





### Exercise: Think and Tell, Page no: 2

Question: How did the ant know that the other ants were not from its group?

Answer: Ants can tell other ants are not from their group by smelling them. Each group of ants has a different smell that only those ants have.



Question: How did the guard ant recognize this ant?

Answer: The guard ant could recognize this ant because it smelled like it belonged to the same group.



## Exercise: Try this and Write, Page no: 2

Question: Drop some sugar, jaggery or anything sweet on the ground. Wait until the ants come there.

· How long did it take for the ants to come?

Answer: It might take a few minutes for ants to smell the sweet food and come over to it. The time it takes can change depending on how close the ants are.

Did one ant come first or a group of ants came together?

Answer: Usually, one ant finds the food first and then tells the other ants where it is by leaving a trail for them to follow.

• What did the ants do with the food?

Answer: The ants break down the food into smaller pieces and carry it back to their home to share with the other ants.







• Where do they go from there?

Answer: The ants will take the food back to their nest, following the trail the first ant left. It's like following a map to get back home.

• Do they move in a line?

Answer: Yes, ants usually move in a straight line because they are following the trail marked by the ant that found the food. It looks like a little ant road.



#### Page no: 3

Question: Now carefully, without harming the ants, block their path for a while with a pencil.

Answer: When a pencil blocks their way, ants stop and look confused for a little bit. Then they quickly work together to find a new path around the pencil.

Question: Now can you guess why the ants behaved like that when you blocked their path?

Answer: Ants drop a scent for others to follow. If something blocks their way, they search to reconnect with this scent trail.

Question: Have you ever been troubled by mosquitoes? Just think, how do they know where you are?

Answer: Mosquitoes pick up on our body odor and heat to locate us, including the scent from our feet.

Question: Have you seen a dog sniffing here and there? What do you think it is trying to smell?

Answer: Yes, we have seen a sniffing dog here and there. Dogs sniff around to detect if other dogs are around, using their strong sense of smell.











### Exercise: Think and Tell, Page no: 2

Question: In what ways do human beings make use of this special sense of smell of dogs?

Answer: Humans use dogs' keen sense of smell to detect criminals, find explosives, and retrieve stolen goods.

Question: When do you find your sense of smell helpful to you? List some examples.

Answer: My sense of smell is useful for

- enjoying fragrances,
- identifying spoiled food,
- sensing fire, and
- recognizing clean or soapy scents.





Question: Name the animals that you would be able to recognize only by their smell, without seeing them.

Answer: Animals like dogs, cats, cows, goats, and sheep can often be identified solely by their scent.

Question: Write the names of five things whose smell you like and five things whose smell you do not like.

#### Answer:

Likes	Dislikes
1. Flowers	1. Chemicals
2. Perfume	2. Garbage
3. Tasty food	3. Gutter
4. Incense sticks	4. Decaying things







Question: Do you and your friends have similar answers?

**Answer:** Yes, our answers are similar to each other.



## Exercise: Discuss, Page no: 5

Question: Do the clothes of any of your family members smell? Whose?

Answer: Yes, my father's clothes often have a smell due to sweat when he returns from outdoors.

Question: Did you ever come across any smell in a crowded place such as a fair, bus, train, etc.?

Answer: Yes, in crowded places like buses, I've noticed the distinct smell of smoke.



## Exercise: Think and Discuss, Page no: 5

Question: Sushila covered her nose when she cleaned Deepak's nappy, but not when she cleaned her daughter. Why do you think she did this?

Answer: Sushila covered her nose because Deepak's nappy had a strong smell, but her daughter's didn't, so she didn't need to cover her nose then.

Question: How do you feel when you walk near a heap of garbage? Think of the children who spend the whole day picking things from such garbage.

Answer: Walking by garbage makes me want to hold my nose due to the smell. Kids who sort through it daily might not mind the smell because they're used to it.

Question: Is a smell 'good' or 'bad' for everyone in the same way? Or does it depend on how each one feels about it?

Answer: What smells 'good' or 'bad' varies for each person. While most might agree on some bad smells, it really depends on personal feelings.









Exercise: Discuss, Page no: 5

Question: Write the name of a bird which has eyes in front of its head (like in humans).

Answer: Owls are birds that have their eyes in front, similar to humans.

Question: Write the names of some birds which have eyes on either side of the head. What is the size of their eyes as compared to the size of their head?

Answer: Examples of birds with eyes on the sides of their heads include crows, pigeons, and parrots.







Their eyes are relatively small when compared to their heads.



Exercise: Loo<mark>kin</mark>g wit<mark>h one</mark> or both eyes, Page no: 6

Question: Could you see your friend's action, without moving your neck?

Answer: No, I couldn't see what my friend was doing without turning my neck.

Question: Now try to look at your friend's action with both your eyes open but without moving your neck.

Answer: With both eyes open and not moving my neck, I could see my friend's actions.

Question: What was the difference in looking with one or both eyes?

Answer: Using both eyes gives a better view than just one eye.

Question: Now toss a small ball or a coin and try to catch it. Try this with both your eyes open. Then close one eye and try to catch it. When was it easier to catch?

Answer: It was easier to catch the ball or coin with both eyes open.







Question: Imagine how it would be to have your eyes in place of your ears? What would you be able to do then, which you cannot do now?

**Answer:** If our eyes were located where our ears were, we could see sideways without turning our heads.

Question: Now can you guess from what distance can an eagle in the sky see a roti on the ground?

Answer: Eagles can spot a roti from as far away as two kilometers due to their sharp vision.





Exercise: Write, Page no: 8

Question: The names of ten animals whose ears can be seen.

