

Maths Shed

Monday 8th June

Lesson: 1

To be able to compare mass

Mass (sometimes called weight) is how heavy or light something is. We measure it in grams and kilograms.

Success criteria:

- ✓ I can compare mass using terms like, “heavier”, “heaviest”, “lighter” and “lightest”
- ✓ I can explain my reasoning

To be able to compare mass

Starter:

Pick up two objects at home.

Which one feels heavier? How do you know?

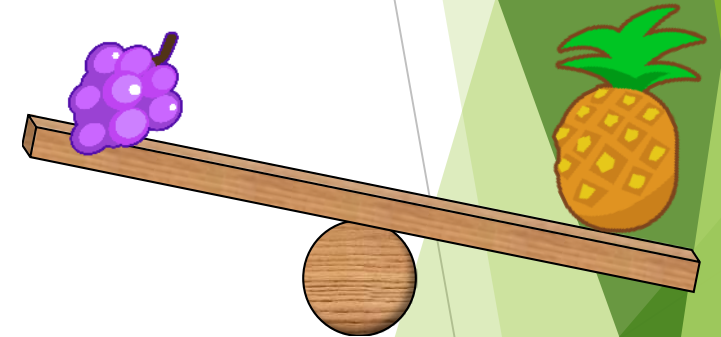
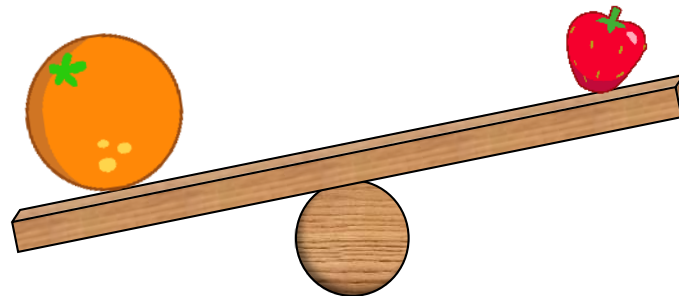
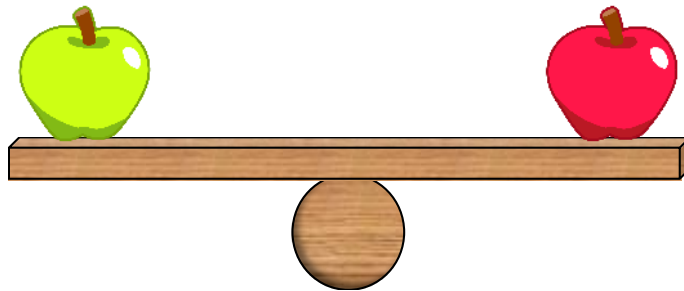


To be able to compare mass

Starter:

Look at the balances.

Which is the odd one out?

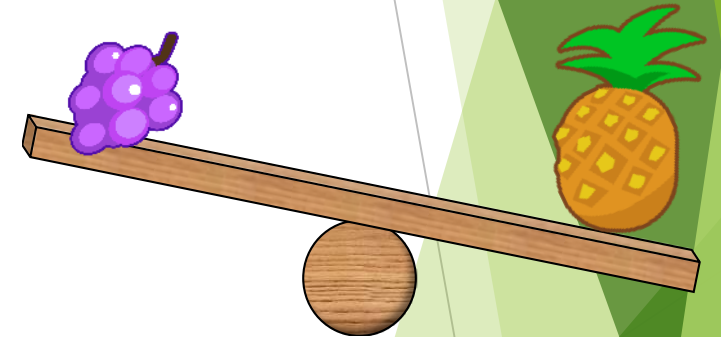
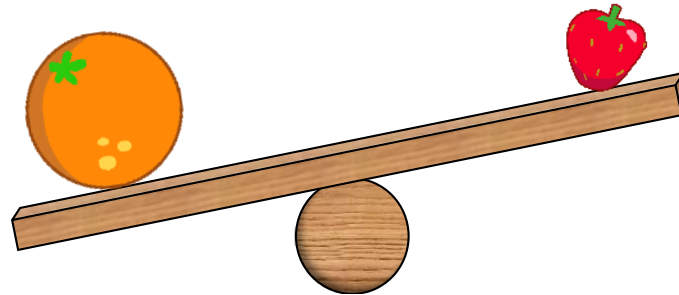
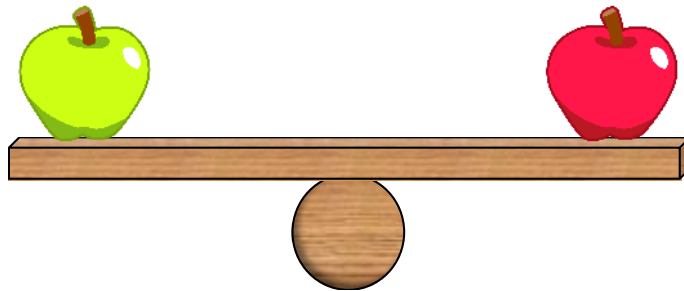


Explain your answer.

To be able to compare mass

Starter:

Which is the odd one out?

