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Sensing the World Around



Points to Know :

- ▣ Senses and Sense Organs
- ▣ Sense Organs and Their uses
- ▣ Experiencing the World Without Senses
- ▣ Being Sensitive to Differently Abled People
- ▣ Types of Touch and Appropriate Responses



Getting Started

We experience and sense the world around us through our sense organs. We have five sense organs and they help us to see, hear, smell, taste and feel the things around us.

Some pictures are given below. Name the sense organs which have been used in each of them.



Senses and Sense Organs

Right from our birth, we can feel the presence of people and the world around us. We recognise people and their voices. We can also feel if the weather outside is warm, hot or cold. We can also find out whether the food is tasty or not. Similarly, we can also sense whether our surroundings are stinking or clean. These are stimuli or natural responses which we receive from the external world all the time. Such sensations of the outside world are provided to us by the senses of sight, hearing, smell, taste and touch. Each of these senses has a particular organ associated with it. These five particular organs are **eyes**, **ears**, **nose**, **tongue** and **skin**. These are called **sense organs**. Basically, these organs are information collectors; i.e.–these organs, connected to the senses,



collect information and send it to the brain so that the body may act on it. These organs receive the external stimulus, convert them into signals and pass them onto the brain for interpretation. Each organ converts the stimuli into signals in its own specific manner. Our sense organs help us to learn, protect ourselves and experience the world.

Sense Organs and Their Uses

The five sense organs are crucial in our lives as they help us to behave differently in different situations.



Things to Know

- ◆ The traditional classification for five sense organs are sight, smell, taste, hearing and touch is credited to Aristotle (384 Bc-324).

Eyes : These are the **organs of sight** which help us to see things around us. They inform us about the shape, size, colour, position and distance of things. Our eyes also help us to express our feelings.



Ears : These are the **organs of hearing** which help us to hear sounds like soft, loud, dull, sharp, pleasant and unpleasant. They inform us about the distance between a thing and us. They also help us to recognize dangers like barking of a dog or blowing of a horn. They help us to locate the source of sound.

Nose : It is the **organ of smell**. It can detect a variety of smells. It has two openings called **nostrils** which help us to breathe. It also helps to clean the air we breathe in.



Tongue : It is the **organ of taste**. It has many receptors called **taste buds** on it which detect different tastes like sweet, sour, salty and bitter. It also helps us to speak.

Skin : It is the **organ of touch**. It helps us to feel sensations like hot, cold, smooth, rough, soft and sticky. It has millions of nerve endings which feel these sensations and send signals to the brain. It protects our internal organs and maintains the body temperature by the process of sweating.



Some More Senses

Besides these five sense organs, we also have sense for pain, motion, balance, pressure and temperature. These are called **additional senses**. They all work together and involve the coordinated use of sense organs. The sense of balance is managed by a complex network of different organ systems. Any sudden change in the position or functioning of the body may make us unsteady or feel dizzy. You might have felt so while turning quickly or riding a car.



Activity

Name two things each which taste sweet, salty, bitter and sour.

Experiencing the World Without Senses

Our sense organs help us to enjoy beautiful and colourful world around us. But some unfortunate people cannot do so as one or more of their sense organs have been damaged from birth or through some accident. To compensate for their loss, their remaining sense organs become highly developed. With passage of time, they learn to perform different tasks even without a particular sense organ. For example, **visually impaired people** have highly developed senses, of hearing and touch. **Hearing impaired people** use their eyesight and learn to lip-read.



Tell Us Wh

Think of a situation where we use all five sense organs of ours at the same time?

Many a times, we lose our sensations temporarily as one or more of our sense organs stop getting natural response from the external environment. For example, we cannot see in pitch darkness. We also cannot hear in a soundproof room. We may also not smell anything if we have cold and our nose is blocked. So, considering all such problems, we must take extra care of our sense organs.



Being Sensitive to Differently-abled People

Differently-abled people are the ones who have lost the use of one or more of their sense organs. Though these people have special needs, their sense of smell and touch are so highly developed that they manage to do things on their own. We should not look down upon such people or make fun of them. We must help them whenever needed.

Types of Touch and Appropriate Responses

Touches are of various types. Whenever our parents appreciate us, they might pat us, hug or kiss us which makes us feel good. But when someone pushes, shoves, grabs, hits or slaps us, we don't like it. We also do not like it when someone touches us inappropriately. If someone does so, immediately tell the teachers, elders and parents about it.

Words to know

Stimulus	:	An external action that produces a reaction
Visually impaired	:	Partly or completely blind
Shove	:	Push someone angrily
Inappropriate	:	Not proper



Revision

- ❖ Eyes, ears, nose, tongue and skin are our five sense organs. These help us to see, hear, smell, taste and touch.
- ❖ The brain controls all sense organs. It interprets the signals sent to it and gives appropriate responses.
- ❖ We must take extra care of our sense organs.
- ❖ Differently abled people have lost the use of one or more of their sense organs.
- ❖ We must help differently abled people whenever asked.
- ❖ We should understand the difference between a good touch and a bad touch.

Exercise



A. Tick (✓) the correct answer :

- It is not a sense organ.
(a) Tongue (b) Skin (c) Brain
- It provides responses to external stimuli.
(a) Ear (b) Brain (c) Eye



3. The tongue has receptors called :
 (a) taste buds (b) nerve endings (c) Both of these
4. Our skin has millions of :
 (a) both (b) and (c) (b) hair (c) nerve endings
5. Differently-abled people have lost :
 (a) the use of sense organs
 (b) something
 (c) nothing

B. Fill in the blanks :

1. We _____ the world around us by our sense organs.
2. Right from our _____, we can feel the presence of people.
3. Our sense organs provide the _____ of outside world to us.
4. The five sense organs are _____ in our lives.
5. Besides five sense organs, we also have _____ senses.

C. State whether True or False :

1. Our eyes help us to express feelings. _____
2. The tongue does not helps in speaking. _____
3. A touch can only be good. _____
4. The skin helps to maintain body temperature. _____
5. We must always help differently-abled people. _____

D. Tell us Which :

1. _____ is the main processor of the body.
2. _____ Organ has tasted buds located on _____.
3. _____ Are the five additional senses.
4. _____ Process helps the body to maintain the body temperature.
5. _____ Organ helps to feel _____

E. Answer the following questions :

1. What are sense organs?
2. How do we behave differently in different situations?
3. When does a temporary loss of sense occur? Give examples.
4. How does our skin help us?

F. Describe the uses of any one sense organ and an additional sense organ.





Activities

A. Here is a list of some fruits and vegetables. Some of them are smooth to touch while some are rough. Put the names in the correct column :

spinach, potato, banana, bitter gourd, cauliflower,
pineapple, broccoli, custard apple, grapes, pear

smooth

rough

B. Take four different types of substances having strong smells like soap, orange, garlic and onion. Put these things in four saucers. Blindfold your friend and bring these saucers one by one near your friend's nose. Is he/she able to recognize the things by smelling them?

C. Go to a park and note down everything which you sense. Make a list and draw their pictures in the given space.

