

Tanquiri.AI

Environmental Science

4

Teacher's Manual

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MASTERMIND

Chapter 1 : Living Together

1. a. (ii) b. (iii) c. (ii) d. (iii) e. (iii)
2. (a) farming (b) police officer (c) dustbin (d) respect
(e) buildings
3. (a) 7 (b) 3 (c) 7 (d) 3 (e) 7
4. (a) A community is a group of people living in the same place. They help and care for each other and share work, festivals, and responsibilities. Living together makes life easier and happier.

(b) In a village community, people help each other by working together in farming and daily activities. They share tools, food, and take care of animals. They also celebrate festivals and support one another.

(c) Communities are important because they make us feel safe and supported. They teach us values like sharing, caring, and cooperation. In difficult times, people help each other.

(d) Children can help their community by keeping surroundings clean and planting trees. They can help classmates and follow good habits. Being kind and respectful also helps the community.

(e) Diversity in a community means people are different from each other. They may have different languages, clothes, food, and customs. These differences make the community beautiful and united.

Activity – Do it yourself.

Chapter 2 : Exploring Our Neighbourhood

1. a. (iii) b. (i) c. (ii) d. (iii) e. (ii)
2. (a) dustbin (b) doctor (c) park (d) not (e) shops
3. (a) ✓ (b) ✗ (c) ✗ (d) ✓ (e) ✓
4. (a) A neighbourhood is the area around our home. It includes houses, roads, and nearby places. People living near us are called neighbours.

(b) Important places in a neighbourhood include schools, markets, hospitals, parks, and post offices. These places help us in daily life. Each place has a special use.

(c) We can keep our neighbourhood clean by throwing waste in dustbins. Planting trees and keeping surroundings tidy helps. We should not damage public property.

(d) Exploring our neighbourhood helps us know nearby places. It makes us confident and independent. It is useful during emergencies.

(e) We should be kind and polite to our neighbours. Helping and respecting them builds friendship. Good behaviour makes the neighbourhood happy.
5. a. (iv) b. (i) c. (v) d. (ii) e. (vi) f. (iii)

Activity : Do it yourself

Chapter 3 : Nature Trail

1. a. (iii) b. (ii) c. (iii) d. (ii) e. (ii)
2. (a) dead (b) cool (c) cold (d) prides (e) dark
3. (a) ✓ (b) ✗ (c) ✗ (d) ✓ (e) ✓
4. (a) By taking a walk in nature, we learn about plants, animals,

birds, and insects. We observe how they live in forests, rivers, and mountains. Nature walks help us understand the importance of trees and water. They also teach us to respect living creatures. This makes us more aware and caring towards nature.

- (b) Mountains help animals by providing them shelter and food. Animals like snow leopards and mountain goats live there. Mountains keep the climate cool and clean. They help in balancing weather and rainfall. Mountains are very important for the environment.
- (c) Birds have special features that help them live safely. Their beaks help them eat different kinds of food. Claws help them catch food and sit on trees. Birds like owls have sharp eyes to see at night. These features help birds survive in nature.
- (d) Frogs and snakes help nature by eating insects and pests. Frogs can live on land and in water. Snakes help control the number of small animals. They help keep balance in the food chain. This balance is important for a healthy environment.
- (e) We can care for nature by planting and protecting trees. We should keep our surroundings clean and avoid littering. Saving water and electricity helps the Earth. We should be kind to animals and not harm them. Caring for nature keeps our planet safe and beautiful.

5. a. (i) b. (ii) c. (iii) d. (iv) e. (v) f. (vi)

Activity : Do it yourself

Chapter 4 : Growing up with Nature

- 1. a. (ii) b. (i) c. (ii) d. (ii) e. (ii)
- 2. (a) oxygen (b) wild (c) kind (d) tree (e) dustbin

3. (a) ✗ (b) ✓ (c) ✗ (d) ✓ (e) ✓
4. (a) People in villages live close to nature by depending on forests, rivers, and fields. They grow their own food using rain and sunlight. Their houses are made of natural materials like mud and bamboo. They use leaves, wood, and stones in daily life. This lifestyle teaches them to live simply and respect nature.
- (b) Wild animals are animals that live freely in forests and jungles. They find their own food and water from nature. Many animals help spread seeds and clean the forest. Elephants make paths in jungles and help plants grow. Wild animals help maintain balance in nature.
- (c) Plants and trees are important because they give us oxygen to breathe. They provide food, fruits, shade, and medicine. Trees keep the environment cool and prevent soil erosion. Birds and animals depend on trees for shelter. Without plants, life on Earth would not be possible.
- (d) Indian festivals are closely connected to nature and seasons. Festivals like Pongal and Baisakhi celebrate harvests. Holi celebrates spring using colours from flowers. These festivals remind us to thank nature for its gifts. They teach us to respect and care for the environment.
- (e) We can care for nature by planting and protecting trees. We should save water and electricity. Using cloth bags instead of plastic helps the environment. We must keep our surroundings clean. Caring for animals and plants keeps nature healthy.
5. a. (ii) b. (v) c. (iv) d. (vi) e. (iii) f. (i)

