

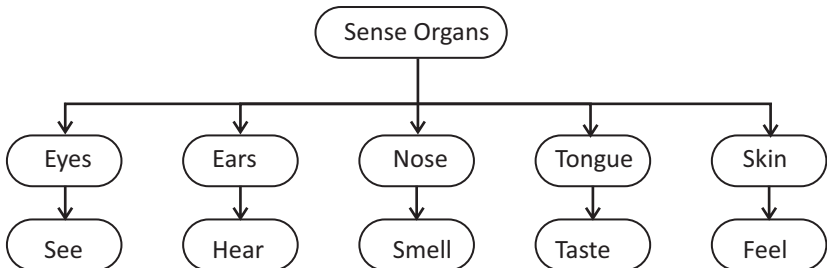
1. Family and Its Relationship

The Outset

- Do it yourself.
- A. 1. (b) 2. (d) 3. (d) 4. (a)
- B. 1. extended 2. Adoption 3. elders 4. Namaste
- C. 1. F 2. F 3. T 4. T 5. T
- D. 1. Immediate family include your grand-parents, aunts, uncles and whoever else lives at home with you. If you live in a nuclear family, your immediate family would be your parents, sisters and brothers.
 2. Uncles, aunts, cousins, and nephews who stay separately are part of your extended family. Both maternal and paternal relatives are part of an extended family. Family members gather on happy occasions such as festivals, birthday parties and marriages. They also gather on sad occasions such as death in the family. 3. Changes In The Family : Events like the birth of a child, adoption, marriage, job transfer or retirement bring about changes in the family. Due to such events, members often have to make adjustments and efforts to fit into the new situation.
 4. Due to marriages, an another person include with us in our family. So, changes come in the families due to marriage. 5. We learn many values from our families such as being honest, hardworking and respectful towards others and obeying our elders. 6. Do it yourself. 7. Do it yourself.
- E. 1. Uncle (Mama) 2. Aunt (Mosi) 3. Uncle (Chacha)

2. Sensing Around

The Outset



- A. 1. (c) 2. (b) 3. (a) 4. (b)

- B. 1.** eyelids **2.** good **3.** sign **4.** Braille **5.** dolphin
- C. 1.** F **2.** T **3.** F **4.** T **5.** F
- D. 1.** Our sense organs allow us to feel the world around us. They also help to protect us from harm. **2.** Our tongue can identify the taste of sweet, salty, sour and bitter. **3.** We have two ears that help us hear different sounds. Each ear consists of the outer ear and the inner ear. The outer ear acts as a cup to receive sounds travelling by our head. Sound is created when a material object vibrates. These vibrations are carried through air as sound waves and reach our ears. **4.** People who cannot hear are regarded as deaf and people who cannot speak are referred as dumb or mute. As deaf and dumb people are unable to hear or speak, they communicate by using a sign language. **5.** Do it yourself.

3. Fun and Games

The Outset

- 1.** Ice-hockey **2.** Golf **3.** Cricket **4.** Hockey
- A. 1.** (b) **2.** (a) **3.** (b) **4.** (c)
- B. 1.** rules **2.** umpire **3.** captain **4.** girls **5.** Traffic
- C. 1.** Children love to play. While some children enjoy playing outdoors, others prefer indoor games. Playing games is necessary for us as it keeps the body fit and the mind happy. If we play without rules, the players at times are penalised for committing foul. **2.** Sometimes while playing a game, the players get into arguments or quarrels because there is a difference of opinion. That is why each sport has a set of rules to be followed. In some sports, there is an umpire or referee to see that the game is played according to the rules. Sometimes players can quarrel with each other even though there are rules. In such cases, the differences can be resolved easily by understanding each other's point of view. In case of unfair play, the players at times are penalised for committing foul. In case of football, a penalty may be given or in cricket, penalty runs. The decision of the referee is final. **3.** While playing, we must make sure that we do not differentiate between any two people. Each player should get a turn to play. It is important to play with everyone as it builds cooperation and respect for one another. It also helps us to develop qualities of a healthy teamwork. Everyone learns to put in their best effort and gives support to each other while playing. **4.** The player who says Kabaddi-Kabaddi, should touch the 'Baulk-line'

