

# Diagnostic TASK

## FOCUS

### Understand Units

- Key Understandings 1, 2

### Direct Measure

- Key Understanding 1

## Which Tin?

K–Year 3

### Purpose

To reveal if the student:

- focuses on and describes 2–3 attributes of one object
- compares things with respect to a particular physical attribute
- is able to use comparative language of measurement attributes.

### Materials

Five tins displaying a range of attributes, i.e. short, thin, wide, tall, heavy, light

Storage box or bag for tins

Coin or similar small object to hide under a tin

Teacher Recording Sheet

### Procedure

1. Begin by asking the student to take the tins out of the bag/box and put them on the table, giving them the opportunity to feel and comment on the mass. If they do not make comments about the weight of the tins, ask questions such as: *How is that tin different to the other tin?* (point to the heaviest tin). Record the exact words the student uses to compare the tins, e.g. big, not big, heavy, light, not heavy.

2. Tell the student you are going to play a game. Say: *I'm going to hide a coin under one of the tins and then give you some clues to find it. Hide your eyes. OK, Open your eyes. I have put the coin under the tall, heavy, thin tin. Can you find it?*

Record which tin the student points to first, which attributes they focus on, and how many attributes they were able to focus on.

3. Exchange roles and ask the student to hide the coin. Say: *Now it is my turn to guess where you hide the coin. You have to give me some clues so I can guess.*

If necessary, prompt with, *I want you to tell me as much as you can about the tin to make it easy for me to find it. Don't point to it. Keep your hands under the table, because I have to work it out from what you tell me.*

Record which attributes the student uses and the terms they use.

It may be necessary to prompt the student into using three clues. Say, for example, *I can see two tall, heavy tins. How will I know which one the coin is under?*

# Which Tin? Teacher Recording Sheet

Name \_\_\_\_\_ Year \_\_\_\_\_ Date \_\_\_\_\_

**1. How is that tin different to the other tins?** (point to the heaviest tin)

**2. I'm going to hide a coin under one of the tins and then give you some clues to find it. Hide your eyes. OK, open your eyes. I have put the coin under the tall, heavy, thin tin. Can you find it?**

**3. Exchange roles.**

**Now it is my turn to guess where you hide the coin. You have to give me some clues so I can guess** (remind the child not to point).

After the child places the coin, prompt if necessary with, **I want you to tell me as much as you can about the tin to make it easy for me to find it. I can see two tall, heavy tins. How will I know which one the coin is under?**

# Diagnostic TASK

FOCUS

## Understand Units

- Key Understandings 1, 2

## Direct Measure

- Key Understanding 1

## Ordering Tins

K–Year 3

### Purpose

To reveal if the student:

- knows that ordering objects by different attributes may result in different orders
- can use comparative words to describe order.

### Materials

Five tins displaying a range of attributes, i.e. short, thin, wide, tall, heavy, light  
Teacher Recording Sheet

### Procedure

1. Use the tins from the Which Tins? task.

Ask the student to put the tins in order. Say: *Please put the tins in order in some way.*

If the student hesitates for too long, a prompt may help, e.g. *Put them in a line from biggest to smallest.*

Record the attribute they used to order the tins.

2. Ask the students to describe the order. Say: *Tell me the idea you have used to order them. Tell me about each tin.*

Record the words the student uses to describe their order?

3. Ask students to put the tins into a different order. Say: *Could the tins be ordered in a different way?*

If the student hesitates for too long, prompt, e.g. *Last time you ordered by (how tall they were). This time can you use something else about the tins?*

After they have reordered the tins, ask, *What have you used to order the tins this time?*

Record the language the student uses.

Consider and record:

- Is the child able to reorder the tins?
- Which attribute does the child use?
- What words do they use to describe their order?

# Ordering Tins: Teacher Recording Sheet

Name \_\_\_\_\_ Year \_\_\_\_\_ Date \_\_\_\_\_

1. Use tins from the Which Tin? task and ask the student to put them in order. Which attribute does the child use to order the tins?

2. Ask the student to describe the order. Say: **Tell me the idea you have used to order them.** If necessary ask, **Tell me about each tin.** If the student hesitates for too long, prompt with, **Put them in a line from biggest to smallest.** If necessary, say: **Start with the biggest one and put it over here.** What words do they use to describe their order?

3. Ask students to then put the tins into a different order. Say: **Could the tins be ordered in a different way?** If the student hesitates for too long, prompt with: **Last time you ordered by** (*how tall they were*). **This time can you use something else about the tins?** Ask, **What have you used to order the tins this time?**

Is the child able to reorder the tins?

Which attribute does the child use?

What words do they use to describe their order?