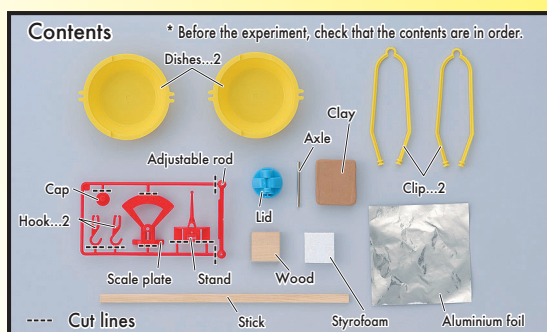


# Weight of materials (Type A)

Class supplementary materials included  
Keep small parts inside zip lock bag



**Caution**

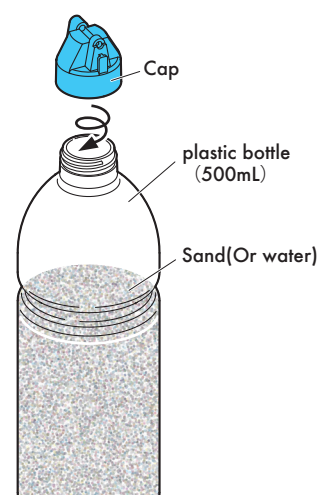
- Please do not put small objects or clay in your mouth to prevent swallowing them.
- Please handle with care to prevent injuries.
- Please handle with care when using scissors or other tools to remove items from the frame.
- When you have finished the experiment, put the materials in your bag and return it to the storage area.



## Assembling the balance

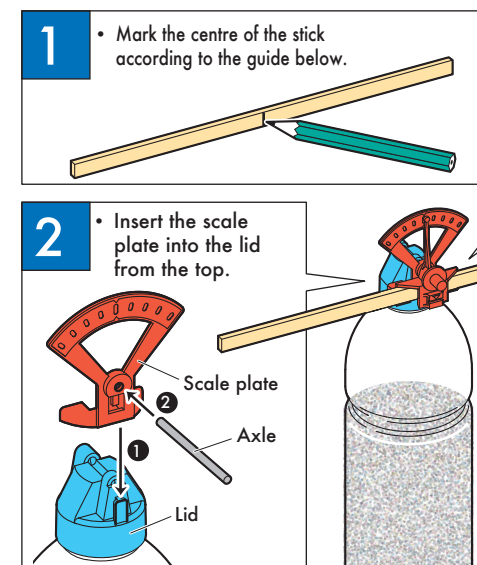
### How to assemble 1 Prepare the platform

- Put the sand or water inside the plastic bottle.
- Screw the lid of the bottle.

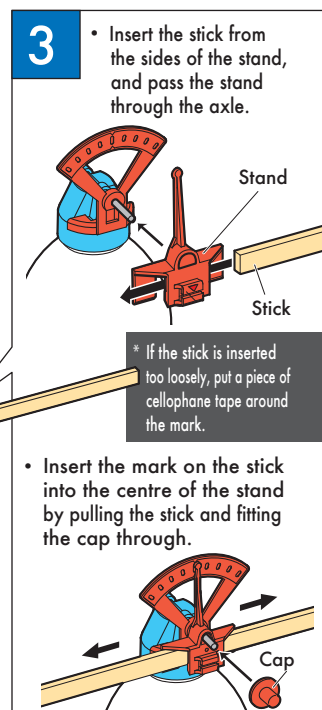


Align the end of the stick here.

### How to assemble 2 Attaching the stick



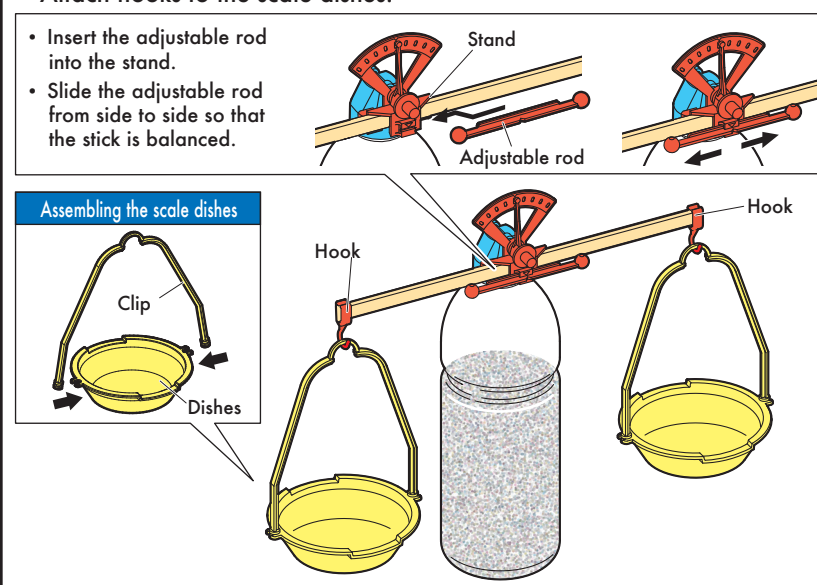
Guide



Place the mark on the stick.