before he comes back, otherwise he would be considered as 'out'. The cant should start and stop at the middle line. But it should be in one breathe. If the cant is stopped in between it is considered to be out. **5.** The players who cross the end lines or side lines are considered as 'out'. Those players who are 'out' should sit in the 'sitting box' which would be outside the court. The players who are 'out' can join the team in order whenever the team scores a point. The players should not grow nails. One should not apply oil to the body while playing. Physical training teacher explain the rule. **6.** All children should play every day. When we play games we become active and our blood circulates better. All impurities present in our body come out in the form of sweat. During the play time, we talk, laugh, solve simple disputes, discuss and follow the rules. It relieves us from stress and strain and keeps our body healthy and active. It also helps us in maintaining good relations with others. If you play games regularly, you will become strong and healthy, not obese. **7.** In earlier times, girls were not allowed to play, as many games were considered too rough for them. However, today most games are played by both men and women. Many women have also been successful in various sports and have earned medals for their country.

4. Work Around Us

The Outset

1. Make gold jewellery **2.** Flying airplanes **3.** Repair Taps **4.** Fought for the country **5.** make buildings **6.** serve the customer

A. 1. (c) **2.** (b) **3.** (b) **4.** (a)

B. 1. traffic policeman **2.** weaver **3.** television journalist **4.** architect

C. 1. A regular activity or work done to learn money is called an occupation. **2.** An occupation that requires special training and formal qualification is referred to as a profession. For e.g. : Tailor, traffic policeman, train engine, weaver, doctor, etc. **3.** The person who weaves the clothes is called a weaver. **4.** We must share the works at our home in free timing. We should help our mother to cleaning the house. We should help our grandparents in their daily activities. **5.** Train engine driver carry the train safely to its destination on time. He controls the acceleration and braking of the train so that it enters and leaves stations at the correct time. His job requires discipline, hard work, alertness and dedication. Career of a train engine driver begins by qualifying in an

exam and then worked as an assistant driver on a diesel locomotive. He learnt about the train parts and signalling systems. After extensive training and years of practice, he became driver of an express train. Sometimes, he faces difficulties such as a breakdown of signals or an emergency aboard the train. On such occasions he uses his presence of mind to ensure the safety of all passengers. **6.** In earlier times, women were not allowed to work outside the home and were expected to only take care of the house and children. Also some jobs were regarded as being too tough for women. This has changed. Today, women take up all kinds of jobs. Many women have joined the armed forces and there are women engineers and pilots also.

- D. 1.** Tailor uses a sewing machine to stitch clothes. **2.** Carpenter makes our houses colourful. **3.** A potter makes different types of pots. **4.** A chef cooks the food in Hotels and restaurants. **5.** A journalist works for a news channel.

5. The Animal World

The Outset

- 1.** troop **2.** pack **3.** colony **4.** flock **5.** pod **6.** school **7.** pride **8.** sloth **9.** tower **10.** herd

A. 1. (a) **2.** (b) **3.** (b) **4.** (b) **5.** (b)

B. 1. elephant **2.** dog **3.** bat **4.** wing **5.** colony, swarm

C. 1. F **2.** F **3.** T **4.** T **5.** T

- D. 1.** Mammals have external ears which can be seen. Some mammals such as the elephant and rabbit have big ears while others like the monkey have small ears. Birds, snakes, lizards, frogs and insects are not mammals. They do not have markedly visible external ears. But they have a good sense of hearing. **2. Body Coverings :** Just like our body is covered with skin, the body of animals too is covered with skin. The skin has hair. Some animals have long hair on their skin. Animals like yaks, musk oxen and bears live in very cold areas. They have long hair which keep them warm. Animals like cows and buffaloes live in not so cold areas. They have short hair. **3.** Animals like the polar bear, which live in cold regions, have more fur or body hair. The hair traps the body heat of the animals and helps to keep it warm. **4.** Snakes do not have markedly visible external ears. But they have a good sense of hearing. **5.** Most animals live and move together in groups. Such animals are called social animals. Humans too are social animals. Living in a group gives us a

sense of comfort and a feeling of being part of the community. Similarly animals live together and move in groups to find food and water, to protect themselves from enemies, to raise their young ones and to get warmth from each other's bodies.

- E. **1.** Dogs, cows **2.** Polar Bears, yaks **3.** Elephants, rabbits **4.** Zebras, leopard.

