

### 1. Cloud and star gazing

Depending on the time of day, either lie on back and gaze at the clouds or the stars. Look for shapes that you can see and call them out.

When you return inside, see if you can draw any of the shapes that you spotted. Have a look at:

<https://hubblesite.org/resource-gallery/learning-resources/tonights-sky> to see if you can identify the constellations you spotted.

### 2. Plant a seed

With permission, find a plastic pot or juice carton in the recycling. Then fill it with some soil from the garden or from your daily walk.

Take seed from something you have eaten e.g. cucumber, tomato, strawberry. Put it on some paper to dry and then plant it in your container.

Finally, give it a drink of water and watch it grow.

### 3. Science with water

Place some cups of water in different places in the garden and explore the different rates of evaporation. Remember that to make it a fair test, the cups and the amount of water must be the same. The only thing you should change is the location of the cup. You could use a ruler to measure the depth of water each time and record your findings in a table. In what area of the garden does evaporation happen the quickest and which the slowest?

### 4. Build a bee hotel

We all know about the important part that bees play in pollination and therefore we should be encouraging them into our gardens.

Build a bee hotel by filling a tube/ bottle from the recycling with hollow plant stems, bamboo and straws. This allows the bees to burrow into the ends. Pack any spaces with twigs and stems that you can find in the garden.

### 5. Play Islands and Sharks

Mark out the garden with hoops (or whatever you have to hand), 2m apart, each signifying an island.

Each child gets into a hoop/island.

Encourage the children to swim in the sea to the next hoop, keeping apart where possible.

Shout out the type of water they are swimming in e.g. calm waters (run slowly), rough waters (run fast), large wave (jump).

### 6. Blind man's obstacle course

Make an obstacle course in your garden or in a park, using materials you can find around you. Blind fold a family member and then guide them through the obstacle course using only verbal directions. You should use degrees of turn, clockwise, anticlockwise and points of the compass in your instructions. Set a number of points you start with and deduct a point for every boundary stepped on. See who is best at giving precise instructions.

### 7. Play with your shadow

You could play shadow tag with your family members. Instead of tagging each other with your hands, you tag each other's shadows with your feet instead!

Be a human sundial. Stand on some hard ground e.g. patio, look at your shadow and have someone draw around it, either with chalk or anything you can find to make a mark. Repeat this every hour and see what you notice.

### 8. Play with outdoor magic number squares

A magic number square is a grid in which every row, column and diagonal adds up to the same number (the magic number). 15 is the magic number for a 3x3 magic square in which the numbers 1-9 are all used only once. 34 is the magic number for a 4x4 magic square in which the numbers 1-16 are all used only once. Try making one out of materials you can find in the garden: [https://st-pauls.eschools.co.uk/cms\\_manage/edit\\_page/479049](https://st-pauls.eschools.co.uk/cms_manage/edit_page/479049)

### 9. Building with twigs and sticks

Gather twigs and sticks that you find when you are out for your daily walk. Then you could:

- ◆ What is the biggest number you can make? Think partitioning: what combination and operation will give you the biggest number?
- ◆ What is the tallest structure you can build?
- ◆ Use the twigs to make a frame for some nature art.

### 10. Make a rainbow

Rainbows are made when there is both sunlight and rain at the same time. As the white light that we usually see passes through the water droplets, it bends (refracts) and separates into the seven colours of the rainbow.

By doing this science experiment with different pieces of equipment, you can try different ways to make your very own colourful rainbow:

[https://st-pauls.eschools.co.uk/cms\\_manage/edit\\_page/479049](https://st-pauls.eschools.co.uk/cms_manage/edit_page/479049)

### 11. Make a face out of nature

The green man is a facial sculpture surrounded by leaves. Forms of this character are found in many different cultures through the ages. The icon is generally interpreted as a symbol of the cycle of new life at spring.

You could make your own version, either on a tree or on a fence. Find materials outside that you can use to make a face. Keep a record of the artwork either by photographing it or drawing it.

### 12. Experiment with Hapa-zome -

a Japanese term meaning 'leaf-dye.' Collect a range of leaves, berries and flowers. Position the natural matter as desired on a small piece of cotton fabric or kitchen roll. Either fold over the other half of material (if you want a symmetrical shape) or place another piece on top. Then hammer over the top layer of material using a heavy object, being careful not to damage the top layer. Remove the top layer and observe the natural imprint you have made.