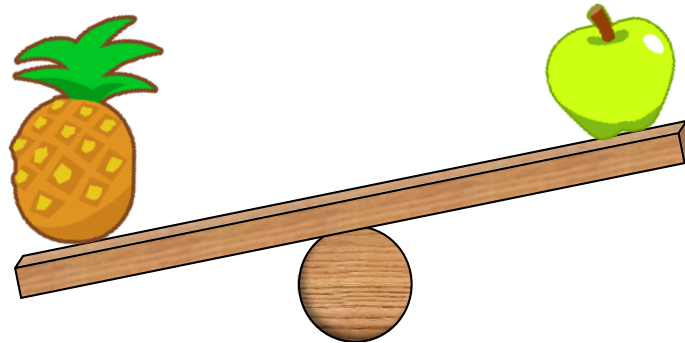


The left-hand image is the odd one out as the two apples weigh the same, whereas the other seesaws are unbalanced. (The orange is heavier than the strawberry...)

To be able to compare mass

Talking Time:

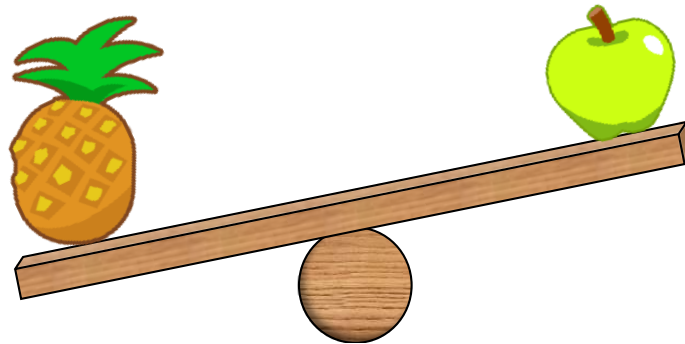
Look at the picture, can you complete the sentence below with the word “heavier” or “lighter”.



The pineapple is _____ than the apple.

To be able to compare mass

Talking Time:

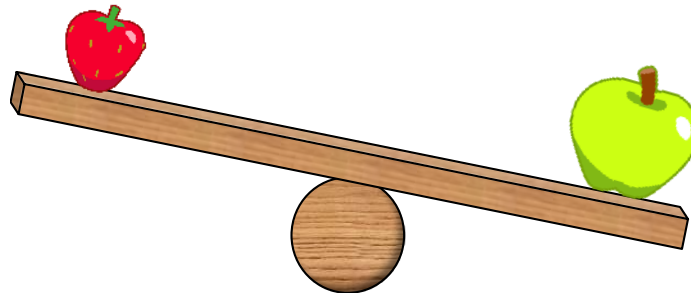


The pineapple is heavier than the apple.

To be able to compare mass

Talking Time:

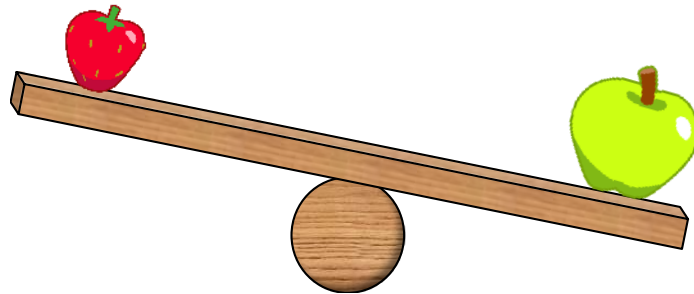
Look at the picture, can you complete the sentence below with the word “heavier” or “lighter”.



The apple is _____ than the strawberry.

To be able to compare mass

Talking Time:

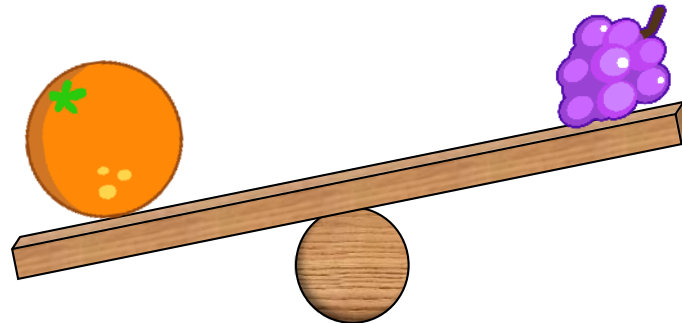


The apple is heavier than the strawberry.

To be able to compare mass

Talking Time:

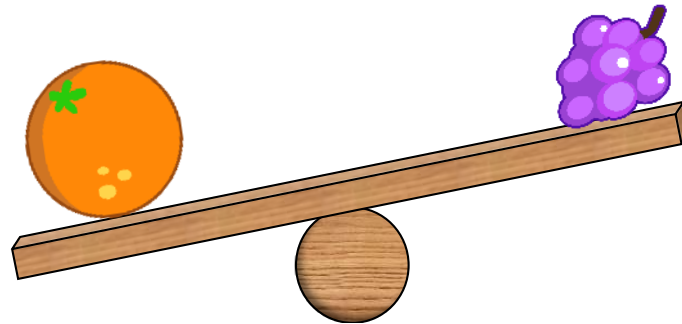
Look at the picture, can you complete the sentence below with the word “heavier” or “lighter”.



