SCIENCE FOR ONE

Activities for doing **practical science** while **respecting social distancing**



- * Each activity sheet is based around one easy to obtain resource
- * Children work independently but should be encouraged to talk in pairs or groups
- * Any additional resources needed are minimal and easy to provide for each child
- * Activities are linked to topics and suggestions are given for three age ranges
- * The activities can be done outside.

Science with wire coat hangers

Wire coat hangers are useful for making displays of scientific artefacts. They can also be bent into quadrats and used to make mobiles or wind chimes. When learning about circuits, they are great for making a steady hand game.



AGE 5-7 NATURE WEAVING

Give each child a coat hanger and piece of string. To make a natural loom, wrap the string back and forth around the coat hanger and tie at each end. This could be done by adults before the session. Ask the children to collect natural objects (e.g. twigs, leaves, dead flowers, feathers) to weave into their loom. Encourage the children to:

- describe and name the objects and explain why they chose them
- decide if their objects are alive, were once alive or were never alive
- see how many different types of leaf they can include in their weaving
- discuss where in the school grounds they found the biggest range of natural objects

Taking photos of their weaving will enable this activity to be repeated each season to explore changes over time.



Resources per child

- 1 wire coat hanger
- 1m piece of string

Science explored

- Living things plants
- Observation over time

Interesting links

- RHS School for Gardening
- PSTT Garden Watch

Important note: The Primary Science Teaching Trust is not liable for the actions or activity of any person who uses the information in this resource or in any of the suggested further resources. The Primary Science Teaching Trust assumes no liability with regards to injuries or damage to property that may occur as a result of using the information on this sheet and recommend that a full risk assessment is carried out before doing any of the activities suggested.



AGE 7-9 METAL GONGS

This intriguing activity is good for generating discussion, comparing sounds and investigating how sound travels through different media.

Explain to the children how to make their metal gong by tying a piece of string to each corner of the coat hanger. They should then wrap the other ends of the two strings around each of their index fingers. With the coat hanger hanging between their hands, they should put their fingers into their ears and the tap the coat hanger against a surface, e.g. a wooden table-top. Challenge the children to describe what they can hear and how the sound changes when they tap their gong against a different surface.

The children could:

- Explore tapping different surfaces and materials both with and without their fingers in their ears
- Change the length of the strings
- Talk to their partners about possible reasons for the differences in the sounds they can hear
- Change the type of string, for example wool, twine, nylon, cotton

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Resources per child

- Coat hanger
- 2 pieces of string, each 30cm long
- OPTIONAL other 30cm pieces of thread (wool, nylon, cotton, twine)

Science explored

- Sound
- Comparative testing

Interesting links

- Sounds of Science
- PSTT Growing
 Music
- Chrome Music Lab

Resources per child

- Coat hanger
- <u>Woodland Trust iDial</u> or ID Sheet
- OPTIONAL hand lens, tent pegs

Science explored

- Living things
- Materials
- Observation over time

Interesting links

 Going under ground activity with Earth Explorers Club

AGE 9–11 COAT HANGER QUADRATS

Quadrats are a useful way of looking at biodiversity in your school grounds. Challenge each child to pull their coat hanger into a square shape. Take the children to an outside area where they are likely to find living things and prompt them to put their quadrat onto the ground. Ask them to look closely at the plants in the quadrat and name and count what they can see. If possible they should use the Woodland Trust identification Dials or Sheets to help with this. The children could:

 Complete a tally of what they can see in different areas of the school grounds in order to make comparisons – this could include animals and materials as well as plants and children could discuss the possible reasons for any similarities and differences they find



- Compare the plants in their garden or local park with the plants they have found in the school grounds
- Tent peg a quadrat to the ground and return to this area each week over the term to look for changes, e.g. they could observe a dandelion growing flowers, and making and dispersing seeds

Please **share** these activities in your networks and on social media, tagging **@pstt_whyhow** and **@RedPSTT.** For more **ONE FOR SCIENCE** activity sheets, click <u>here</u>.