


WHOLE SCHOOL SCIENCE .



# *BISCUIT DUNKING EXPERIMENT*

Get excited about conducting scientific research whilst learning the scientific method.





## To do this experiment you will need:

1. One mug/cup/glass of tap water, wide enough to fit your largest biscuit
2. Any three biscuits of different types.
3. Pen/pencil
4. KSI/KS2 worksheet
5. Access to youtube to dunk along with the soundtrack.

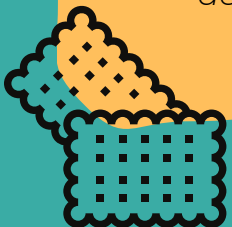
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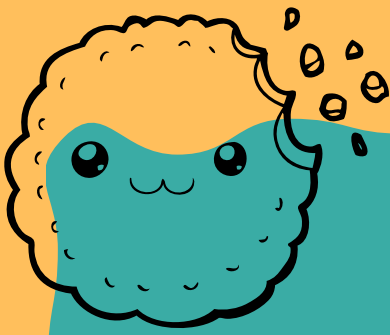


### **QUESTIONS TO DISCUSS PRIOR TO STARTING THE EXPERIMENT**

1. Have they ever dunked a biscuit in a cup of hot chocolate, milk or another drink?
2. Has the biscuit ever broken?
3. Why do they think biscuits break when they are left in water for too long? You could talk about how the biscuit soaks up water which dissolves the sugar in the biscuit. Sugar is needed to hold the biscuit together so when it dissolves, the biscuit breaks.
4. How do they think they could design an experiment to test which biscuit is the best for dunking?

*Once you have chatted through these questions, explain the method to the children. You can talk about how this is just one way of testing the dunkability of a biscuit - there are lots of different ways we could have designed the experiment. The important thing is that everyone in the school does the same thing.*





# METHOD

You will be dunking each biscuit in and out of a cup of tap water temperature water. It is hoped that whilst there may be slight variations, the tap water temperature will be similar enough across the school to make this a fair test.

Load up the Youtube video and give it a listen. You will need to dunk the biscuit vertically into the water every time they hear a number. You should dunk so that 50% of the biscuit is in the water and 50% remains outside of the water.

When you hear the word 'out', you should take the biscuit of the water and hold it horizontally above the glass.

When the biscuit breaks, you should write down the 'dunk number'. This should be the number you heard just before the biscuit broke. For example, if you dunk the biscuit in on number 7 and it dissolves in the water during the dunk, you should write down 7. If your biscuit breaks whilst you are holding it above the water after dunk number 7, you should still write down the most recent number (7), not the number of the dunk you were just about to do.

After each test, pour out your water and get a fresh cup. This will help keep the experiment a fair test because sugar dissolved in the water may affect the next biscuit's dunkability.

Fill out the first part of your worksheet, and start the experiment. Once you have finished your experiment, you can then complete the second part of the worksheet.

