







Topic: Using units of measurement

Exploring size 1

Lesson concepts

-  **Capacity** — Language
-  **Capacity** — Direct comparison
-  **Length** — Language
-  **Length** — Direct comparison
-  **Mass** — Language
-  **Mass** — Direct comparison

Today students will:

- ▶ directly compare the size of objects
- ▶ describe the size of objects.

Resources

Text

Familiar texts that explore size (for example: *Who sank the boat?* or *Goldilocks and the three bears*)

Find and prepare

Dress up items (or dolls/toys and their clothing)

Play materials such as construction toys

Length of ribbon or string (up to about 50 cm)

Familiar objects to manipulate and compare

Key terms

long, short, tall, height, length, mass, heavy, light, fat, thin, thick, longer, shorter, space, cover, fit inside, bigger, smaller, straight, curvy, measure, compare, big, describe, represent

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

Lesson

Note

This lesson prompts students to explore mathematical concepts of measurement. Students compare the size of objects in the world around them. Early concepts of measurement are often based around students' perception of size, especially in relation to themselves. The activities will prompt student awareness of size by considering length (height), as well as mass (heaviness) and space (volume and capacity).

Introduce the lesson

Say to students

Over the next four lessons, you will explore 'How big am I?'
In this lesson, you will learn about size.

Explore big and small things

Discuss students' understanding of size.

Focus questions

Q: *What does 'big' mean?*
 Q: *What other words could you use instead of 'big'?*
 Q: *What things are big? Why?*
 Q: *How do you find out if something is big?*
 Q: *Could you be big and small at the same time? Explain.*
 A: For example, I'm big compared to my cat, but small compared to the house.

Provide materials for students to explore familiar contexts for measuring by direct comparison in the following activities.

Activity 1: Fitting clothing

Provide dress up costumes for students (or materials for students to dress up dolls or toys).

Ask students to:

- play dress-ups (or dress up the toys)
- determine which dress-up items are too big, too small or fit perfectly
- make head bands that fit themselves (or the dolls or toys)
- decide if a ribbon will fit around a head, leg, ankle or waist
- identify who may own which shoes.



Can I fit into this?

Activity 2: Pouring and cooking

Provide materials for students to explore capacity and length such as:

- how much a container holds
- how things get shorter or longer when they are cut or rolled.

How does the size of a banana change as it is chopped?



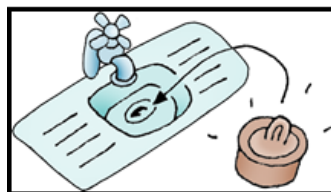
Activity 3: Fitting into spaces

Provide opportunities for students to explore space, such as:

- hiding (selecting an appropriate hiding space)
- building bridges or tunnels and discovering which items fit under or through them
- playing limbo (or other games where the levels get lower or smaller).



Is all the space filled?



Will that fit in the hole?

Activity 4: Picking up objects

Provide opportunities for students to explore weight and mass by:

- lifting blocks, toys and various household items (for example: books, chairs, storage bins and boxes)
- playing on a see-saw
- making cubby houses
- observing cranes and pullies.



Share familiar texts such as *Who sank the boat?* or *Goldilocks and the three bears*.

Discuss how measurement was used in these texts.