

Environmental Studies

(Chapter – 1) (Super Senses) (Class – 5)

Think and Tell:

Question 1:

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

Answer 1:

Just like us, animals also have different senses. They can see, their smell and feel. Due to these abilities, the ant came to know that the other ants were not from its group.

Question 2:

How did the guard ant recognise this ant?

Answer 2:

Some animals can find their friends by their smell. The guard ant recognised this ant by its smell.

Try this and write:

Question 3:

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

- (a) How long did it take for the ants to come?
- (b) Did one ant come first or a group of ants came together?
- (c) What did the ants do with the food?
- (d) Where do they go from there?
- (e) Do they move in a line?

Answer 3:

- (a) It took 15-20 minutes for ants to come.
- (b) one ant came first.
- (c) Ants carried the food of their hole.
- (d) They go to their hole from there.
- (e) Yes, they move in a line.

Question 4:

Now carefully, without harming the ants, block their path for a while with a pencil. Now observe, how do the ants move?

Answer 4:

Ants climb up on the pencil but move in a line only.

Question 5:

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

Answer 5:

As the ants move, they leave a smell on the ground. The other ants follow the smell to find the way. So when their path was blocked, ants tried to maintain their original path by following the scent.

Question 6:

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

Answer 6:

Mosquitoes find us by the smell of our body, soles of feet and also by the heat of our body.

Question 7:

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

Answer 7:

Yes, I have seen dog sniffing around. A dog can sense if the other dog comes in his area by its smell from body, urine, and poop. dog tries to recognise the smell for unknown odour to check if someone is new.

Write:

Question 8:

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

Answer 8:

We can use dog's special sense of smell.....

Question 9:

When do you find your sense of smell helpful to you? List some examples. Like – to know by its smell that food has gone bad or that something is burning.

Answer 9:

Besides smelling the bad food and the smell of burning our sense of smell helps us to choose good food, perfume, soap, incense stick, etc. and also to find out that if any cloth is stinking due to sweat.

Question 10:

Name the animals that you would be able to recognise only by their smell, without seeing them?

Answer 10:

We can recognise pet animals like dog cat, cow, buffalo, goat, etc. by their smell.

Question 11:

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

I like the smell of	I do not like the smell of

Answer 11:

I like the smell of	I do not like the smell of
(1) Food (2) Perfume (3) Flower (4) Cosmetic items (5) Incense stick	(1) Filth (2) Dead and decaying things (3) Drains (4) Gutter (5) Bad smelling chemicals

Question 12:

Do you and your friends have similar answers?

Answer 12:

Yes, our answers are more or less the same.

Discuss:**Question 13:**

Do the clothes of any of your family members smell? whose?

Answer 13:

Yes, My big brother's clothes smell of perspiration after workout. My clothes smell after playing in field, my father's clothes smells after office.

Question 14:

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

Answer 14:

During the fair, I smell of sweets from shop, during bus ride I smell burning diesel.

Why so?

Question 15:

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 15:

We often find a smell "bad" when we think it is from something dirty. If we make up our mind, we may not be so offended by certain smells. So Sushila covered her nose when she cleaned Deepak's nappy, but not when she cleaned her daughter.

Question 16:

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 16:

The children who are working on the heap of garbage don't find it smelling, because they are habitual to smell.

Question 17:

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

Answer 17:

A smell is good or bad depends on how each one thinks about it.

Let's see:

Question 18:

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

Answer 18:

Owl.

Question 19:

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 19:

Birds like crow, pigeon, parrot, sparrow, eagle, etc, have eyes on either side of the head. The size of their eyes is very small as compared to the size of their head.

Looking with one or both eyes:**Question 20:**

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

Answer 20:

No.

Question 21:

Now try to look at your friend's action with both your eyes open but without moving your neck. What was the difference on looking with one or both eyes?

Answer 21:

The viewing area increases when we see with both eyes. I can see things better with both my eyes.

Question 22:

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 22:

When both eyes were open, it was easier to catch the coin.

Question 23:

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 23:

If my eyes were in place of my ears, I would have been able to see all the things to my right and left clearly.

