

Super science fun!

Below are shown some fun, silly and exciting science experiments you might like to try whilst at home. These tasks have been chosen because they require materials you're more likely to have in the house. If you do try any of these please remember to post them on our twitter page; we would love to see what results you get from these.

Champion materials

Review focus in a Chemistry context

TASK: Design a test to decide on the best material for a particular job e.g. stickiest tape, stretchiest wool/string, best clothing fabric for blackout curtains etc.

Choose 4+ materials and carry out your test e.g. shining light through the potential black out fabrics, measuring how far the wool/string will stretch, counting how many times the tape can be re-stuck etc.

Order the materials from best to worst, according to your test.

You could record: a diagram of your champion material labelled with an explanation of why it is best for the job.



Ice escape

Do focus in Chemistry context

TASK: Find a couple of small objects to freeze in ice e.g. plastic animals, lego character etc. Put each object in a small pot with water (or water in a balloon works too) and place in freezer overnight.

Now the challenge is to find out the best way to help them escape from their mini-iceberg.

You could try putting them in different places, adding water or adding salt... (*Check your ideas with an adult first*).

Decide how to compare the 'escapes' e.g. will you time how long it takes for the object to be 'free'? Or will you compare every 10 minutes?

You could record by: drawing your observations over time or recording your times in a table.



Paper planes

Plan focus in Physics context

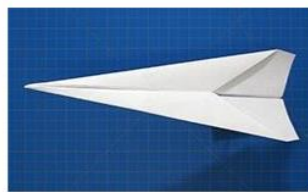
TASK: Make and test some paper planes.

Design ideas here: www.foldnfly.com

Choose a design and pick one thing to change e.g. paper size, wing size, nose point/cut, bigger/smaller flaps etc.

Does your change variable make a difference to the flight distance or time? How can you compare the planes fairly – what will you try to keep the same?

What to record: List the variables you changed, measured and kept the same. Or write/draw instructions for how to compare plane designs fairly.



Bottle flip

TASK: Find a plastic bottle and put some water inside. Practice flipping the bottle to land on its base. Now explore a variable which may have an effect on how often it lands. For example, you could try different: amounts of water, bottles, landing surfaces, start positions (stand/kneel/sit) or flipping techniques.

What to record: Make a table to record how many attempts it took to land the bottle flip for each condition.

Do focus in Physics context



Cleaning coins

TASK: Find some old 1p or 2p coins and some different sauces e.g. ketchup, mustard etc. Investigate which sauce/liquid is the best coin cleaner.

Important: *check with an adult that you can use the sauces/liquids - no household cleaners because the challenge is to find out if other things can clean coins.*

What to record: Write or draw about your conclusions: out of the sauces you tested, which was the best coin cleaner?

Review focus in Chemistry context

