

## Comparing two objects by weight

### Annotation

Mia shows that she understands the attribute of weight by holding an object in each hand and identifying that the object that has a greater downward pull on her hand is heavier. She is also able to transfer this understanding to the balance scales by identifying that the pan that goes down holds the heavier object.

### Problem: Comparing two objects by weight

The teacher places two objects that are a similar size but have different weights in the student's hands and asks:

*Which one is heavier?*



### Student Response

**Mia:** The orange.

**Teacher:** Put the apple and the orange on the balance scale and see if you are right.

**Mia:** Mia places the apple in one pan and the orange in the other.

**Teacher:** Are you right?

**Mia:** Yes.

**Teacher:** How do you know?

**Mia:** Mia points to the pan containing the orange.

Because it goes down.

## Direct comparison

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### Annotation

Harriet shows that she understands the measurable attribute of length by directly comparing two strips of different colours and lengths to identify that one strip is longer. She does not use the same starting point when comparing strips.

### Problem: Direct comparison

The teacher places one blue and one yellow strip, each in a different position and different orientation, in front of the student and asks:

*Which one is longer?*

### Student Response

Harriet picks up the two coloured strips and lines them up beside each other.



She points to the blue strip.

**Teacher:** How do you know it is longer?

Harriet points to the extra length on each end of the blue strip.

**Harriet:** It's a bit more there and there.

## Shorter, longer or the same?

### Annotation

Callum is able to use his foot outline as a measure to directly compare it with another object. He is also able to describe an object as being shorter or longer and group objects accordingly.

### Problem: Shorter, longer or the same?

The teacher provides the student with an outline shape of the student's foot. The teacher asks the student to find classroom objects that are shorter than his foot, the same length as his foot and longer than his foot and to group the objects on the appropriately labelled sheet of paper.

### Student Response