6. Animal's Habitat

The Outset

1. Parasites **2.** Arboreal **3.** Amphibians

A. **1.** (a) **2.** (c) **3.** (b) **4.** (a) **5.** (c)

B. **1.** Camel **2.** fish **3.** poison arrow frog **4.** Amphibians **5.** Parasite

C. **1.** T **2.** F **3.** F **4.** T **5.** T

D. **1.** The process in which an animal changes itself to suit its surroundings is called adaptation. Adaptation can help an animal breathe, catch food or hide from its enemies. **2.** Desert animals like camel have padded feet that help them to walk on sand easily. They store fat in their humps which gives them energy when required. They have long eye lashes that protect their eyes during sandstorms in deserts. A camel can live without water for many days. **3.** Aerial animals have the following adaptations : (i) Their forelimbs are modified as wings to help them to fly. (ii) They have light bodies covered with feathers. (iii) Their bones are hollow and light. (iv) They have boat-shaped body which helps them in flying. **4.** Animals that can live both on land and in water are called amphibians. Frog, crocodile, alligator, tortoise, etc are some examples of the amphibians. **5.** Animals living in polar regions such as polar bears have fur on their bodies which protects them from cold. **6.** Animals like frogs, lizards, etc become inactive and sleep for several months in cold climate to protect themselves from cold. This is called hibernation. **7.** Parasites are the animals that live within or on the bodies of other animals. Bugs, mosquitoes and leeches are some examples of the parasites.

7. All About Plants

The Outset

(a) leaf (b) flower (c) fruit (d) stem (e) root

A. **1.** (b) **2.** (b) **3.** (b) **4.** (c) **5.** (b)

B. 1. Stem 2. Rose 3. Chlorophyll 4. Bud 5. Fruit

C. 1. T 2. T 3. T 4. F

D. 1. Some plants like carrot, beetroot, turnip and radish have a thick main root below the stem and many small roots growing sideways from the main root. These are called taproots. Herbs and grasses don't have a strong main root. They have many thin roots that spread out from the base of the stem. These are called fibrous roots. **2.** The root of a plant performs many important functions : (i) Roots fix the plant firmly to the ground. This prevents the plant from being pulled out easily or blown away by the wind. (ii) Roots absorb water and minerals from the soil which are used by the plant to make food (photosynthesis). (iii) Plants like carrot, radish, beetroot and turnip store food for the plant in their roots. Such roots are called storage roots. We eat these roots as vegetables. (iv) Sometimes there is a shortage of food. Then people survive by eating roots such as yam, tapioca and sweet potato. These roots are called famine food. **3.** Leaves are called the food factory of the plant as they use water and carbon dioxide present in the air to prepare food in the presence of sunlight. This process is called photosynthesis. **4.** Some people depend upon flowers to earn their livelihood. People do business with flowers. Flowering plants are not found in every body's house. Such people buy flowers. **5.** Due to growth in human population and their increasing needs, forests are slowly disappearing. Humans clear away forests to make space for more houses, offices, hospitals and schools. Trees are also needed for furniture and paper products. Hence, forests are slowly getting reduced.

8. The Food We Eat

The Outset

• wheat • maize • rice • beans

A. 1. (b) 2. (b) 3. (a) 4. (d) 5. (b) 6. (a)

B. 1. The farmer first prepares the soil for growing crops. He ploughs the soil with the help of bullocks. The plough breaks the large lumps of soil and makes the soil porous so that it can absorb oxygen from the air easily. Some farmers use tractors to plough the soil. **2.** Weeds are plants that grow without being planted. If they are not removed, they take up all the water and fertilizers meant for the crop. **3.** The grains are separated from the plant by threshing, while winnowing removes the

chaff and husk. The clean grains are dried and packed in sacks. **4.** Harvesting is the process of gathering mature crops from the fields. It has to be done at the correct time or the crops will rot away. **5.** As the crops grow, the farmer needs to protect them from insects, birds and pests. For this, he uses insecticides and pesticides which are made from chemicals. **6.** Proteins are called body building nutrients. Proteins are required for hair and nail growth and repair muscles. They are especially essential for growing children as they help the body to grow and help wounds to heal faster. **7.** A diet that contains adequate amounts of all the necessary nutrients required for healthy growth and activity is called a Balanced Diet. **8.** Tony's father loading the grains in their tractors for sale.

- C. 1.** Winnowing, threshing **2.** Milk, meat **3.** Rice, potatoes **4.** Fruits, vegetables **5.** Drip irrigation, sprinkler

9. Eating Together

The Outset

- 1.** Ganesh Chaturthi **2.** Holi **3.** Eid **4.** Teej **5.** Guru Purab **6.** Bihu **7.** Christmas **8.** Onam

A. 1. (d) **2.** (d) **3.** (c) **4.** (b)

B. 1. community **2.** Mess **3.** Sanjha chulha **4.** bhandaras

C. 1. F **2.** T **3.** F **4.** T

- D. 1.** When a large group of people eat together, it is known as community eating. Community eating brings everyone together and promotes mutual love and respect among people. **2.** During birthday parties, family weddings, anniversaries, festivals and other special occasions, people meet each other and also eat together. **3.** Midday meal programme provides nutritious food to the children and brings about a feeling of togetherness and sharing among them. It helps to educate children from poor families as parents are encouraged to send the children to school. It also ensures that children do not drop out from school and attend school regularly. **4.** There are many schools where students live and study together. They are called boarding school or hostels. **5.** A langar is a place where free meals are served to all visitors at a Gurdwara, irrespective of their religion or social status.

10. Tongue and Teeth

The Outset

• sweet • bitter • salty • sour

A. 1. (b) 2. (b) 3. (c) 4. (a) 5. (d)

B. 1. teeth 2. teeth care 3. eagle 4. duck 5. humming bird

C. 1. T 2. F 3. F 4. T 5. T

D. 1. (e) 2. (d) 3. (a) 4. (b) 5. (c) 6. (f)

E. 1. It is rough and bumpy. The rough bumps are called papillae and contain taste buds. The papillae help to grip the food and move it around while chewing and the taste buds help to detect sweet, sour, bitter and salty flavours. 2. Human beings have two sets of teeth in their lifetime. The first set of teeth are called milk or temporary teeth. A child has about 20 milk teeth by the age of 2 or 3 years. 3. we should maintain good oral hygiene by cleaning our tongue with a tongue cleaner every day. We should rinse our mouth or gargle after every meal and avoid eating very hot and spicy food. 4. We must take care of our teeth to prevent tooth decay : (i) We must brush our teeth at least twice a day; in the morning and at night, before going to bed. (ii) We should eat raw vegetables and fruits like apples, carrots and radish. They make our teeth and gums strong. (iii) We should avoid sweets and chocolates. They spoil our teeth. (iv) Visit a dentist once in six months. 5. When we eat, bacteria grow on the tongue and teeth and cause bad breath and plaque. So If we do not take care of our tooth and tongue we fall sick. 6. Birds do not have teeth to chew or bite. They eat with the help of their beaks. Different birds have different kinds of beaks. They are suited to the kind of food they eat. For eg : Short, hard and horny beaks, Hooked beak, Chisel-shaped beak, Straw-shaped beak.

11. Houses Then and Now

The Outset

• Cave • Flats • Kutcha house • Pucca house

A. 1. (b) 2. (c) 3. (b) 4. (b)

B. 1. high 2. cement 3. gas stoves 4. apartments

C. 1. T 2. F 3. T 4. T 5. F

D. 1. (i) Most houses had a large courtyard for children to play and some houses had a tulsi plant in the middle of the courtyard. (ii) Electricity did

not exist in the house, the walls had in-built spaces or alcoves to place lanterns or candles. (iii) People coated the floor and walls with a mixture of cow dung and mud to keep insects away. (iv) Many houses had a covered well in the courtyard from where the residents would fetch water. **2.** Modern houses made from brick, cement, iron, concrete, glass and other materials. The floors are made of tiles and there are separate rooms for cooking, sleeping, bathing, etc. Building materials such as wood, granite, plastic, steel and aluminium are used in the interior fittings of the house. **3.** Due to a large population and shortage of space, people in big cities live in multi-storey buildings. The house in these buildings are called flats or apartments. **4.** We build different types of houses in different places due to environment, location, comfortability, etc. **5.** People in slums live in unhygienic conditions. They don't have proper facilities for toilets, sewerage, drinking water or health care. Due to this, stagnant water and garbage collect around slums, making them ideal breeding grounds for mosquitoes and flies. Hence, diseases are common in slums.

12. Waste and Its Disposal

The Outset

- Do it yourself
- A. 1. (c) 2. (c) 3. (d) 4. (c) 5. (b)**
- B. 1. biodegradable 2. foul 3. Recycling 4. biodegradable 5. incineration 6. composting**
- C. 1. F 2. T 3. T 4. T 5. F 6. F**
- D. 1.** All such items that we throw away as they are no longer of use to us, are called waste or garbage. Fruit and vegetable peels, discarded toys, torn paper, broken glass, wrappers, empty bottles and packets, non-working gadgets and torn footwear are some items that make up household waste. **2.** People living in urban areas or cities generally use more packaged items and thus, produce more waste than people living in rural areas or villages. This is because rural people generally rely more on fresh food rather than packaged items. **3. Open dumping :** Waste is taken away and dumped in the open in a designated place located at a distance from the city or town. **Landfills :** Deep pits are dug in the ground and garbage is dumped into them. When the pits fill up, they are covered with soil. **4.** Plastic bags especially are very harmful as they clog

waterways, pollute the environment and kill aquatic life. They also pose a danger to animals who swallow them while feeding. So we should use cloth bags. **5.** Waste like vegetable and fruit peels, leftover food, newspapers, magazines, plant leaves, flowers and human and animal body waste are all biodegradable wastes. Waste like candy wrappers, metal, cans, polythene styrofoam and plastic bags are example of non-biodegradable wastes. **6.** Reduce, reuse, recycle and recover/refuse are known as 4 R's. **7.** Do it yourself.

13. Directions and Maps

The Outset

- Do it yourself.
- A. 1. (d) 2. (c) 3. (b) 4. (b)**
- B. 1. landmarks 2. atlas 3. scale 4. electronic map 5. south**
- C. 1. F 2. T 3. F 4. F 5. F**
- D. 1.** When we want to find a certain place, we make use of reference points called landmarks. **2.** There are four directions : east, west, north and south. These are called the cardinal directions. **3.** As we know, the sun rises in the east and sets in the west. Hence when we face the rising Sun, we are facing east. Our back is towards west. If we stretch our arms sideways, the left hand points to north and the right hand indicates south. **4.** Many symbols are used on maps to denote roads, railway lines, water bodies, boundaries, etc. For example, on most maps, a river is represented by the symbol (~~~) and a capital city is shown by the symbol (●) These are called standard symbols. A map also contains a key. It explains the symbols used in the map and their meanings. **5.** A map is a drawing usually on a flat surface, of an area or country, giving the exact location of a place. The scale of a map gives us an idea of the distance between two places on the map. Smaller units are used in the map for this purpose. **6.** Physical maps and political maps **7.** Do it yourself.

14. Water for Living

The Outset

- Do it yourself.
- A. 1. (b) 2. (a) 3. (b) 4. (c) 5. (b) 6. (a)**
- B. 1. water 2. evaporation 3. ground water 4. condensation 5. water cycle 6. conservation**

C. 1. F 2. T 3. F 4. T 5. T 6. T

D. 1. Some rivers depend on rainfall for water. They are called rain fed rivers. These are also called seasonal rivers. All rivers finally flow into the sea. 2. When we hang out wet clothes in the sun, they dry up after some time. This is because the heat from the sun changes the water into water vapour. 3. **Evaporation** : Process by which water changes to water vapour is called evaporation. **Condensation** : When we fill a glass with cold water, after some time we find tiny droplets of water on the outer surface of the glass. This is because water vapour in the air comes into contact with the cool surface of the glass and turns into water droplets. This is condensation. 4. As more and more drops join the clouds, they become heavy and burst. This water from the clouds reaches the ground in the form of rain, hail, snow and sleet. This is precipitation. 5. **Water Cycle** : The change of water to vapour and back to water in nature is called the water cycle. The water cycle helps to maintain the water level on the earth. 6. We conserve water by building dams and tanks.

15. Clean Water

The Outset

1. Bhagirathi river 2. Narmada river 3. Sutlej river 4. Mahanadi 5. Narmada river 6. Krishna river

A. 1. (d) 2. (b) 3. (c) 4. (c) 5. (b) 6. (c)

B. 1. Pollution 2. idols 3. Defecating 4. straining 5. chlorine

C. 1. T 2. F 3. F 4. T 5. T 6. F

D. 1. (c) 2. (a) 3. (b) 4. (e) 5. (d)

E. 1. Harmful chemicals, dust etc involves in water cause the water pollution. Polluted water can cause many infectious diseases like : typhoid, diarrhoea, cholera, jaundice and skin diseases. Polluted water affects aquatic life. Many fish die due to poisonous substances in water. Pollution also disturbs our food chain. For example, harmful chemicals in water enter the bodies of little fish. Big fish eat these small fish and human in turn eat the big fish. Thus humans are also affected. 2. We should not throw garbage or domestic waste into water bodies. Human activities such as bathing and washing near water bodies should be banned. Government should provide community toilets for the