Activity: Do it yourself

Chapter 5 : Food That Keeps Us Fit

1. a. (ii) b. (i) c. (i) d. (ii) e. (iii)
2. (a) protective (b) energy (c) protein (c) junk (e) juices
3. (a) ✗ (b) ✓ (c) ✗ (d) ✓ (e) ✓
4. (a) We need food because it gives us energy to work and play. Food helps our body grow strong and healthy. It protects us from diseases and keeps us active. Good food helps our brain work properly. Without food, we cannot survive.
(b) A balanced diet is a meal that has all nutrients in the right amount. It includes fruits, vegetables, grains, and proteins. A balanced diet keeps our body strong. It helps us grow properly. It also prevents sickness.
(c) Body-building foods help our body grow tall and strong. They repair our body when we get hurt. These foods are rich in protein. Milk and pulses are examples. Eggs and nuts are also body-building foods.
(d) Protective foods keep us safe from diseases. They are rich in vitamins and minerals. Fruits and vegetables are protective foods. They make our immunity strong. They keep us healthy and active.
(e) We should avoid junk food because it is unhealthy. Junk food has too much oil, sugar, and salt. It can cause sickness and weight gain. It does not give proper nutrients. Eating healthy food keeps us fit.
5. a. (iii) b. (i) c. (v) d. (vi) e. (ii) f. (iv)

Activity : Do it yourself

Chapter 6 : Happy and Healthy Living

1. a. (ii) b. (iii) c. (ii) d. (i) e. (ii)
2. (a) twice (b) happy (c) balanced (d) clean (e) trusted
3. (a) ✗ (b) ✗ (c) ✓ (d) ✗ (e) ✓
4. (a) Staying healthy is important because it helps us grow properly. A healthy body gives us energy to study, play, and work. It keeps us safe from diseases. When we are healthy, we feel happy and active. Good health helps us enjoy life.
(b) We can keep our body clean by brushing our teeth twice a day. We should take a bath daily and wash our hands regularly. Washing hands before eating keeps germs away. Clean habits prevent sickness. Cleanliness is very important for good health.
(c) We should avoid eating too much junk food because it is unhealthy. Junk food contains too much oil, sugar, and salt. It can cause illness and weakness. It does not give proper nutrition. Healthy food keeps our body strong.
(d) Regular exercise helps our body stay strong and active. It keeps our muscles and bones healthy. Exercise also makes us feel happy and fresh. It improves concentration and sleep. Playing and exercising daily keeps us fit.
(e) If someone makes us feel unsafe, we should say “NO” loudly. We should move away from that person. It is important to tell a trusted adult immediately. We should not keep such things secret. Speaking up keeps us safe.
5. a. (iv) b. (iii) c. (ii) d. (v) e. (i)

Activity : Do it yourself

Chapter 7 : How Things Work

1. a. (ii) b. (ii) c. (i) d. (ii) e. (iii)
2. (a) pulley (b) rubber (c) spinning (d) rolling (e) cut
3. (a) ✓ (b) ✗ (c) ✓ (d) ✗ (e) ✓
4. (a) We see different types of movements around us in daily life. Some objects move in a straight line, which is called linear movement. Some move back and forth like a swing. Some objects move up and down like an elevator. Others show spinning or rolling movement.
(b) Push and pull are forces used to move objects. When we move something away from us, it is called a push. When we bring something closer, it is called a pull. Pushing and pulling help us open doors and move objects. These actions make work easier.
(c) Rolling happens when a round object moves by rotating on a surface. Sliding happens when an object moves without rotating. Rolling needs less effort and is faster. Sliding needs more force because of friction. Balls roll while books slide.
(d) Some things float and others sink in water because of their weight and material. Light objects usually float on water. Heavy objects sink because they are denser than water. Shape also matters while floating. Hollow objects can float easily.
(e) Simple machines are tools that help us do work easily. They reduce the effort needed to lift or move things. Examples include pulley, lever, and inclined plane. They make work faster and safer. We use simple machines every day.
5. a. (ii) b. (vi) c. (ii) d. (iii) e. (iv) f. (v)