Question 24:

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

Answer 24:

The vision of an eagle is much powerful than that of ours. An eagle can see a roti on the ground from a distance of about one and a half to two kilometers.

Write:**Question 25:**

The names of ten animals whose ears can be seen.

Answer 25:

- | | |
|------------|-------------|
| 1. Cow | 6. Dog |
| 2. Buffalo | 7. Deer |
| 3. Ox | 8. Elephant |
| 4. Horse | 9. Rabbit |
| 5. Donkey | 10. Monkey |

Question 26:

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

Answer 26:

The ears of elephant, rabbit, cow buffalo, ox, dog, etc. are bigger than that of ours.

Think:

Question 27:

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

Answer 27:

I think there may be some link between the size of animal's ears and their hearing. The animals with larger ears can hear better because their ears can collect more sound waves.

Try this:

Question 28:

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 picture. Let the same child say something again as softly as before. In which case was the sound sharper? Ask your friends too.

Answer 28:

When I put my hands behind my ears, the sound was sharper.

Question 29:

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

Answer 29:

Yes, I can hear my own voice.

Question 30:

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 30:

Yes, when I put my ear on the desk, the sound was sharper.

Write:

Question 31:

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

Answer 31:

Yes, I can recognise the sound of a few animals like dog, cat, cow, horse, etc,

Question 32:

Do some animals understand your language? Which ones?

Answer 32:

Yes, Some pet animals like dog, cow, ox, horse, parrot etc. can understand our languages and gestures.

Say it with sounds:

Question 33:

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 33:

Me and my friend whistle at each and other to call each other. We also make Pssst sound to call each other during the classroom session.

Sleeping-waking:

Question 34:

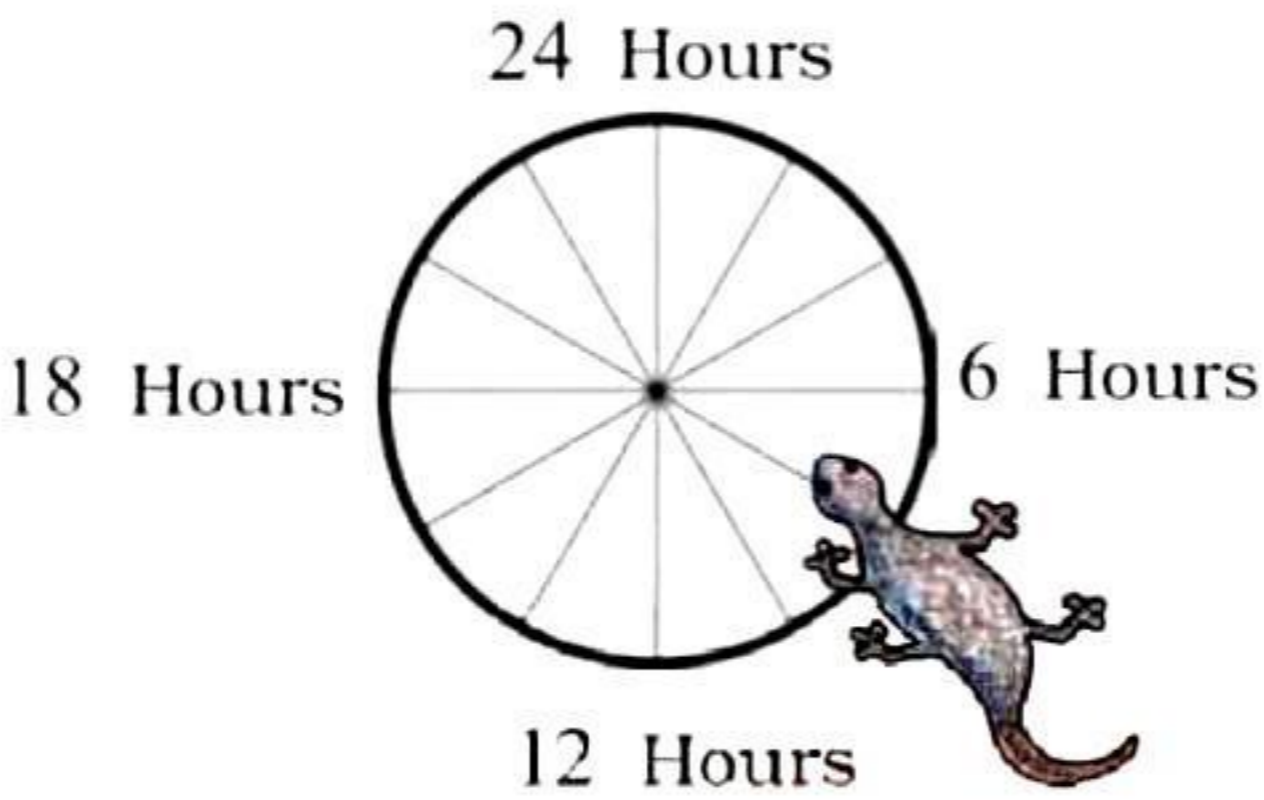
Have you noticed that during the cold season you cannot see any lizard in the house? Where do you think they have gone?