homeless to discourage urinating and defecating near water bodies. We should not throw chemicals, oils, paints and medicines into the sink or drains. **3.** We can purify water at home by boiling or filtered. **4.** We can also add chemicals such as chlorine to kill the germs in water. In villages, bleaching powder or chemicals like potassium permanganate are added to wells in specific proportions. This keeps water germ-free. **5.** We should store water in clean and covered containers. Drinking water should not be stored for a very long time. **6.** The purified water is pumped into huge tanks from where it reaches our house through pipes. It may contain germs so we need to purify water again.

16. Travelling Today

The Outset

1. NH-44 **2.** NH-1 **3.** NH-58 **4.** NH-9 **5.** NH-11 **6.** NH-3

A. 1. (b) **2.** (c) **3.** (a) **4.** (d) **5.** (c)

B. 1. (e) **2.** (c) **3.** (b) **4.** (a) **5.** (d)

C. 1. Mumbai, Thane **2.** Waterways **3.** Sunderban delta **4.** Airlines **5.** TTE

D. 1. T **2.** F **3.** T **4.** T **5.** F

E. 1. India has two types of roads : Kachcha roads and Pucca roads. Kachcha roads are unmetalled roads and pucca roads are metalled with tar. The roads in the cities are metalled. **2.** The Golden Quadrilateral is a network of highways that joins the four metropolitan cities of our country – Delhi, Mumbai, Chennai and Kolkata. **3.** Roads are beneficial in different ways : (i) Roads are used to carry passengers and goods to different places. (ii) They play an important role in the growth of industries as raw materials are transported by roads to factories. (iii) They play a vital role in times of emergency such as famines and floods as they help in the rescue of people and quick transportation of goods. **4.** India has the largest railway system in Asia and the fourth largest in the world. The first railway in India was started in 1853 between Mumbai and Thane, covering a distance of about 34 kilometres. There are different types of trains like superfast trains, express trains, and passenger trains. The Shatabdi, Rajdhani and Duronto are the superfast trains. **5.** Some rivers like the Brahmaputra, Hoogly and the lagoons of Kerala are suitable for water transport in India. **6.** Airways is the most advanced and developed means of transportation. It is the fastest

means of transport. At the same time, it is also the most expensive mode of transport. It helps us to cover long distances in a short time. It is the only means by which we can get to places which cannot be reached by road or railways. Airways are useful for natural disasters for providing rescue operations. **7. (a)** State highways connect important towns within a state. **(b)** Tanker ships are used to carry oil and other petroleum products from one place to another. **(c)** In this system, trains run within the city on elevated and underground tracks. **(d)** An outline of Mahatma Gandhi's face on every currency note can be seen on the white space. This is called a watermark.

17. Architecture

The Outset

1. Traveller **2.** Carpenter **3.** Electrician **4.** Painter **5.** Welder **6.** Carpenter **7.** Mason **8.** Typist

A. 1. (b) **2.** (c) **3.** (a) **4.** (b)

B. 1. (d) **2.** (c) **3.** (b) **4.** (a)

C. 1. steel **2.** Pontoon **3.** cantilever **4.** arch **5.** Pontoon

D. 1. They used naturally available building materials like stones, mud, straw and wood to make their houses. These materials are still in use in various parts of our country to make houses. **2.** Architect. I make the design for a building. A design is simply a plan showing the layout of the rooms, doors, windows and open spaces. The basic design of a structure is called a blueprint. **3.** An architect, town planner, civil engineer, mason and labour helps to build a house. **4.** Bridges help us to cross rivers, lakes, railway tracks and busy roads. Hence, they act as links between places. **5.** Brick is the most commonly used building material. Process of brick making are following : (i) Clay is removed from the ground by hand or machines. (ii) Clay is mixed with water to form a smooth mixture. (iii) The mixture is put in a moulder to obtain rectangular, wet bricks. These bricks are dried in the sun. (iv) The dried bricks are burnt in a brick kiln. (v) The burnt bricks are then cooled. Bricks become hard and strong. **6.** It is suspended in the air and supported by steel cables hung from high towers on either side of the bridge. **7.** It is a modified beam bridge. It consists of two horizontal beams joined in the centre by a connecting structure. The two horizontal beams called cantilevers.