Activity : Do it yourself

Chapter 8 : How Things are Made

1. a. (iii) b. (ii) c. (i) d. (ii) e. (I)
2. (a) lime (b) tissue paper (c) thread (d) potter's wheel
(e) natural
3. (a) ✗ (b) ✓ (c) ✗ (d) ✗ (e) ✓
4. (a) Natural materials are obtained from nature like wood, cotton, clay, and wool. Man-made materials are made by humans using machines. Plastic, glass, and nylon are man-made materials. Natural materials are eco-friendly. Man-made materials are strong and long-lasting.

(b) Paper is made from wood pulp. Trees are cut and chopped into small pieces. These pieces are ground and mixed with water to make pulp. The pulp is cleaned and spread into thin sheets. After drying, paper is ready for use.

(c) There are different types of paper used for different purposes. Writing paper is used in notebooks and books. Newspaper is used to print news. Cardboard is used to make boxes. Tissue paper is used for cleaning and wrapping.

(d) Clay pots are made by potters using clay. The clay is kneaded well to remove air. It is shaped on a potter's wheel. The pot is dried in air. Then it is baked in a kiln to make it hard.

(e) The 5Rs are Refuse, Reduce, Reuse, Repurpose, and Recycle. They help us reduce waste. They save natural resources. The 5Rs keep our environment clean. They help protect the Earth for the future.
5. a. (iii) b. (ii) c. (i) d. (iv) e. (v) f. (vi)

Activity : Do it yourself

Chapter 9 : Different Lands, Different Lives

1. a. (i) b. (i) c. (i) d. (i) e. (I)
2. (a) Thar (b) Amritsar (c) humid (d) woollen (e) golden
3. (a) ✓ (b) ✓ (c) ✗ (d) ✓ (e) ✗
4. (a) The geography of a region affects how people live there. Climate decides the food they eat and the clothes they wear. Land and water decide their occupations like farming or fishing. Houses are built according to weather conditions. Thus, lifestyle changes from place to place.
(b) Farming is the main occupation in the plains because the land is flat and fertile. Rivers provide enough water for crops. The soil is rich and suitable for growing many crops. Transport is easy in plains. This helps farmers sell their produce easily.
(c) People in the desert manage with very little water by saving every drop. They build underground tanks to store rainwater. Houses are made with thick walls to stay cool. People use water carefully for daily needs. This helps them survive in dry areas.
(d) Life in coastal areas is closely linked to the sea. Many people depend on fishing for their livelihood. Seafood is a major part of their diet. The sea also affects weather and festivals. Coastal people respect and depend on the sea.
(e) People in the mountains live in cold climate and wear woollen clothes. Houses are made of wood and stone to keep warm. Roofs are sloped to let snow slide off. People grow crops like apples and potatoes. Their lifestyle is simple and close to nature.
5. a. (iii) b. (i) c. (ii) d. (v) e. (vi) f. (iv)

Activity : Do it yourself

Chapter 10 : Our Sky

1. a. (ii) b. (iii) c. (ii) d. (ii) e. (ii)
2. (a) rainbow (b) Poornima (c) Shadows (d) phases (e) Diwali
3. (a) ✓ (b) ✗ (c) ✗ (d) ✗ (e) ✗
4. (a) The Sun helps us in many ways every day. It gives us light and heat. Sunlight helps plants make food. It keeps the Earth warm and suitable for life. The Sun also helps us know time and direction.

(b) Shadows change during the day because the position of the Sun changes. In the morning and evening, shadows are long. At noon, shadows are the shortest. Shadows change direction as the Sun moves. This shows the movement of the Sun.

(c) Constellations are groups of stars that form patterns in the sky. They can be seen at night when the sky is clear. Long ago, people used them for navigation. Some constellations look like animals or objects. They help us study the sky.

(d) The phases of the Moon are the changing shapes of the Moon. These changes happen because the Moon moves around the Earth. The Moon looks different on different nights. Important festivals are based on Moon phases. Phases help us count days and months.

(e) A rainbow is formed after rain when sunlight passes through water droplets. The light bends and splits into different colours. A rainbow has seven colours. It looks like a curved arc in the sky. Rainbows make the sky beautiful.
5. a. (ii) b. (iv) c. (i) d. (v) e. (iii)

Activity : Do it yourself