Answer 34:

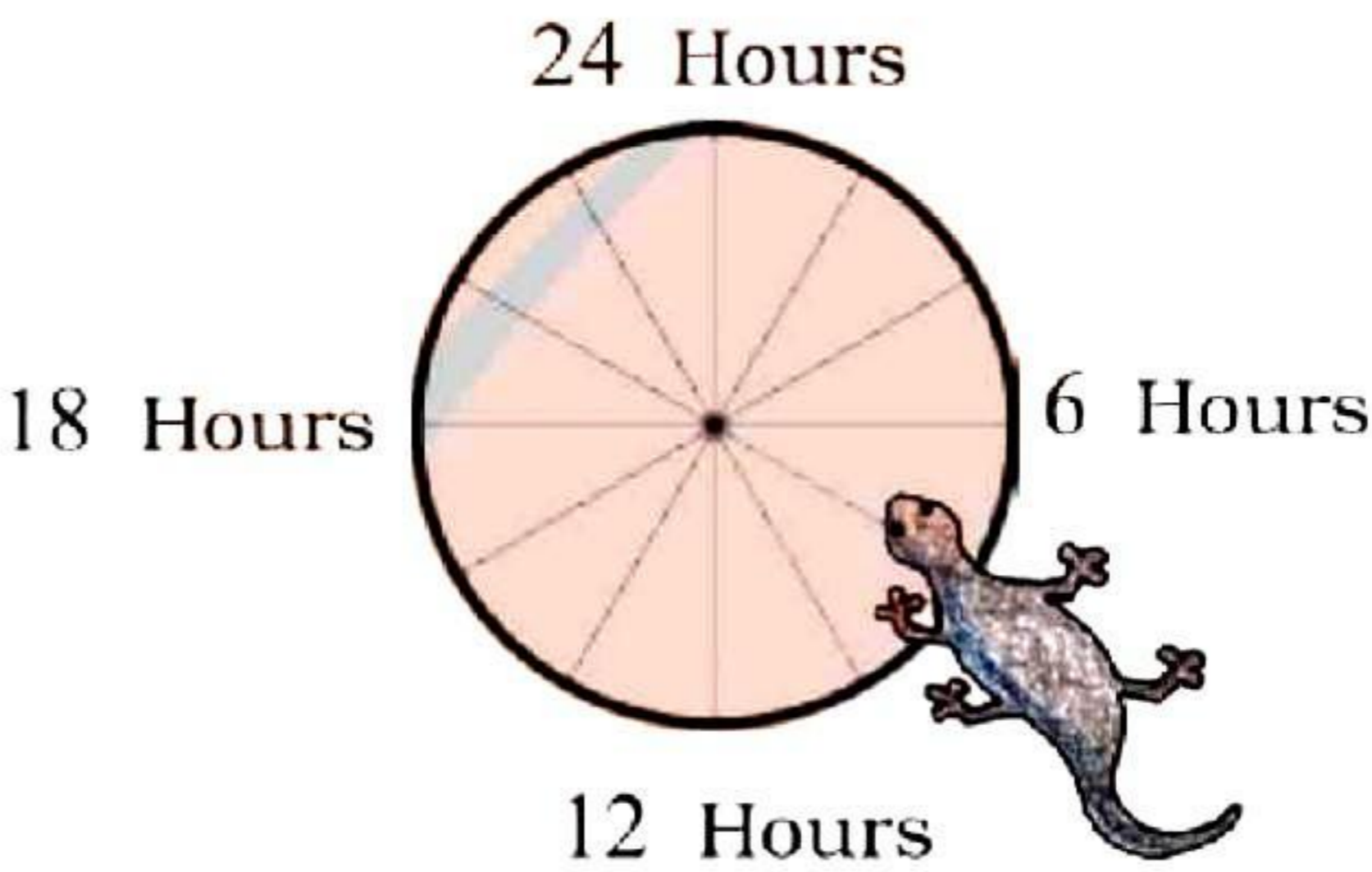
Yes, I have noticed it. I think to protect themselves from cold, they shift to some safe and conducive place.

