

The Scientific Method

Question

What are you testing? What are you trying to figure out?

How are things that float in water different from things that sink?

Hypothesis

What do you think will happen and why?

Experimental Design

How are you going to test out your hypothesis? (You might not need all 6 spaces!)

Write or draw your steps:

1.

2.

3.

4.

5.

6.

Data and Observations

Carry out your experiment. Record the tests and what happens with words or pictures.

Object <i>What item are you testing?</i>	Describe the object <i>heavy/light/ large/small/ solid/hollow</i>	Hypothesis <i>Do you think it will sink or float?</i>	Observation? <i>Did it sink or float?</i>

Analyse

Look at your observations, how are things that float different from the things that sink?

Conclusion

Look at your analyses, is your hypothesis right?

Continue the Experiment

Sometimes your hypothesis is wrong or an experiment does not work. This is not a bad thing! It is an important part of science!

When things do not work out, scientists go back and try again! We change our hypothesis or adjust how we are running our tests. With each attempt we learn new things. Sometimes even when an experiment works, the testing continues because the scientist has a new question. Being curious is part of being a scientist!

Question 2

What are you testing? What are you trying to figure out?

Hypothesis 2

What do you think will happen? Why do you think that?

Experimental Design 2

How are you going to test out your hypothesis? Use only the boxes you need.

Write or draw your steps:

1.	2.
3.	4.
5.	6.

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Data and Observations 2

*Carry out your experiment. Record the tests and what happens with words or pictures.
(Make your own table, you might need different columns than last time!)*

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Analyse 2

Look at your observations, how do they answer your question?

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Conclusion 2

Look at your analyses, is your hypothesis right?

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