

SCIENCE

Lesson 1

Prep

Topic: Discovering movement and me

Exploring my senses

Lesson concepts

- Science involves exploring and observing the world using the senses
- Questions can obtain responses
- Observations can be made using the senses
- Observations can be discussed and ideas can be represented
- Observations and ideas can be shared

Learning alerts

Be aware of:

- students thinking movement can only be seen.

Suggested next steps for learning

- Explain and demonstrate that some movements may be sensed in other ways, giving practical examples, for example: hearing a clock tick, feeling a triangle or drum vibrate.

Today students will:

- ▶ understand that movement can be observed and described.

Resources

Find and prepare

Sheet — Movement word cards (cut up cards and place in envelope for use throughout lessons)

Scrapbook/exercise book

Music player

(Optional) camera

Box or tin with rubber bands around it

Ball

Key terms

observe, senses, vibration

For definitions and explanations of terms, please see the [Glossary](#).

Lesson

Note

Music is required for this lesson — choose a student favourite.

In this lesson, students are required to observe movement in an outside location. If weather prevents this activity, observations can be made through a window.

Explore the term 'movement'

Say to students

“ I am going to play some music for a minute or two. While the music is playing, I want you to move your body to the music and think about your movements. ”

1. Stop the music and ask:

Focus questions

Q: *What movements did the music make you do or feel like doing?*

A: For example: move, dance, jiggle, clap hands.

Q: *How would you describe 'moving' to someone? What is 'moving'?*

A: Young children will find it difficult to describe the concept of moving without using the word 'move'. They may give examples or you may be able to guide them to an answer such as 'making your body do different things and make different actions'.

Say to students

“ We are going to learn about movement. Not just our movement, but the movement of all the things we can see and touch around us and that we use in our lives. Movement is when something changes location or shape or both. There are lots of different types of movement and also things that affect how and where things can move. ”

Observe movement in familiar outdoor settings

Say to students

“ We are now going to observe movement of things that are outdoors. Collect your hat, camera (optional) and exercise book and we will spend some time observing and describing movements we see. ”

2. Move to a suitable nearby location.

Say to students

“ We are going to sit quietly for a few minutes observing all the movement we can. You can take photos of moving things too. You may also like to take photos of things that aren't moving now, but you know they can move.

Now close your eyes and see if you can observe movement by listening. Tell me about your observations.

Now open your eyes again.

We are going to try and draw some lines that represent the movements we are observing. They might be back and forward movements like a tree bending forwards and backwards as the wind blows, or a round and round as a windmill turns. If you can't draw it, you can show me the type of movement with your body. ”

a. Examples of movements include:



a tree's movement



a wheel or windmill



garage door



bird

b. Return inside.

Explore the senses used for observing movement

Say to students

“ When we were outside, we made detailed observations about movement. You already know a lot about movement, but accurate observations are the way scientists understand and explain the world. To make observations, they use their senses. ”

Focus questions

Q: *What are our 5 senses?*

A: Seeing, hearing, touching, tasting and smelling.

Q: *What senses did you use to observe if something was moving?*

A: For example: I could see it move and sometimes I could hear it.

Q: *What is something you heard moving?*

A: For example: The leaves being blown by the wind.

Q: *Are there any other senses we could use for observing movement?*

A: Personal response required.

Q: *Imagine you are sitting on a swing and you close your eyes. Someone gives you a push while your eyes are closed. Would you still be able to sense it was moving? How?*

A: You can feel it in your tummy, feel the air move around you and maybe hear the swing squeak.

Say to students

‘ To make observations of movement, we mainly use our senses of sight, touching and hearing. Our sense of smell can help us sometimes. For example, we might work out that a dog is carrying a rotting bone beside us by the smell first or we might smell the perfume of someone sneaking up on us as a surprise before we see or hear them. People don't use taste to sense movement. We mainly use sight, touching and hearing. Let's look at a couple more examples. ’

3. Bounce a ball several times so the students can see.

Focus questions

Q: *What movement did you observe?*

A: Bouncing.

Q: *What senses did you use to make your observations?*

A: Seeing and hearing.

Q: *Could you feel it?*

A: Personal response required.

Say to students

‘ Close your eyes while I bounce the ball again. ’

- a. Bounce the ball slowly then do a few quick pat bounces.

Focus questions

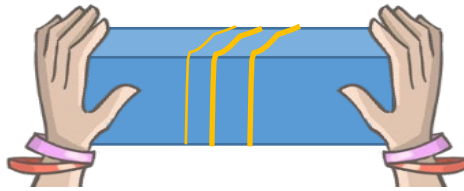
Q: *Now open your eyes. What did your sense of hearing tell you about the movement of the ball?*

A: It bounced slowly and then quickly.

Q: *Could you taste or smell the movement of the ball?*

A: No.

4. Display the box/tin with rubber bands prepared before the lesson.



Say to students

‘ This is a homemade musical instrument. By holding it at the ends and strumming the rubber bands, we can make observations about movement. We will take turns holding and strumming while we make observations. ’

Focus questions

Q: *What did you observe?*

A: I heard the sound of the rubber bands moving and I could see them going backwards and forwards.

Q: *Could you feel anything?*

A: For example: Yes, I could feel the movement through the box.

Q: *Could you taste or smell this movement?*

Say to students

‘ The movement you have just observed is called vibration. Vibration means something is moving backwards and forwards very quickly, often too fast for us to even see. This is the way we write the word ‘vibration’. ’



- a. Display the word card ‘vibration’ from **Sheet** — [Movement word cards](#).
- b. Display word cards on a word wall or in an exercise book for students to refer to in future lessons.

Say to students

Now take a couple of minutes to sit very still and observe movement that is happening in this room. Use your senses to see what you can detect.

- c. Give student word cards 'move', 'movement' and 'vibration' from **Sheet — Movement word cards**.
- d. Discuss observations, for example: clock hands, fan, computer screensaver, motor, wind blowing things.
- e. Add words cards back to word wall or exercise book.