



Lesson 4

Prep

Topic: Using units of measurement

Exploring size 4

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

Sheet

Sheet — What I learned about measuring

Find and prepare

Large sheets of paper (to trace body outline)

Familiar objects in the environment to compare size with (for example: chairs, posts)

Range of small plastic containers

Familiar objects to manipulate and compare

Trays of rice or sand

Seesaw (optional)

Sand pit (optional)

Mini trampoline (optional)

Safe play area with hiding spaces

Digital camera (optional)

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, Mathematical Guided Inquiry

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



Lesson

Introduce the lesson

Say to students

In this lesson, you will continue to explore 'How big am I?' Today, you will decide how big you are and explain why you think that.

Describe and represent their size

Provide materials for students to 'measure' themselves.

Ask students to:

- choose a method to 'measure' how big they are
- measure themselves
- record their findings using writing, drawings or photographs.

Focus questions

- Q: What tools are you using to measure how big you are?
- Q: How will you decide if you are big?
- Q: Could you be bigger than an elephant? How?
- Q: How could you remember what you found out?
- Q: How could you display the information?
- Q: What else can the information tell you?

Ask students to explain how big they are and what makes them think that.

Note

Questioning may elicit responses such as:

- I am this big.
- I am shorter than the door.
- I am not too heavy for the trampoline, so it won't break when I jump on it. If an elephant jumped on the trampoline, it would break so I am lighter than an elephant.
- My hand is shorter than a wooden spoon but thicker. I know this because it is easy to hold the wooden spoon because it is thin.



Justify how big they are



Students complete the **Sheet** — What I learned about measuring.

Focus questions

- Q: What did you find out? What makes you think that?
- Q: What could that mean?
- Q: What mathematics have you learned?
- Q: What new 'measuring' words have you learned?

Note

Questioning may elicit responses such as:

- I am this big.
- I am bigger than a margarine container. I think that because I cannot fit in a margarine container or fit in the fridge like a margarine container.
- My body is longer than a margarine container. My hand is smaller than a margarine container. I know that because it can fit in the margarine container.
- My hand holds less rice than a margarine container.
- I am heavier than a margarine container. I think that because my friend can lift a margarine container but he can't lift me.
- I am wider than a margarine container as you can see when you look at my body outline and the margarine container.



Explore further questions

Focus questions

- Q: What other questions do you have about measuring?
- Q: How could you answer those questions?
- Q: How could you use measuring skills to explore objects at home?
- Q: Why do you think you need to know how big things are?

