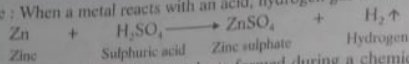


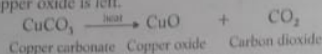
Example : When a metal reacts with an acid, hydrogen gas is evolved.



(b) Change in Colour : One of the products formed during a chemical reaction may have a different colour than the reactants.

In such a case, change in colour accompanies the chemical reaction.

Example : When green coloured copper carbonate is heated strongly, a black residue of copper oxide is left.



3. Differences between physical and Chemical changes.

Parameters	Physical Change	Chemical Change
1. New substance	No new substance is formed.	One or more new substance are formed.
2. Nature of change	It is a temporary change.	It is a permanent change.
3. Reversibility	Easily reversible	Irreversible
4. Physical and chemical properties	Only the physical properties of the substance get changed.	Both the physical & chemical properties of substances are changed.
5. Amount of energy.	Very little energy is absorbed or given out.	Large amount of energy is absorbed or given out.

4. See Activity 5 at P. No. 72

1. Because the moisture content is more in coastal areas in comparison to desert areas.  
2. Sea water is salty because of great capacity of water to dissolve substances, especially the salt in it.

## 7 Chapter Weather, Climate and Adaptation of Animals to Different Climates

- A. 1. The wind, the rain, humidity; 2. Polar bears, penguin  
B. 1. (a) 2. (b); 3. (d); 4. (c)  
C. 1. (v); 2. (i); 3. (ii); 4. (iii); 5. (iv)  
D. 1. cold; 2. climate; 3. Tundra; 4. middle; 5. tropical  
E. 1. True; 2. True; 3. False; 4. False

- F. 1. Camel is an animal able to live in extreme hot desert by following ways :  
(a) Camel can drink 50 litres of water in one gulp whenever water is available.  
(b) The hump stores fat which gets converted into metabolic water when needed.  
(c) It exerts very little urine and dry during when it does not get water to drink.  
2. Macaque, Elephant have adapted to live in tropical rainforest region.

10  
Science-7

CLASS: 7  
SCIENCE

3. Seal have streamlined body. Under the skin, they have a layer of fat called blubber which helps them to keep warm in the cold.  
4. Animals migrate to survive in favourite climate and in favourable surroundings. Animals search those regions which are suitable for them to survive.  
5. The movement of water in the oceans are called ocean currents. Warm ocean currents make the climate warm and wet. Cool ocean make the climate colder and dry.

- G. 1. Climate of a place depends upon a number of factors are :  
(a) Distance from the Sea, (b) Ocean Currents, (c) Mountains, (d) Direction of Prevailing Wind, (e) Distance from the Equator, (f) El Nino Effect.  
(a) Distance from the Sea : Coastal areas are cooler and wetter than inland areas. Clouds are formed when warm air from the inland areas meets cool air from the sea.  
(b) Ocean Currents : Warm ocean currents make the climate warm and wet. Cool ocean currents make the climate colder and dry.  
(c) Direction of prevailing wind : They are from the sea/ocean side bring rain to the coastal areas and dry weather to inland areas. As a result, the climate of the areas near sea is moderate.  
2. Weather changes very frequently as compared to climate. Weather include changes in temperature, rainfall, and sunshine. Even during a single day, the weather may change several times whereas climate is the common average weather condition at a particular place over a long period of time.  
3. The adaptations are as follows :  
(i) Animals which live in cold regions bear a coat of thick fur.  
(ii) Animal have a thick layer of fat under the skin and birds are with more down feathers.  
(iii) Animals in cold climates have small ears and tails and short legs due to this, the heat loss gets reduced.  
4. Tropical rainforests have a large population of animals because this region supports wide variety of plants, therefore a large number of animals are adopted to living on trees. The climatic condition of that is humid climate. The temperature ranging from 15°C to 40°C.

- H. 1. Polar regions : reindeer, penguin, seal, siberian crane, arctic fox.  
Tropical rainforest : lion-tailed macaque, gorilla.  
2. (a) short ears : cold climate (b) sensitive hearing : tropical rainforest  
(c) long leg and tail : hot climate (d) sharp claws : tropical rainforest  
(e) curved claws : tropical rainforest (f) thick layers of fur : polar region  
(g) sharp eyesight : tropical rainforest (h) blubber : polar region

8

Chapter

## Natural Disasters : Winds, Storms and Cyclones

- A. 1. Storms, cyclones, Earthquakes; 2. Japan, Phillippines  
B. 1. (b); 2. (a); 3. (a); 4. (a)

11  
Science-7