Question 35:

How will you show the clock for a house-lizard in winters?

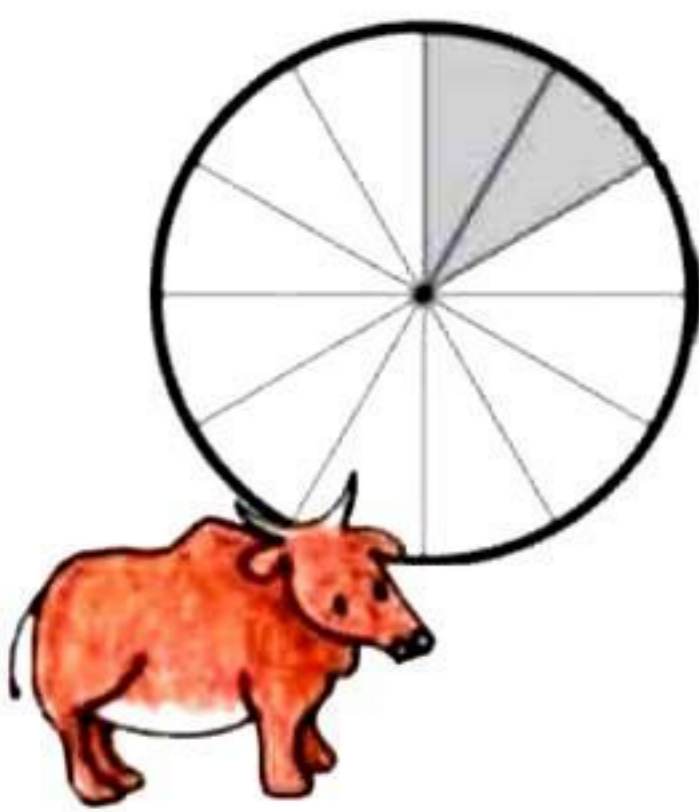


Answer 35:

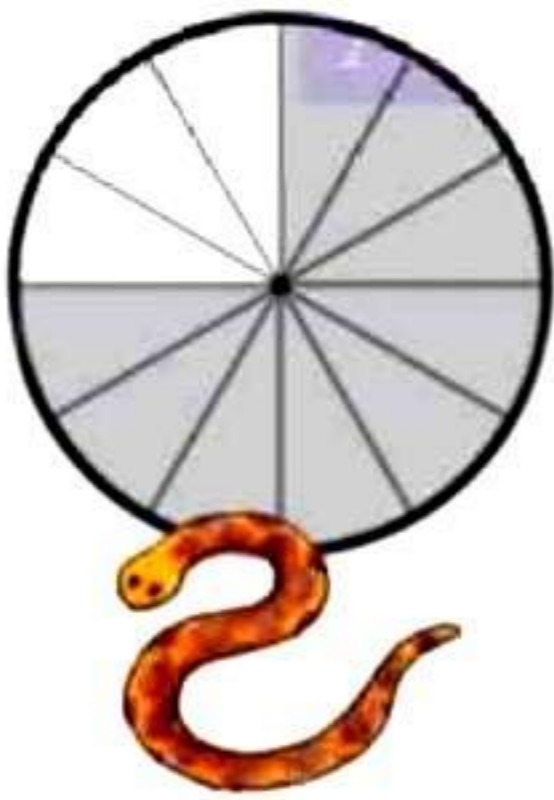


Question 36:

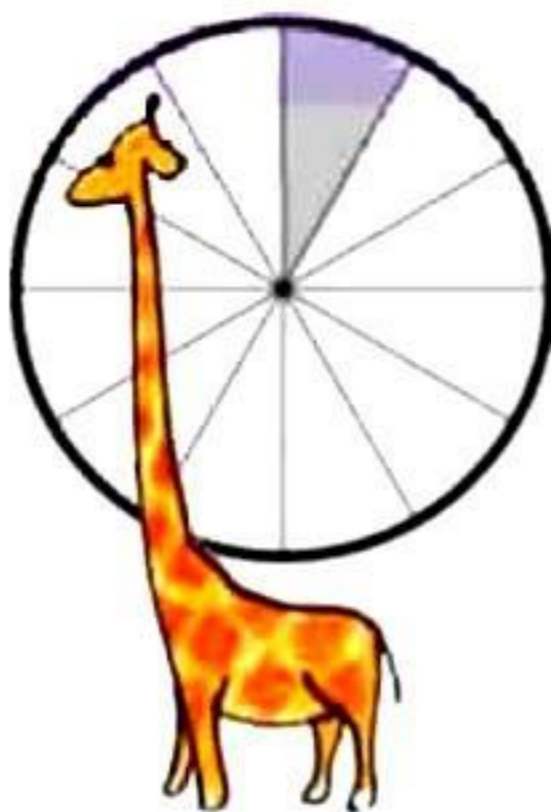
Given here is the sleeping time of some animals. Write below each picture for how many hours a day that animal sleeps.