Answer: Visible-eared animals include dogs, cats, rabbits, horses, cows, elephants, giraffes, lions, tigers, and bears.

Question: The names of some animals whose ears are bigger than our ears.

Answer: Animals with larger ears than humans include elephants, rabbits, bats, and donkeys.









Question: Is there some link between the size of animals' ears and their hearing?

Answer: Yes, animals with larger ears often have enhanced hearing capabilities compared to those with smaller ears.









Exercise: Write, Page no: 8

Question: For this activity find a quiet place in your school. Tell one of your friends to stand at a short distance and ask him to say something softly. The rest of you should listen carefully. Then all of you put your hands behind your ears, as shown in the below picture. Let the same child say something again as softly as before. In which case was the sound sharper? Ask your friends too.



Answer: With hands behind our ears, the sound was clearer.

Question: Put your hands over your ears and say something. Can you hear your own voice?

Answer: Yes, hearing my own voice is possible.

Question: Sit near a desk. Tap the desk once with your hand. Listen carefully. Now put your ear on the desk as shown in the picture. Tap on the desk once again with your hand. Listen again. Was there any difference in the sound of the tap?



Answer: Placing my ear on the desk made the tapping sound clearer.



Exercise: Write, Page no: 10

Question: Can you understand the sounds of some animals? Which animals?

**Answer:** I can recognize sounds from animals such as dogs barking or cats meowing.





Question: Do some animals understand your language? Which ones?

Answer: Animals like dogs and cats can pick up on what we're saying to some extent.



## Exercise: Say it With Sounds, Page no: 10

Question: Just like birds and dolphins, you can also make your own language of sounds for giving messages. Remember you have to talk to your friends with only sounds and no words. How and when will you need to give an alarm call? For example, when the teacher is coming to the classroom!

Answer: We'd use quick, distinct sounds like "ping-ping" or "tik-tik" as a signal, especially when the teacher approaches the classroom.



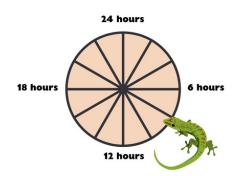
## Exercise: Say it With Sounds, Page no: 10

Question: Have you noticed that during the cold season you cannot see any lizard in the house? Where do you think they have gone?

**Answer:** In cold seasons, lizards find warmer spots, maybe outside or in hidden places, to stay warm.

Question: How will you show the clock for a house-lizard in winter?

Answer: For a house lizard in winter, most of the clock would be shaded, indicating their long rest period during the colder months.









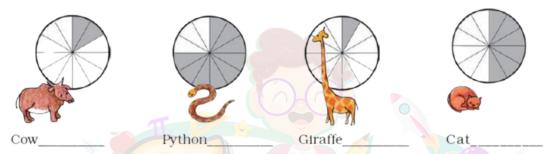


## Exercise: Page no: 11

Question: Given here is the sleeping time of some animals. Write below each picture for how many hours a day that animal sleeps.

Answer: Cows rest for about 4 hours daily.

- Pythons have a long sleep of 18 hours each day.
- Giraffes take short naps, totaling 2 hours of sleep daily.
- Cats enjoy half the day sleeping, with 12 hours of sleep.





## Exercise: Say it With Sounds, Page no: 10

Question: When you see different animals, do you have any questions about them? Make a list of ten such questions.

#### Answer:

- 1. How do they change color or blend into their surroundings?
- 2. What is their favorite food?
- 3. How much sleep do they need?
- 4. Are they meat-eaters, plant-eaters, or both?
- 5. Do they give birth or lay eggs?
- 6. Can they understand any human words or sounds?
- 7. What ways do they use to talk to each other?
- 8. Why do they live in the wild instead of with people?
- 9. What's the longest they can live?
- 10. How do they stay safe during extreme weather?



## Exercise: Page no: 13

Question: The tiger is one of the most alert animals. And yet, today tigers are in danger. What do you think are some of the dangers to tigers in the jungle?

Answer: Tigers face several threats including poaching for their fur, competition with lions for territory, habitat destruction from deforestation, and dangers from humans and natural disasters like forest fires.







Question: Can human beings also be a threat to animals? How?

Answer: Yes, humans pose a significant threat to animals by destroying their habitats, hunting them for their body parts like skin, tusks, and horns, and causing pollution.



### Exercise: Find Out, Page no: 13

Question: Where are other such National Parks in India?

Answer:

National Park	State
Nagarahole National Park	Karnataka
Ranthambhore National Park	Rajasthan
Palamu National Park	Jharkhand
Gir National Park	<i>G</i> ujarat
Kaziranga National Park	Assam
Kanha National Park	Madhya Pradesh

Question: Collect information on these and write a report.

Answer: India's rich biodiversity is showcased in over 200 National Parks and 540 wildlife sanctuaries. These parks are home to unique animals like the Bengal tiger, Asiatic lion, Indian rhino, and more, offering a vital refuge in a rapidly changing world.



## Exercise: What we have learnt, Page no: 13

Question: Have you noticed that sometimes singers put their hand on their ear when they sing? Why do you think they may be doing this?

Answer: Singers often cover one ear to better hear their voice over the surrounding noise, helping them stay on pitch.





Question: Give examples of animals that may have a very strong sense of sight, hearing or smell.

#### Answer:

- Dogs have an acute sense of hearing.
- Eagles have incredible sight, spotting prey from great distances.
- Mosquitoes are drawn to humans by detecting body heat and scent.
- Certain animals can sense impending natural disasters, showcasing a unique sensitivity to environmental changes.

## To Know More:



