

Go on a scavenger hunt

Scavenger hunts are great fun and can be done anywhere in the world. A scavenger hunt is also a great way to explore biodiversity! To celebrate International Day for Biological Diversity (22 May) – and also any other time of the year – why not spend some time in nature and see what you can find? How many items and living things can you identify on your hunt?

This activity is not only great to get involved with nature but also to train your mathematical brain. Look for certain materials found in nature, see can you label them (the National Parks and Wildlife Service’s guides on www.livingearth.ie might help), sort them, count them and record the results. This type of activity will deepen your understanding of mathematical concepts, improve your knowledge of living things and contribute positively to your wellbeing: spending time in nature has a very positive effect on our mental and physical health.

Create a list

Create a list before you head out, choose as many items as you like. Check out our template below for ideas. As an extra challenge you could extend the scavenger hunt to another location and then add the two together. For example, the front garden and the back garden or the local park and the beach. Please be considerate of the natural environment and only gather objects that have already fallen to the ground.

Head out

Once you have devised a list, take note of the time on the clock, and then head outside.

- Begin by looking for the first object on your list. Count how many of those items you see. For example, there are 3 trees in the back garden
- Write down that number. Or if there are lots of those items it may be a good idea to keep a tally instead.
- You may wish to collect some of the natural items for further analysis later e.g. sticks, round pebbles, fallen leaves, blades of grass, flower petals, shells).
- Continue through the list, searching for each of the items. Record how many of each kind you find. Take some sketches, tree rubbings or photographs.
- Don’t forget to take your time and look around. You may see some other interesting items that weren’t on your list. Can you discover any maths – patterns, shapes and more – in nature?
- When you’re done, look at the results. Which natural item did you find the most of? The least? Which stick is the longest or shortest, thickest or thinnest etc.
- Record the time on the clock again. How long did you spend scavenging?



Back from a successful scavenger hunt in the garden. Photo: Diane Murphy

Search for as many of the following items as possible

Fallen leaves

How many fallen leaves can you find?

Categorise the leaves as either deciduous or evergreen.

Collect some samples of different types of leaves.

Draw a sketch of one of the leaves or make a leaf print (www.livingearth.ie).

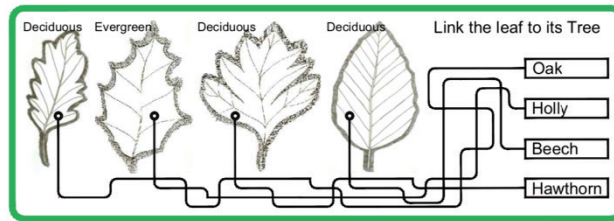
What type of shape does it have? What colour is it?

How is the texture of the leaf (waxy/smooth/rough/flimsy/bumpy/crumblly)?

Create a pattern collage with the leaves you have collected.

What species of trees or shrubs do they belong to?

Have a look at the tree guides and worksheets on www.livingearth.ie



Shapes of leaves. Credit: National Parks and Wildlife Service.

Sticks

How many sticks can you find on the ground?

Which stick is the longest/shortest/thinnest/thickest?

Arrange the sticks in the row, anyway you like/from smallest to biggest

How would you describe the texture (smooth/rough/bumpy/hard/crumblly)?

Trees

How many trees can you see?

Do they have leaves or not?

How to the trees differ from one another? What are the differences? Similarities?

If they have leaves, what colour are they?

Estimate the number the branches/leaves? Is it possible to count?

How would you describe the tree? (tall/small/wide/thin/bushy/bare)

Categorize the trees in terms of size – which one is the tallest/shortest? Which has the thinnest trunk?

Are there any animals in the tree? Count them

Take a bark rubbing. How would you describe the texture/colour of the bark?

What species of trees can you identify?

Have a look at the tree guides on www.livingearth.ie

Feathers

Can you find any feathers on the ground? How many can you collect?

Which feather is the longest or shortest, biggest or smallest?

What colour is the feather?

Can you draw a sketch of a feather?

Can you imagine what bird they belonged too?

Have a look at the bird identification guides on

www.livingearth.ie or the bird quiz on <https://www.wexfordwildfowlreserve.ie/activities/bealtaine-living-earth-festival-2020/>



Bullfinch. Credit: National Parks and Wildlife Service Bird Guide.



Common Dog Violet. Credit: National Parks and Wildlife Service Wildflower Guide.

Flowers

How many white/pink/yellow/purple flowers can you see?
Can you find a flower with 2 petals, 3 petals, 4 petals, 5 petals or more?
Count how many you find and record the results.
How many can you name?
Have a look at the wildflower and tree flower guides on www.livingearth.ie

Animals

Can you find an animal with 0 legs/2 legs/4 legs/more than four legs?
Record how many of each different birds you see in your garden. Put a time limit on it.
Can you find a group of animals together?
Birds/insects/cattle/fish? How many?
Sort the animals in order of size – draw a picture.
Which is the biggest/smallest, fastest/slowest, heaviest/lightest?
How many animals can you name?
Have a look at the identification guides on www.livingearth.ie or the mammal quiz on <https://www.wexfordwildfowlreserve.ie/activities/bealtaine-living-earth-festival-2020/>



Red admiral. Credit: National Parks and Wildlife Service Butterfly Guide.

Human made objects

What types of objects can you see in your garden that are not natural?
How would you describe the shape?
Can you find the following: straight line, curved line, square, triangle, circle, cuboid, sphere.
Can you find an object that you think is heavier than this?

Patterns and symmetry

Can you find any interesting repeating patterns?
Predict what would come next in the pattern if it were to continue
Can you create your own repeating pattern with some of the materials you collected?
Can you find something that has 1 line of symmetry? 2 lines of symmetry? Rotational symmetry?