### How to assemble 3 Attach the dishes.

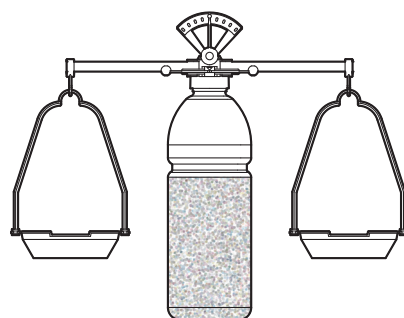
- Assemble the scale dishes.
- Attach hooks to the scale dishes.



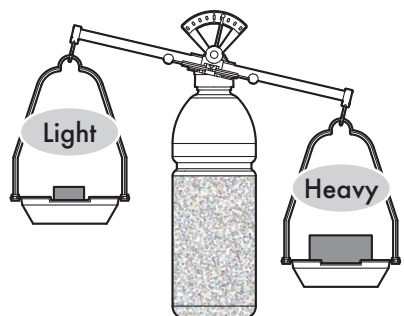
230227K.D

## How to use the balance

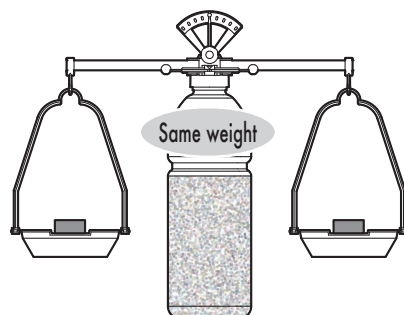
- Check that both sides are aligned. If they are not balanced, shift the balance using the adjustable rod.



- Place a weight on each side.



When the object on the right is heavier,  
↓  
The right-hand side will be lower.

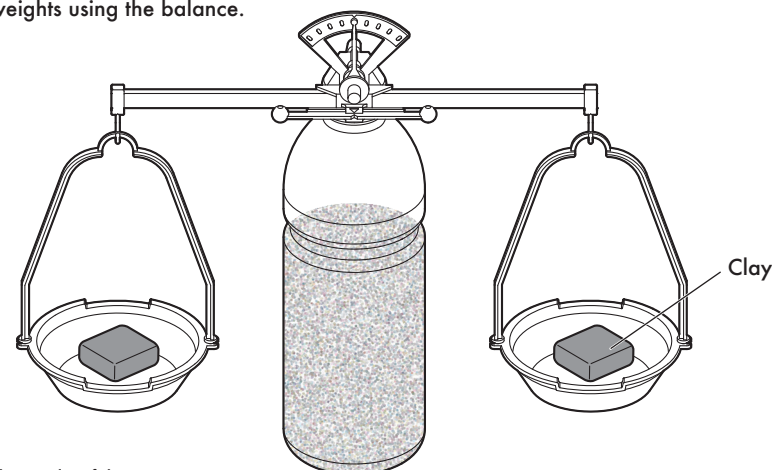


When the objects on both side have the same weight,  
↓  
The two sides will be balanced.  
(Becomes horizontal)




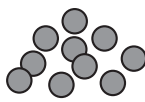


## Compare weights by changing the shape of the object (shape and weight).

- Divide the clay into halves, place them on both sides, and balance them against each other.
- Change the shape of one half of the clay and compare the weight of the two halves in your hands.
- Compare the weights using the balance.

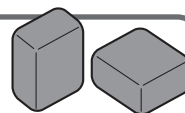


☆ Let's write down the results of the experiment (e.g., how heavy was the clay?).

Shape	Weight (felt on hand)	Weight (measured on scale)
 Sphere	Expectation	Expectation
	Results	Results
 Flat	Expectation	Expectation
	Results	Results
 Thinly stretched	Expectation	Expectation
	Results	Results
 Small pieces	Expectation	Expectation
	Results	Results

Let's try it out!




- What will happen to the texture and weight if you change the shape of the clay?



Let's try it out!

- Cut the aluminium foil in half with scissors, place it on both sides of the balance.
- Change the shape of one of the aluminium foils and compare the weight using the balance.

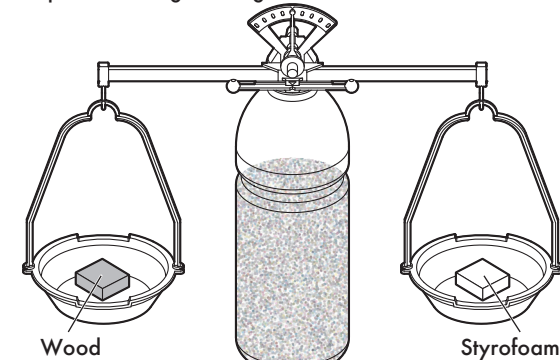
☆ Let's write down the results of the experiment (e.g., how heavy was the clay?).

Shape	Weight (measured on scale)
 Thin strips	Expectation
	Results
 Sphere	Expectation
	Results
 Small pieces	Expectation
	Results



## Compare the weights of objects with the same volume (volume and weight).

- Hold a piece of wood and a piece of styrofoam of the same size in your hand and compare their weights.
- Compare the weights using a balance.



☆ Write down which is heavier and which is weaker, and summarise what you found out in the experiments.

Weight (felt on hand)	Weight (measured on scale)
Expectation	Expectation
Results	Results

### Findings

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Let's try it out!

- Put the clay in the water and find out how the water level has changed.
- If you change the shape of the clay, what will happen to the water level?

