space travel, self-driving cars and smart speakers.
  - 2. Some of the technologies that uses AI are as follows:
    - Humanoids: Humanoids are robots that look and act like humans. They are the most exciting innovation of Al. Some of the popular humanoids are Atlas, Asimo, Rashmi and Pepper.
    - Futuristic space travel: Futuristic space travel involves physical exploration of the space by human spaceflights or by robotic spacecrafts.

- **Self-driving cars:** A self-driving car is a vehicle that uses AI to sense its surroundings and move safely with little or no human input.
- Smart speakers: A smart speaker is a voice-activated speaker that uses AI to perform everyday tasks. For example, Alexa (a virtual-assistant system developed by an e-commerce company).

#### I am a thinker

Accept all relevant responses.

#### I am an all-rounder

#### A. English

- 1. future 2. feature
- B. Maths: Al analyse the data which makes data handling easier.
- C. Social Studies

Al analyse the data and change the way to make the speeches, content and various other modes of communication easier.

# Students' Worksheets 4

#### Worksheet 1

- A. 1. Artificial intelligence
  - 2. robots
  - 3. space
  - 4. humanoids
  - 5. cheaper
- B. 1. False
   2. True
   3. False

   4. True
   5. True
- C. 1.  $\rightarrow$ d 2.  $\rightarrow$ d 3.  $\rightarrow$ e 4.  $\rightarrow$ c 5.  $\rightarrow$ b

# Worksheet 2

- A. 1. humanoid
  - 2. Futuristic space travel
  - 3. self-driving car
  - 4. voice-activated
  - 5. Alexa
- B. 1. DATA
  - 2. SCIENTIFIC RESEARCH
  - 3. SPACE EXPLORATION
  - 4. GAMING
  - 5. TECHNOLOGY
- C. 1. C 2. I 3. I 4. C 5. I

# Worksheet 3

- A. understand, repetitive, rest, doctors, gaming
- B. 1. ROBOT 2. ATLAS 3. ASIMO
- 4. RASHMI 5. PEPPER

- C. 1. False
- 3. True
- 4. False 5. False

# Teacher's Worksheets 4

#### Worksheet 1

#### A. Humanoids

They dont have family They look and act like humans They don't have muscles and nervous system

2. False

They cannot reproduce

They are made in laboratories

They cannot feel

#### Humans

They have family

Humans do not act like humanoids.

They have muscles and nervous system

They can reproduce

A human child grows in a mother's womb They feel through their sense organs

- B. 1. V 2. iii 3. iv 4. ii 5. i
- c. Artificial intelligence is used in our day to day life. It is used in giving on-line shopping recommendations, playing music and also giving the routes having less traffic.

# Worksheet 1

- A. 1. The ability to think and learn is called intelligence. When machines think, learn and act as humans, it is called Artificial Intelligence (AI).
  - 2. Humanoids are robots that look and act like humans. They are the most exciting innovation of Al. Countries from all over the world have come up with different humanoid models. Some of the popular humanoids are Atlas, Asimo, Rashmi and Pepper.
  - 3. The arrival of the concept of space tourism has made big companies use AI and work towards making space travel cheaper and safer even for common people.

Futuristic space travel involves physical exploration of the space by human spaceflights or by robotic spacecrafts. There are also attempts to find new planets which can be used for human settlement.

- 4. A self-driving car is a vehicle that uses AI to sense its surroundings and move safely with little or no human input
- 5. A smart speaker is a voice-activated

speaker that uses AI to perform everyday tasks. For example, Alexa (a virtual-assistant system developed by an e-commerce company) and Siri (a voice-assistant powered by an multinational corporation that specialises in gadgets).

### **Revision Worksheet**

A. 1. c 2. a 3. b 4. a 5. a

- B. 1. Moon
  - 2. Pinna or outer ear
  - 3. cartilage
  - 4. blisters
  - 5. Aerated
- C. 1. False 2. True 3. False
  - 4. True 5. False
- D. 1. Major Yuri Gagarin
  - 2. Optic nerves
  - 3. Skeletal muscles
  - 4. Sprain
  - 5. Physical change
- E. 1. A solute is a substance that dissolves whereas a solvent is a substance in which the solute dissolves.

- 2. Keep the patient upright in such a case with their head held back. Press the bleeding side firmly and keep an ice pack or wet cloth on the nose and head of the patient. In case of heavy bleeding, consult the doctor.
- 3. Our backbone is made up of 33 small vertebrae. These 33 vertebrae together form our backbone.
- 4. The light that enters in our eyes travels from the pupil to the retina.
- The different phases of the Moon are full moon, waxing gibbous, first quarter, waxing crescent, new moon, waning crescent, third quarter and waning gibbous.