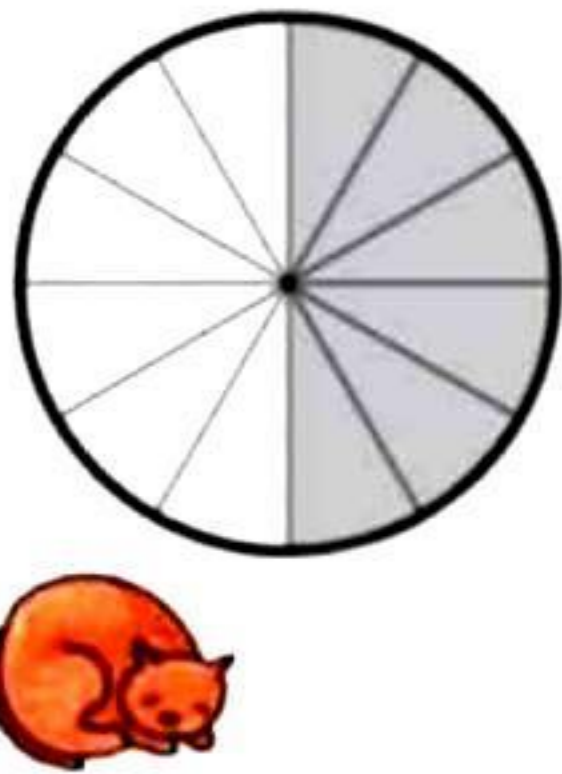
Cow_____



Python_____

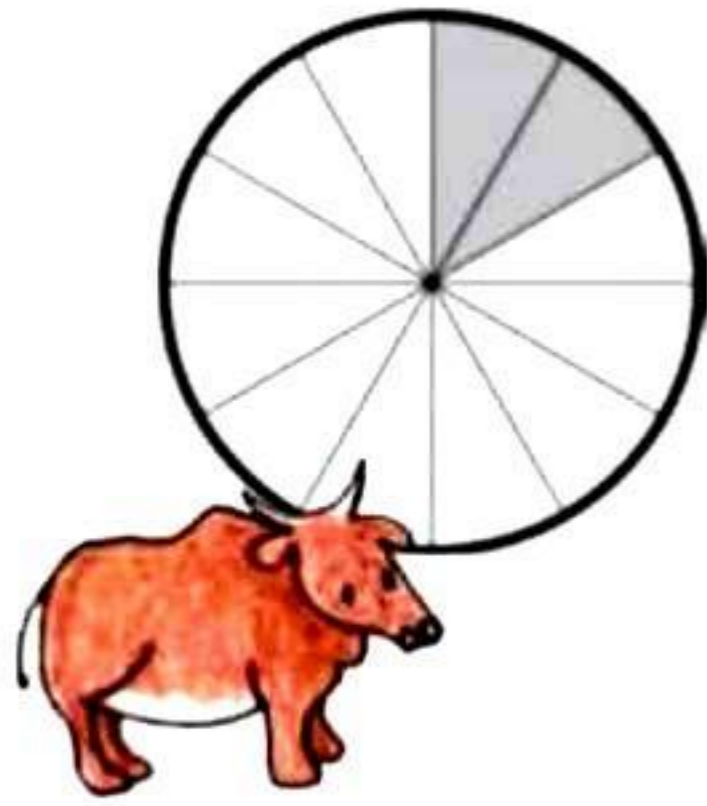


Giraffe_____

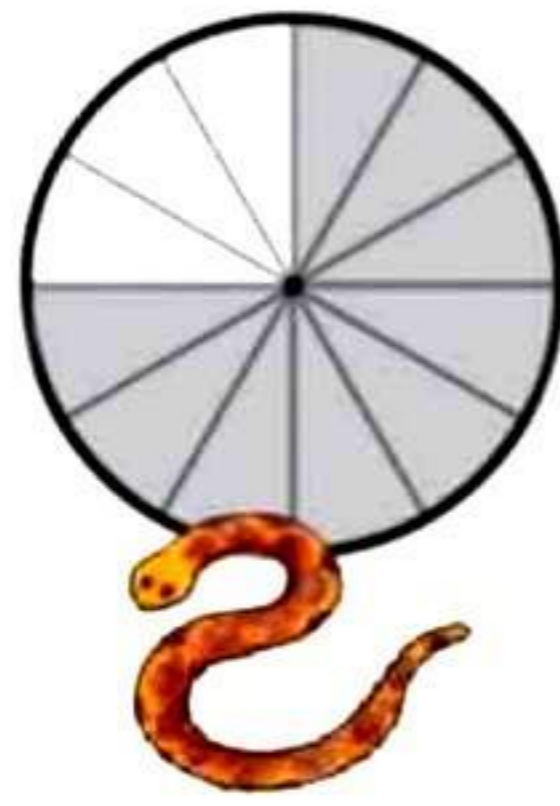


Cat_____

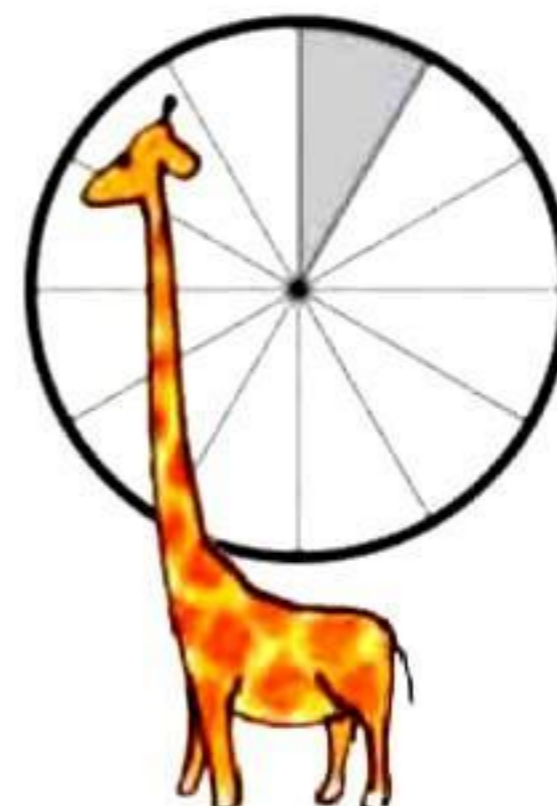
Answer 36:



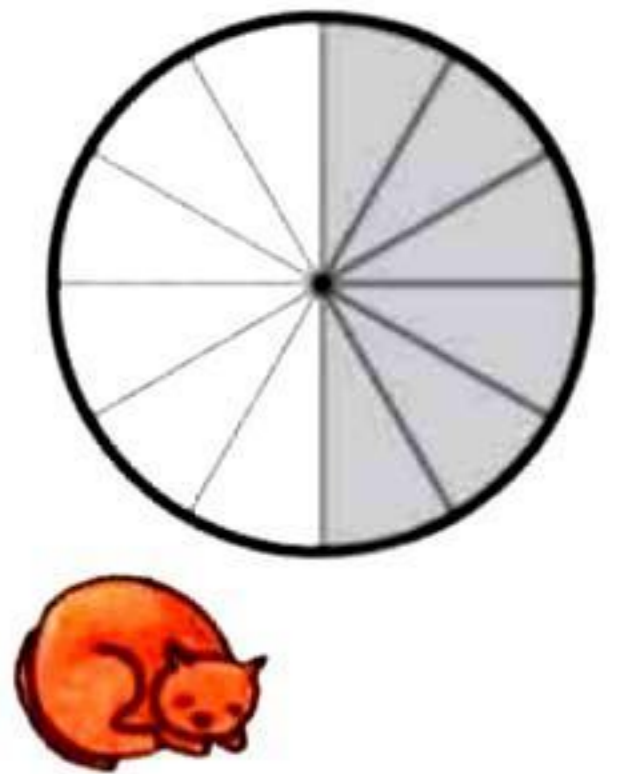
Cow 4 hours



Python 18 hours



Giraffe 2 hours



Cat 12 hours

Question 37:

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

Answer 37:

Yes, when I see different animals, many questions arise in my mind like:

1. Can these animals talk with each other?
2. Can these animals understand our language?
3. Can these animals understand one another's language?
4. Can these animals understand one another's feelings?
5. How can these animals guess the imminent natural calamity much before it happens?
6. How much useful are these animals?
7. If there were no animals on the earth, what would have happened?
8. What will happen if all animals are killed?
9. Why some animals are pet and some are wild?
10. Why different animals have different food habits?

Question 38:

What do you think are some of the dangers to tigers in the jungle?

Answer 38:

The biggest threat to tigers is from hunters and poachers who kill them for their skins. Besides, they are threatened by others powerful animals like lion. Dangers are also from the destruction of forests, forest fires and the growing imbalance in nature.

Question 39:

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

Answer 39:

Yes, human beings are also a threat to animals. Due to continuous poaching, many animals have either got extinct or have come to the stage of extinction. Elephants are killed for their tusks; rhinoceroses for their horns; tigers, crocodiles and snakes for their skins and so on. Musk deer are killed to prepare scent from their musk. Further, growing human interference and destruction of forests have only aggravated dangers to these animals.

Find out:**Question 40:**

Where are other such National Parks in India?

Answer 40:

There are many National Parks in India. Some of these are:

1. Kanha National Park (Madhya Pradesh)
2. Kaziranga National Park (Assam)
3. Gir National Park (Gujarat)
4. Ranthambhore National Park (Rajasthan)
5. Nagarhole National Park (Mysore)
6. Palamau National Park (Jharkhand)

Question 41:

Collect information on animal habitates and write a report.

Answer 41:

There are many species of birds and animals found in India. To protect them, our government has made more than 75 National Park and more than 425 Sanctuaries. These cover about 4.5% of the total land area of the country and are spread from Jammu & Kashmir to Tamil Nadu and from Gujarat to Assam.

What we have learnt:**Question 42:**

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 42:

Yes, I have noticed the same. I think they do so because after putting their hand on their ear, they not only protect themselves from the noises but also hear their own voice more clearly. This helps them to sing better.

Question 43:

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

Answer 43:

It can be understood by the following examples.

- (1) Dog barks if it smells other animal odour in its area.
- (2) A kite can see a piece of bread from a height of about two kilometres.
- (3) Some animals begin to behave in a different manner guessing any natural calamity.
- (4) Mosquitoes find a human being by the smell of its body or feet or by the heat of the body.
- (5) A silkworm can find his female moth from many kilometres away by her smell.