Junior Scientist Challenge

Twelve experiment ideas and a proper lab record

Predict, test and record using simple household science ideas. An adult should choose and supervise any activity involving heat, sharp items or ingredients.

HOW TO USE THIS PACK

- Read the whole activity before starting.
- An adult handles anything hot, sharp or potentially messy/unsafe.
- Choose age-appropriate versions and stop if you are unsure.

THIS PACK BELONGS TO

Name

Date started

Choose Your Experiment

Sink or Float

Choose 5 safe household objects. Predict first, then place each one in a bowl of water to test it.

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Shadow Tracker

Put a toy outside in sunlight. Mark the end of its shadow with chalk, then check again later.

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Paper Bridge

Lay paper across two cups. Fold it in different ways and add coins one at a time to see which bridge holds most.

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Ice Rescue

Put two ice cubes on plates. Sprinkle a little salt on one and leave the other plain. Watch which melts faster.

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Static Balloon

Rub an inflated balloon on fabric, then hold it near tiny pieces of paper and watch what happens.

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Water Drops

Use a dropper or straw to place water drops on a coin. Count how many fit before the water spills.

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Walking Water

Put coloured water in two cups with an empty cup between. Bridge them with folded kitchen paper and watch the water travel.

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Colour Mixing

Use three cups of water coloured red, yellow and blue. Mix small amounts to discover new colours.

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Magnet Hunt

Use a fridge magnet to test a selection of safe household objects. Sort them into magnetic and not magnetic.

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Sound Test

Put different dry materials into sealed containers. Shake each one and compare the sounds.

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Seed Watch

Place a bean on damp kitchen paper in a clear container. Check it each day and draw what changes.

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Paper Columns

Make paper columns in a circle, triangle and square shape. Stand a small card on top and add coins one at a time to compare which shape holds most.

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How to Run an Experiment

Question - what do I want to find out?

Prediction - what do I think will happen?

Method - what did I use and do?

Result - what happened?

Because - how could I explain it?

My Lab Record

Experiment

My question

My prediction

What I did

What happened

What I would try next