The grapes are _____ than the orange.

To be able to compare mass

Talking Time:



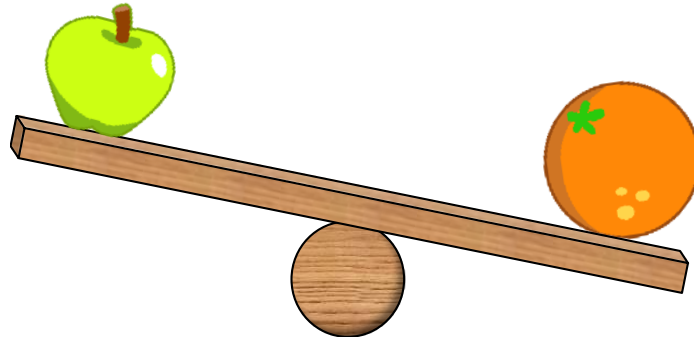
The grapes are lighter than the orange.

To be able to compare mass

Activity 1:

You could copy the picture in to your book.

Copy and complete the sentence below with the word “heavier” or “lighter”.

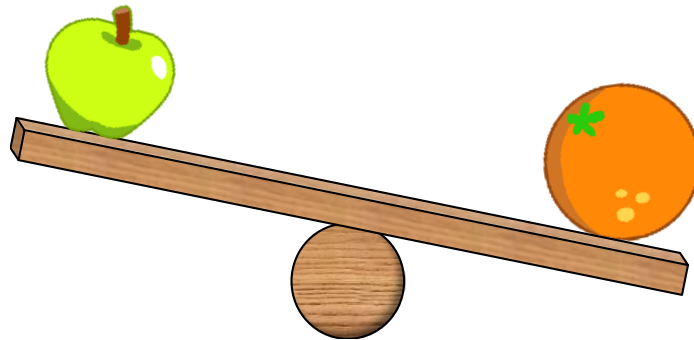


The apple is _____ than the orange.

The orange is _____ than the apple.

To be able to compare mass

Activity 1:

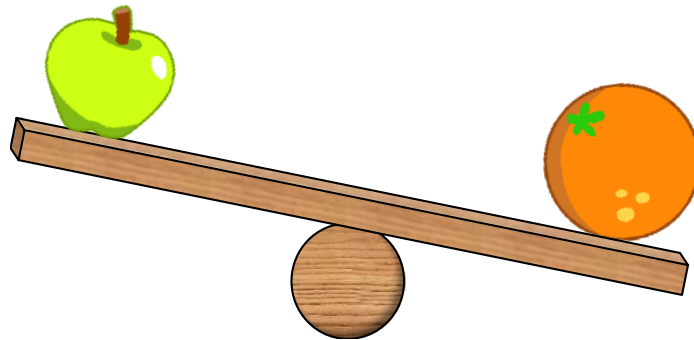


The apple is lighter than the orange.

The orange is _____ than the apple.

To be able to compare mass

Activity 1:



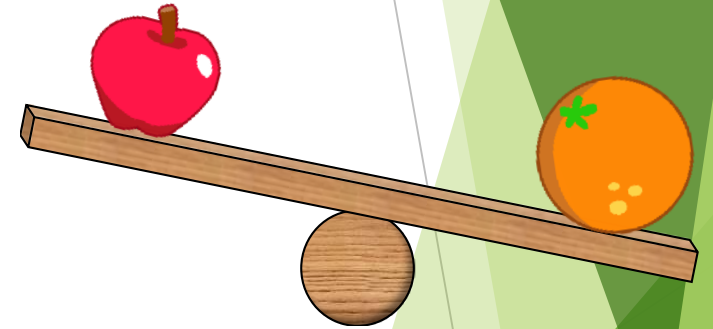
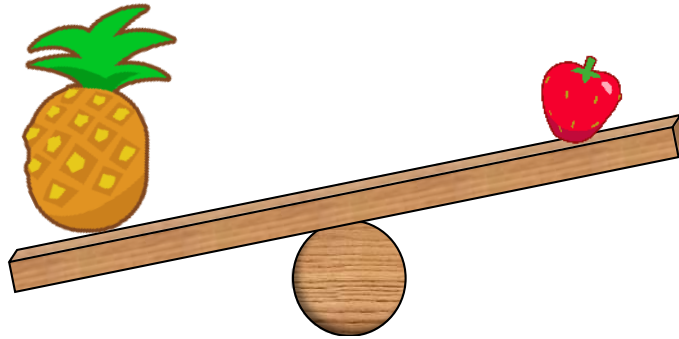
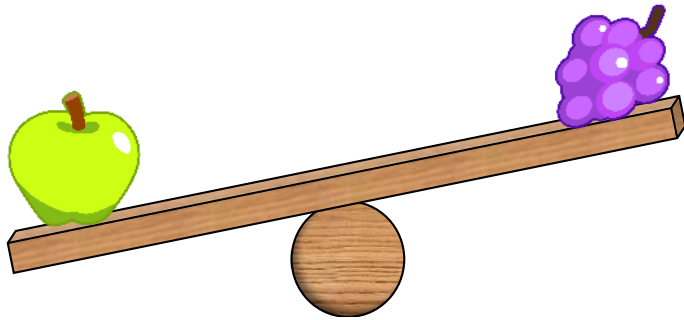
The apple is lighter than the orange.

The orange is heavier than the apple.

To be able to compare mass

Talking Time:

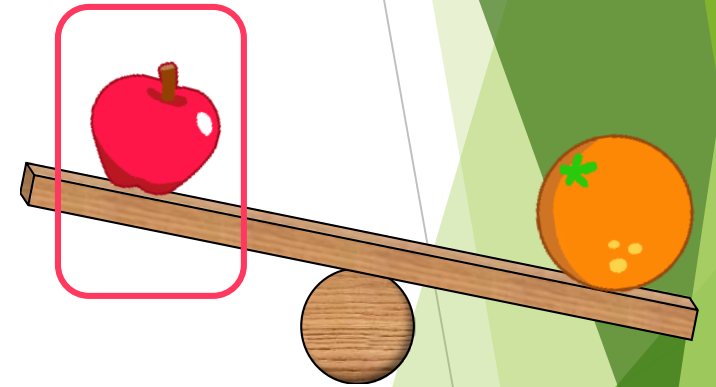
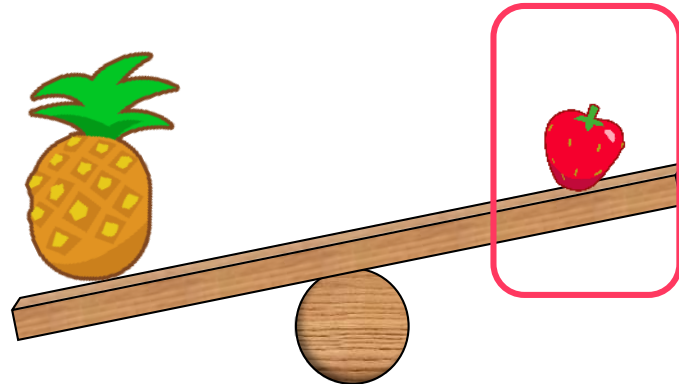
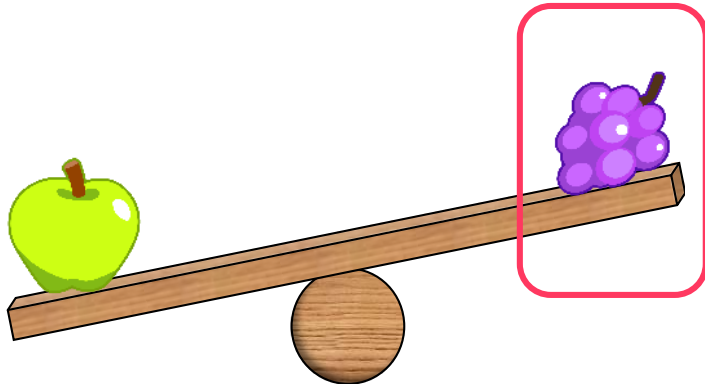
Point to the **lighter** object on each of the scales below. Explain how you know.



To be able to compare mass

Talking Time:

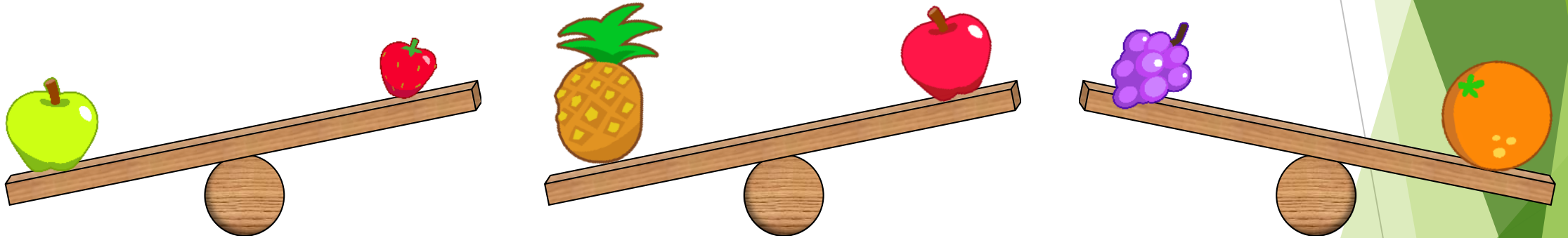
Circle the **lighter** object on each of the scales below.



To be able to compare mass

Activity 2:

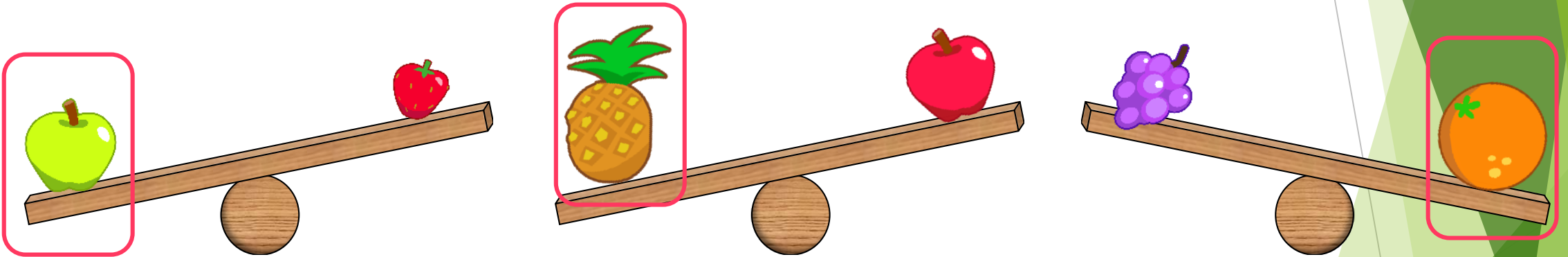
Point to the **heavier** object on each of the scales below. How do you know?



To be able to compare mass

Activity 2:

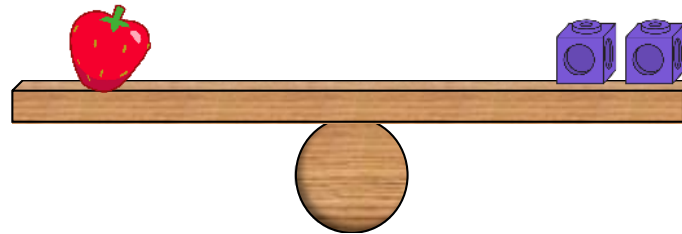
Circle the **heavier** object on each of the scales below.



To be able to compare mass

This time, the mass of objects is being compared with non-standard units of measurement. Here it is cubes.

What is the mass of the object shown?

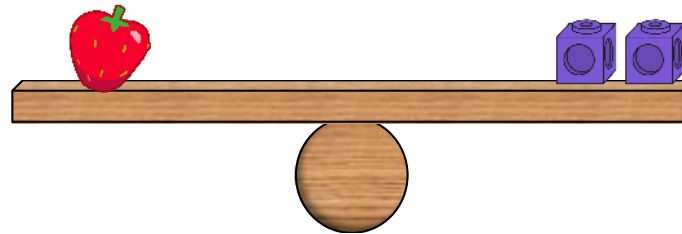


_ cubes

To be able to compare mass

This time, the mass of objects is being compared with non-standard units of measurement. Here it is cubes.

What is the mass of the object shown?

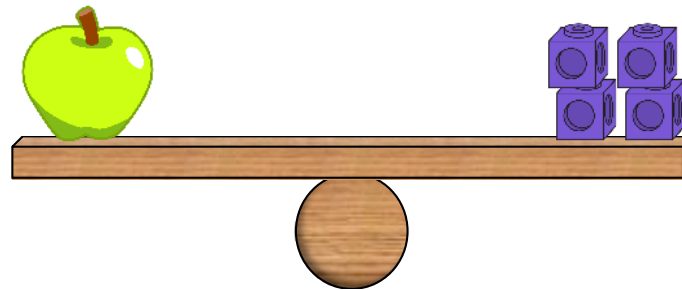


2 cubes

To be able to compare mass

Talking Time:

What is the mass of the object shown?

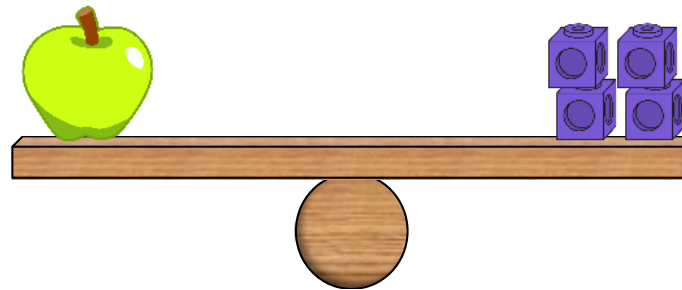


_ cubes

To be able to compare mass

Talking Time:

What is the mass of the object shown?

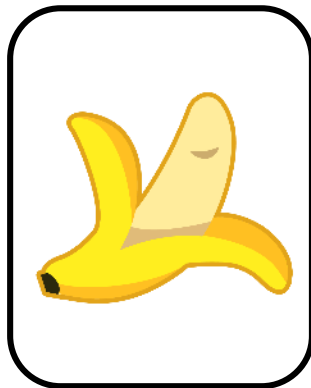
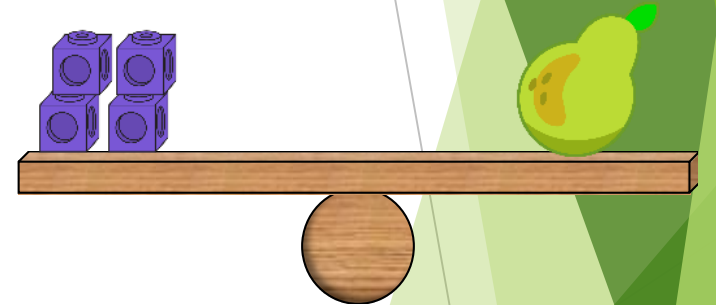
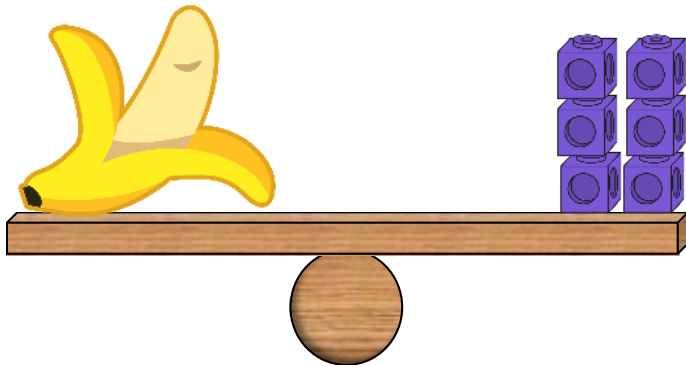


4 cubes

To be able to compare mass

Activity 3:

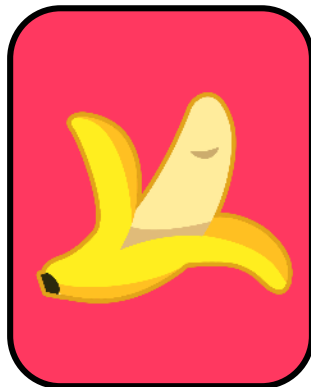
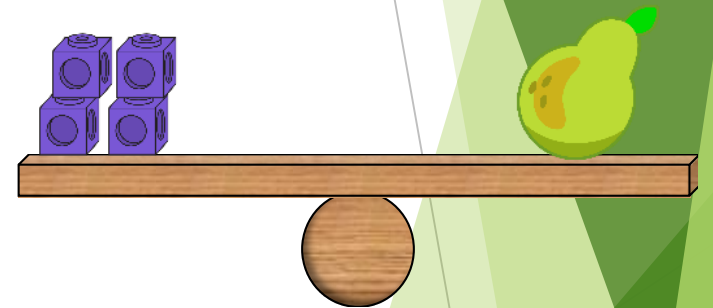
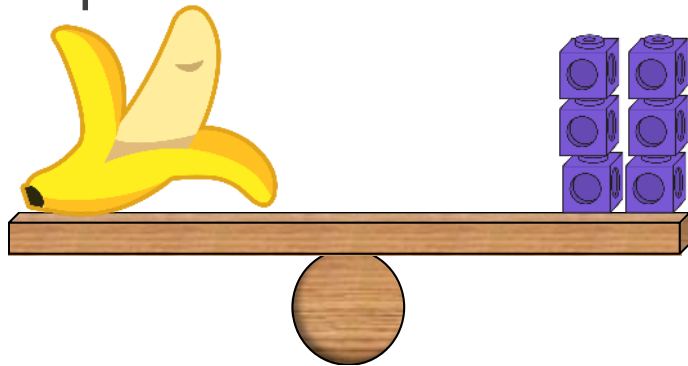
Point to the card that represents the heavier piece of fruit. How do you know?



To be able to compare mass

Activity 3:

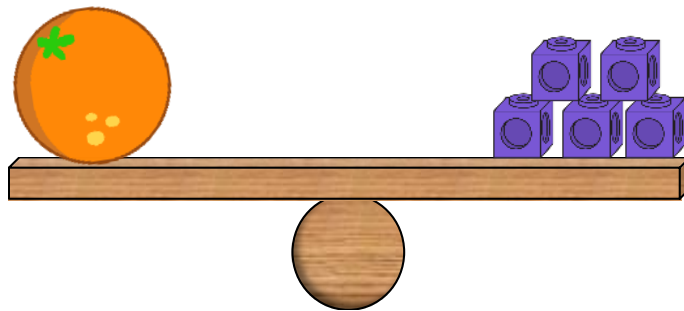
Answer: It's the banana, because its mass is equal to 6 cubes and the pear's mass is equal to 4 cubes.



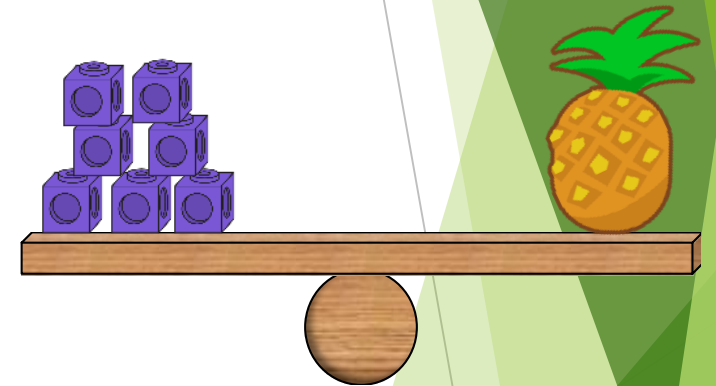
To be able to compare mass

Activity 4:

What is the mass of each of the objects shown?
Complete the sentence below. (Say it or write it).



_ cubes



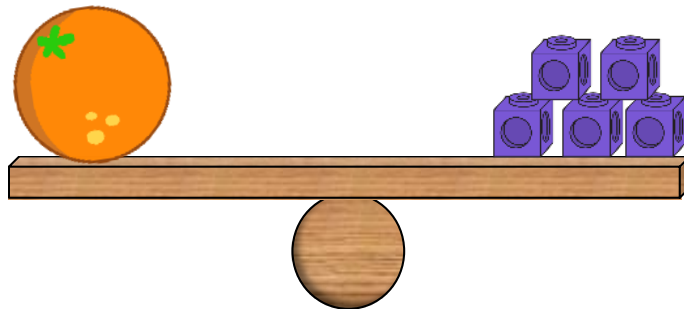
_ cubes

The _____ is heavier than the _____.

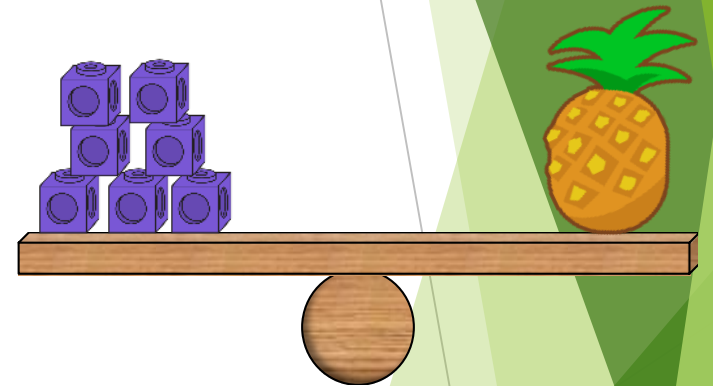
To be able to compare mass

Activity 4:

What is the mass of each of the objects shown?
Complete the sentence below.



5 cubes



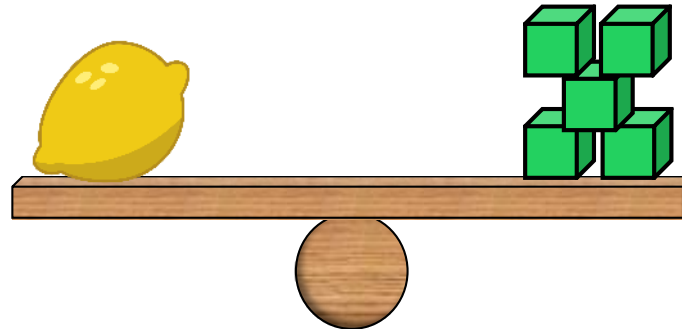
7 cubes

The pineapple is heavier than the orange.

To be able to compare mass

Activity 5:

Eve balances a lemon with some blocks.



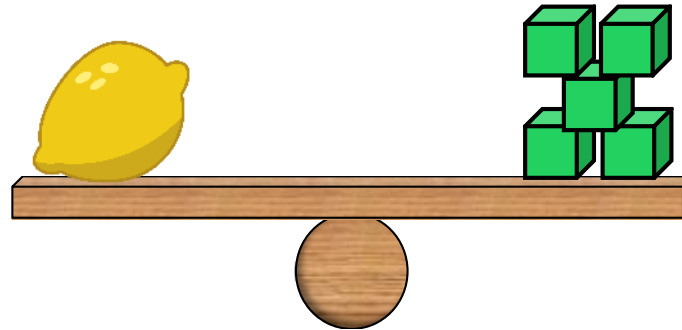
Complete the sentence:

One lemon has the same mass as 6 blocks.

To be able to compare mass

Activity 5:

Eve balances a lemon with some blocks.



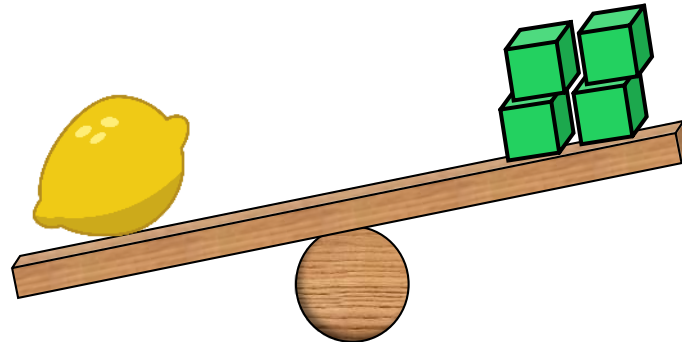
Complete the sentence:

One lemon has the same mass as 5 blocks.

To be able to compare mass

Activity 6:

The scales are no longer balanced.

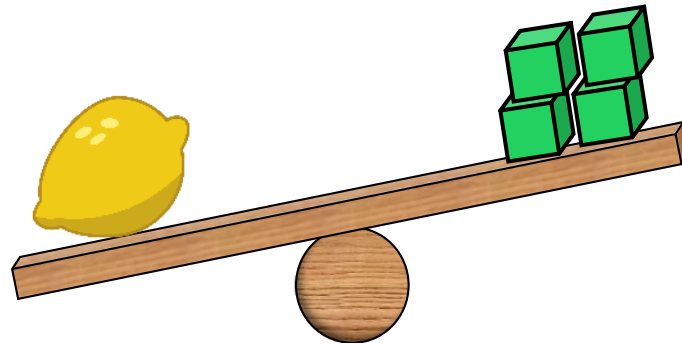


Explain why.

To be able to compare mass

Activity 6:

The scales are no longer balanced.

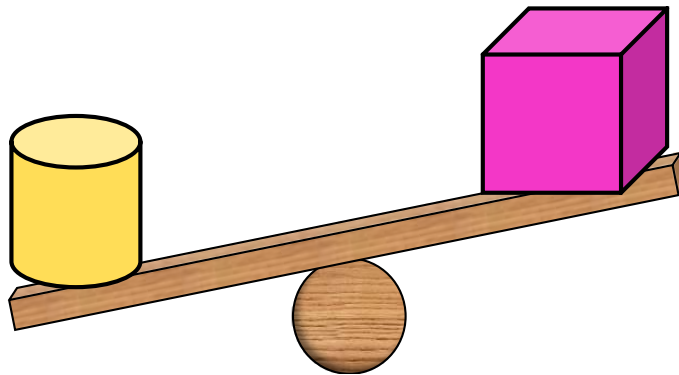


They are no longer balanced as the lemon weighs five blocks, one block has been removed, so a block needs to be added back for the scales to balance again.

To be able to compare mass

Activity 7:

James says, “The cube is heavier than the cylinder because it is bigger.”

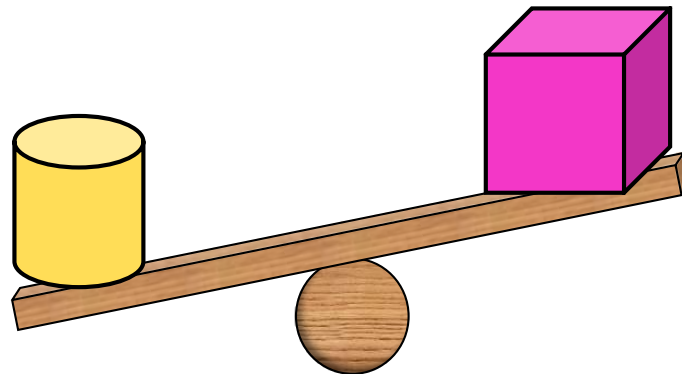


Is James’s statement true or false?
Explain your answer.

To be able to compare mass

Activity 7:

James says, “The cube is heavier than the cylinder because it is bigger.”

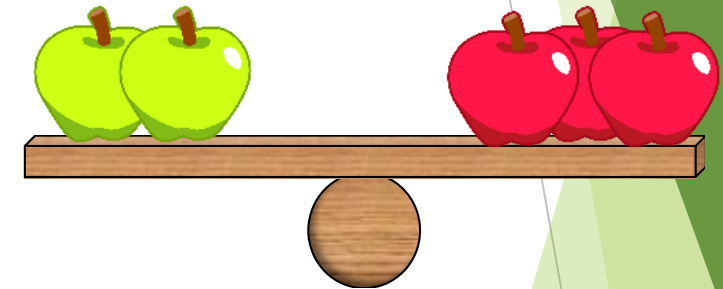
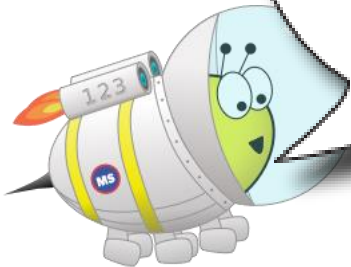


James' statement is false. The cylinder is lower than the cube, which means it is heavier than the cube. (Bigger objects can be lighter than smaller ones!)

To be able to compare mass

Evaluation:

A red apple weighs more than a green apple because there are more of them.

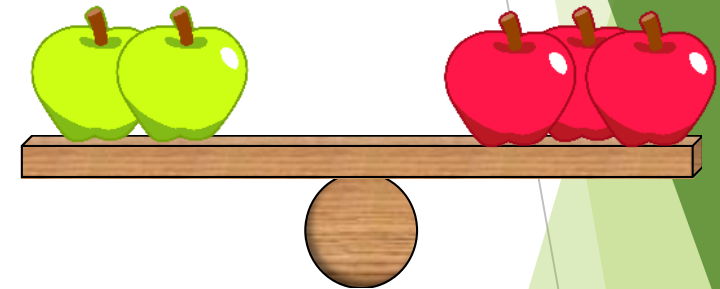
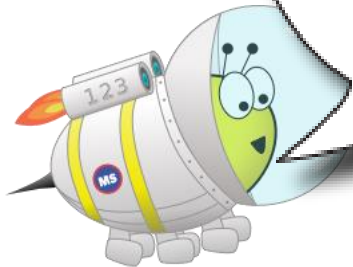


Is Astrobee's statement true or false?
Explain your answer.

To be able to compare mass

Evaluation:

A red apple weighs more than a green apple because there are more of them.



Astrobee's statement is false. If there are more red apples than green apples to balance the seesaw, then each red apple is lighter than a green apple.

To be able to compare mass

How did you get on?

Success criteria:

- ✓ I can compare mass using terms like, “heavier”, “heaviest”, “lighter” and “lightest”
- ✓ I can explain my reasoning to compare mass using terms like, “heavier”, “heaviest”, “lighter” and “lightest”