

## SOUND AND NOISE

Answer the following questions:

### **1. How is sound created?**

Ans: **Sounds** are made when objects vibrate. The vibration makes the air around the object vibrate and the air vibrations enter your ear. You hear them as **sounds**. You cannot always see the vibrations, but if something is making a **sound**, some part of it is always vibrating.

### **2. Animals create different sounds at different times. Explain**

Ans: Animals use sound to warn others to stay out of its territory and also to attract a mate. ... They make at least twenty five different sounds which include growling, squawking, squealing, cooing, and rattling. They use these different calls to identify themselves and communicate with other birds.

E.g: Animals like bats, dolphins, shrews, some whales and some birds all use sound—echolocation—to see in the dark

E.g: Dolphins make two kinds of sounds, “whistles” and “clicks”. Clicks are used to sense their surroundings through echolocation, while they use whistles to communicate with other members of their species and very likely, with other species too.

### **3. Natural sounds can be pleasant as well as unpleasant. Explain by giving examples.**

Ans: Pleasant sound

Any sound that we enjoy hearing and that makes us relaxed is a pleasant sound.

Example:

- Musical instruments make pleasant sounds when musicians play them.
- Sounds made by the waves on a beach
- Rustling sound made by leaves
- Sound of gently falling rain
- Gentle chirping of bird

Unpleasant sound

Any sound that makes us feel uncomfortable irritated or cause a feeling of being unwell can be called an unpleasant sound.

Example:

- Honking of vehicles on the road
- Loud explosion
- Loud sounds of aircrafts
- Noise from factories and generators
- Loud music and loud speakers
- Firecrackers
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### **4. How can we control noise pollution?**

Ans: To reduce noise pollution:

We should take the following preventive measures to save ourselves from noise pollution

- Avoid using loudspeakers for too long and too loudly
- Avoid unnecessary honking
- Building factories and airports away from cities
- Stop the use of firecrackers on any occasions
- Plant more trees around the house and neighbourhood ( trees help in absorbing noise)

Adopting these measures will help us to live a happy and healthy life.

B. Differentiate between the following:

### **1. Pleasant and unpleasant sound**

Pleasant sound

is the **sound** which do not hurts our ear and make us feel cool and happy. ...

### **Unpleasant sound**

is the **sound** which hurts our ear and makes us angry and disappointed.

### **2. a natural and a man-made sound**

#### **Natural sound**

The Natural sounds contained sounds of living objects.

#### **Man-made sound**

Any sound with a source caused by human activity.

### **3. the sound made by a honey bee and a grasshopper**

#### **Honey bee**

The rapid wing beats of bees create vibrations in the air that the human ear detects as buzzing. The bigger a bee is, the slower its wings beat. The slower its wings beat, the lower the pitch of the buzzing will sound.

#### **Grasshoppers**

make sounds in one of two ways – stridulation or crepitation. Like their cricket cousins, grasshoppers produce sounds to attract mates or protect territory

### **C. Give examples of the following:**

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| 1. a pleasant sound:                         | <b>Sound of gently falling rain</b>                        |
| 2. an unpleasant sound:                      | <b>Honking of vehicles on the road</b>                     |
| 3. a natural sound:                          | <b>Bees busily buzz as they fly from flower to flower.</b> |
| 4. an alarming sound:                        | <b>Sounds made by a fire alarm</b>                         |
| 5. a sound at work place:                    | <b>Ringing of the bell</b>                                 |
| 6. a soft sound:                             | <b>A gentle breeze blowing</b>                             |
| 7. a plant that creates sound while growing: | <b>Bamboo</b>  |
| 8. an animal that makes an alarming sound:   | <b>Monkey</b>  |