

SCIENCE







Lesson 9

Prep

Topic: Applying knowledge of properties of materials

Investigating texture

Lesson concepts

-  Objects are made of materials that have observable properties
-  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

Suggested next steps for learning

- Explain that students only use their sense of touch to observe texture.

Today students will:

- ▶ understand that the properties of materials include their texture.

Resources

Digital

Slideshow — How do we use textured materials?

Find and prepare

Sheet — Texture word cards (cut out; save for future lessons)

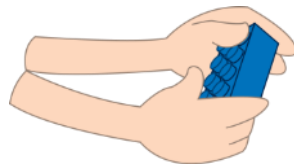
Variety of objects with different textures (for example, sandpaper, fluffy toy, marble, golf ball, tennis ball, scrubbing brush, scourer, rubber glove, wool, velvet material)

Lesson

Explain texture as a property

Say to students

‘ This science lesson is about the property of materials that we can observe using our sense of touch. When we touch or feel a material we are observing its **texture**. We can close our eyes and run our hand over a material and still be able to describe the textural properties of a material. ’



1. Display the word card ‘texture’ cut from the **Sheet** — [Texture word cards](#).

Say to students

‘ This is the word card for **texture**. Texture is the general word for how things feel but there are also many other words that describe different textures. Words like smooth, fluffy, hairy, bumpy, rough, sticky and spiky are just some of these describing words. ’

Observe texture

Say to students

‘ In this lesson, we are going to observe some everyday objects to explore their textures. As you identify a texture, I will find the word card for this and we will put the object and the word card together. If you feel a texture that you don’t know the name of, we will use some word cards to help us. ’

- a. Display objects made from different textures.
- b. Display the texture word cards.

Say to students

Choose an object and feel it. Close your eyes if you wish.

Focus questions

Q: What word describes how this object (e.g. gumboot) feels to you?

A: For example: smooth (depends on object)

Q: Which word card says 'smooth'?

A: Locate word card.

Q: Do you know the name of the material that this object (e.g. gumboot) is made from?

A: For example: rubber

Q: How do you think the texture suits this object?

A: For example: The mud and water run off the boot easily on the outside. On the inside it is easy to slide my foot in because it is smooth.

- c. Place the object and the matching word card nearby.
- d. Repeat with some other objects.

Say to students

Now that we have felt some objects, we can put them in an order. I am going to put a piece of wool in a line along the floor.

2. Choose the smoothest object and put it at the left-hand end of the wool.
 - a. Place the word card with the object.



smooth

Say to students

Now let's look for the spikiest or roughest object we have.

- b. Place the spikiest or roughest object at the other end of the line with its matching word card.

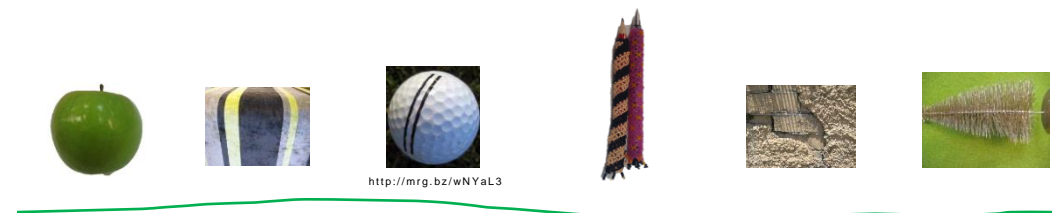


smooth spiky

Say to students

We can now add some other objects to the line. There are so many different textures between very smooth and very spiky or rough.

- c. Choose some more objects to add to the line.
- d. Share your ideas about your choices.



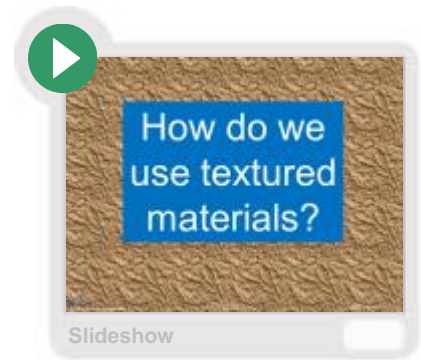
smooth velvety dimpled bumpy rough spiky

Examine textures for specific purposes

Say to students

We are now going to view a slideshow with some photos of textured materials that we use in everyday life.

3. View and discuss the **Slideshow — How do we use textured materials?**



Say to students

“ We can see from this slideshow that when people make objects, they think about the material they will use and what texture they will give the material.

Look around you and see if you can find any objects that have a texture for a purpose. ”

Focus questions

Q: *What material do you think this (toy) is made from?*

A: For example: fabric

Q: *What word or words would you use to describe the texture?*

A: For example: fluffy

Q: *Why is the texture important to the object?*

A: The toy is for cuddling and it wouldn't be nice to cuddle if it had a spiky texture.

Say to students

“ Materials and textures are a very important part of our daily lives in so many ways. Everything we use is made from a material, and the texture of something can make it safe, or useful, or comfortable, or fun, or interesting. Many materials have been invented by scientists. Science has also helped us understand how we can use materials in so many different ways. ”