



#### Examining movement of animals and plants

#### Lesson concepts

- Y The way objects move depends on a variety of factors, including their size and shape
- Science involves exploring and observing the world
- 🔏 Questions can obtain responses
- Observations can be discussed and ideas can be represented
  - Observations and ideas can be shared

#### Learning alerts

#### Be aware of:

• students finding it difficult to use scientific language to describe their observations.

#### Suggested next steps for learning:

Model the use of scientific words during movement activities.

#### Today students will:

recognise that animals and plants move in a variety of ways that are partly influenced by their size and shape.

#### Resources

#### Digital

Video — Music to move to! Audio track 4 (1:54)

Slideshow — Move it, move it: Living things

#### Find and prepare

Sheet — How animals move

Music player

Exercise book

# Key terms

oberve, senses For definitions and explanations of terms, please see the <u>Glossary</u>.

Lesson 9



#### Lesson

#### Say to students

In this science lesson, we are going to look at how living things move, including animals and plants. We will be finding out how their properties influence their movements.

#### **Explore different animal movements**

#### Say to students

- To begin with, I will play some music for you to move to. Instead of moving an object, you will need to move like an animal that you know and try to carefully make the movements so I can easily guess your animal. Remember to just show the animal through your movements, not make the animal noises.
- 1. Play Video Music to move to! Audio track 4.
  - a. Observe student as they move like their chosen animal.
  - b. Discuss what their animal was and write the relevant movement words on blank cards.



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## Say to students

You have identified how a particular animal moves. We are now going to think about the movement of all animals.

#### Focus questions

- Q: Do all animals move in the same way?
- A: No.
- Q: Why do you think some animals can fly and others can't?
- A: For example: Flying animals usually have wings.
- Q: What is a property or feature of animals that can walk and run?
- A: They have legs.



### Focus questions

- Q: What is a property of animals that slither and slide?
- A: For example: They often have no legs and a smooth slippery body.
- Q: Why do you think animals need to move?
- A: For example: To get food; to escape other animals that are chasing them; to get to their homes; to find each other.

## Say to students

- We are now going to look at some pictures of different animals and think about what affects how they move.
- Display, read and discuss slides 1 to 14 in the Slideshow — Move it, move it: Living things making clear links between the shape and size of an animal and the types of movements it can make.



### Say to students

To think about the ways animals can move and how size and shape affects them, we are going to do a sorting activity.

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# 3. Locate the **Sheet** — <u>How animals move</u>.

- a. Read aloud the activity instructions.
- b. Assist student to cut up the labels and glue in columns.
- c. Assist student to cut up animal picture cards, keeping same animals together.

### Say to students

▲ I am going to show you how to do one animal to start with. Choose one animal and give me all the pictures for that animal.

Now we will read across the columns and place a picture of the animal in the columns that best match the way it moves. This is why there are some animals with four pictures because they move in lots of ways. The beginning sounds of the words will help you remember the movement word.



- d. Read the column headings aloud, pointing to the beginning sounds to help student work out what each word says.
- e. Place an animal picture in the columns that best match the way the animal usually moves.

### Say to students

Now, it is your turn to sort some other animal pictures. Then we will discuss what we can learn from the table.

Walk or run	Fly	Swim (underwater)	Jump	Climb	Slide or slither
				At CO)	
ARC)					

f. Ask questions to promote analysis.

#### Focus questions

- Q: What is one type of movement that only some animals can do?
- A: For example: Climb.
- Q: What is it that helps them do this?
- A: For example: They usually have legs and arms that are shaped to hang on to what they are climbing.
- Q: What is a feature of animals that can walk, run and jump?
- A: They have legs.
- Q: What movement type or types are made by the most animals?
- A: Walk or run.
- Q: What movement type is made by only a few animals?
- A: Slide or slither.



### Say to students

We can see that the properties of an animal, such as its shape, often influence the way they can move. Next, we will learn about the movement of plants.

#### Explore the movements of plants

### Focus questions

- Q: Do you think plants move from place to place like animals?
- A: Personal response required.
- Q: What do you think prevents plants from running, jumping and flying?
- A: For example: They don't have legs or wings; they aren't shaped to do these things.
- Q: How do most plants take in food and water?
- A: Through their roots.
- Q: Where do the plant's roots get the food and water from?
- A: For example: Usually the ground and sometimes in the water like a pond.

#### Say to students

- Most plants have roots that stay in one place and give them food and water. That is how they are shaped. But even if you take a plant's roots out of the ground, it still cannot run or fly. It is not shaped to do so. But this does not mean that plants cannot move. We are going to look at some more pictures to see ways plants can move.
- 4. Recommence viewing and discussing the **Slideshow Move it, move it: Living things** from slide 15 until the end.

#### Observe the connections of shape, size and movement

#### Say to students

6 By observing the world around us closely, we have some general understandings about how plants and animals move.



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#### Focus questions

- Q: What movement word do you associate with most snakes?
- A: Slithering.
- Q: What about most fish?
- A: Swimming.

## Say to students

Observation tells us that animals of the same type often move in similar ways.

### Focus questions

- Q: Do you get a picture in your mind when I say 'dog'?
- A: Yes.
- Q: If I ask you to picture lots of different dogs, what is the same about them?
- A: They all have a head, ears, a body, four legs, a snout with teeth and a tongue and a tail.

## Say to students

Observation tells us that animals of the same type often have a similar shape.

### Focus questions

- Q: Why do you think animals of the same type often move in the same way?
- A: Because they have the same shape and body parts.
- Q: And how would most dogs move if they were healthy?
- A: They would walk, run, bark, jump and wag their tails.
- Q: What about lots of different elephants, how do you picture them moving?
- A: Mostly walking along slowly or standing in water.
- Q: Why do you think the elephants you imagine move more slowly than the dogs?
- A: The elephants are a lot bigger and heavier.



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## Say to students

Observation tells us that animals of the same type often have a similar shape and body parts and tend to move in a similar way because of that shape and body parts. The size of an animal or plant can also affect how it moves. We know these things by making accurate and detailed observations and these are an important part of science.

Another important part of science is asking questions about the world.

#### Focus question

- Q: What is a science question or questions that might be interesting to ask about animal or plant movement?
- A: Student poses a scientific question.

## Say to students

- To finish this science lesson, I want you to imagine you are a little mouse. Show me how you might pretend to be a mouse moving about.
- 5. Prompt student to explain the link between the mouse's shape, size and movements.

#### Focus question

- Q: Tell me how your shape and size affects your movements.
- A: For example: I have four legs so I can run really fast and I can also sit on my back legs and hold onto things I eat because I have front paws. I am little, so I can squeeze in tiny spaces and can climb on top of many things because I am very small and light.



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