



Technology in nature

Did you know that you can combine the latest technology with the natural world in some interesting activities? The following activities are fun and at the same time enable you to add to what scientists know about the health of species and habitats in the Bridgend area.

Photo bingo

You will need

- + A copy of the of the bingo cards below for each team member depending on where you will walk to
- + A smartphone/camera

1/ Woodland photo bingo card

Animal footprints	Visit a local landmark	Smooth rock
Feather	Hugging a tree	A puddle
A twig shaped like a Y	Something red	Something seasonal

2/ Coastal photo bingo card

Waves	Beach art	Shell
Seaweed	Snack time selfie	Footprints
Driftwood	Object shaped like something else, e.g. heart shaped rock	The sky

What to do

1. Head out on a walk and take a photo of each item on the bingo card. Who will be the first person to get all 9 photos?
2. Compile a collage showing all 9 items in one photo as a memento of what you found.

Extra activity

If you've already completed our 2 photo bingo challenges, why not make your own photo bingo card?

1/ Bingo card

2/ Bingo card

3/ Bingo card

4/ Bingo card

Geocaching

Geocaching is an outdoor activity that uses Global Positioning System (GPS) to hide and seek containers called geocaches. Put simply, it combines the great outdoors with technology and treasure hunting and is a great activity for people of all ages. There are geocaches everywhere – over 2.7 million of them globally! Some of our local green spaces in the Bridgend area have geocaching trails set up around their grounds, e.g. Bryngarw Country Park and Kenfig National Nature Reserve. Why not try one of these?

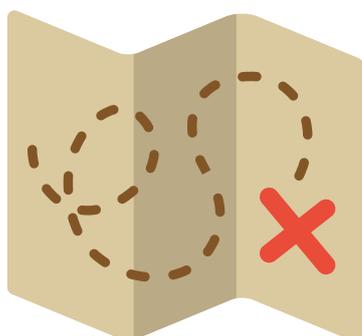
You will need

- + Smartphone
- + Free geocaching app
- + A pen or pencil to sign log books
- + Sensible footwear – geocaches can often be off paths so you might get muddy trying to find them
- + Some trinkets to swap (optional)

- 1 Download a free geocaching app.
- 2 Discover geocaches near you and choose one to find.
- 3 Get outside and find it.
- 4 Jot a note down in the cache's logbook.
- 5 Swap a trinket you take with a piece of treasure in the cache. Take something small. Leave something small.

Remember to follow the countryside code when out exploring:

- + Remember to respect other people
- + Remember to protect the environment
- + Remember to enjoy the outdoors



Stargazing

It's impossible to know how many stars exist, but astronomers think that in the Milky Way alone there are over 300 billion stars! Some stars appear to form a particular pattern which is known as a constellation. Stargazing is a great way to bring science alive and is an activity that anyone can enjoy. Why not head out on a clear night, look up, and see what you can see? Because light takes time to travel, and stars are many light years away from us, you could be seeing a star that no longer exists!

You will need

- + Smartphone with a free Stargazing app installed
- + Something to lie on
- + Warm clothes
- + A flask of hot drink

- 1 Head outside and find somewhere cosy to lie down in your back garden or local green space, or look out of your window.
- 2 Look up at the night sky. The longer you look up, the more stars you will see.
- 3 Use your Stargazing app to help you identify what you can see. If you're really lucky, you might be able to see another planet!



Stargazing top tips

- + Stargazing is best done when it's not a full moon, so check the phase of the moon.
- + Light pollution from our towns and cities can reduce the amount of stars we can see. If you can, head away from lots of lights to get the best view of the stars possible, or make sure you turn off all the lights in your home to reduce pollution.
- + What you see changes depending on the time of day and time of year. Try Stargazing at different times of the year.



Citizen Science

Smartphones are a great way for people to participate in collecting information about the natural world for real science. Just by going for a walk and recording things you see on your smartphone, you can help scientists monitor Bridgend's habitats and see how they are changing. This kind of research is called Citizen Science.

It's a really important activity as it enables scientists to collect a huge amount of data that they wouldn't be able to collect on their own. What you spot and log on your smartphone might even help contribute towards a scientific breakthrough that changes our understanding of the world!

You will need

- + Smartphone
- + Citizen Science app/web page of your choice

What to do

- 1 Choose a Citizen Science project that interests you.
- 2 Install the relevant app on your phone, or open up the relevant web page. Some projects run all year long, whilst others are seasonal. Similarly, some research projects are Wales-based, whilst others are global. Some options include:
 - **LERC Wales App** – allows you to record any species 'on the go' in Wales
 - **WacxApp, Plantlife** (autumn) – helps you identify and record the location of Waxcap fungi in the UK
 - **Dynamic Dunescapes** (Plantlife) – helps restore sand dune biodiversity in England and Wales by recording plant species found on them
 - **Bridgend wildlife survey** – help us discover all about the hidden wildlife across the Bridgend area
 - **Marine Debris Tracker** – tracks plastic pollution around the world
 - **Globe at Night** (webapp) – raises awareness about global light pollution
- 3 Head out on a walk around your local area and submit your observations.
- 4 Feel good and empowered knowing that you have contributed to scientific research in the Bridgend area.

