**Winter scavenger hunt** Aged 11 – 14: answers

**Green plant**

**What do the leaves tell you about the plant?**

What type of plant it is, it’s health and condition, whether it is deciduous or evergreen during specific seasons and that it requires sunlight and contains chlorophyll.

**How does this relate to photosynthesis?**

Plants need sunlight to stay healthy. If they aren’t getting enough, then they may not produce enough chlorophyll to keep photosynthesizing, so the leaves may discolour from their usual and struggle to stay green.

Find out more about photosynthesis: [BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/zpwmxnb/revision/1)

**Seed pods**

**How are seeds spread?**

Bees, insects and animals carry them from plant to plant on their bodies while they look for food. Light seeds are carried on the wind. Sometimes, people pick them and plant them in different places.

Find out more about: [Plant reproduction with BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/zs7thyc/revision/4)

**Lichen**

**What does this plant need to grow?**

Lichens can colonise in places where there are extremes of humidity, temperature and light, and they often occur in places where few other macroscopic living things can survive. Lichens are slow growing and can get all the nutrients they need from rainwater and dust.

Find out about [lichen and air pollution](https://www.bbc.co.uk/bitesize/guides/z83qcj6/revision/5)

**Did you know that reindeer, in their natural habitat, rely on lichen to eat during the winter months? Why do you think that is?**

Lichen doesn’t require much sunlight to produce chlorophyll; the spongy material of the fungus also holds up well against the harsh temperatures. Reindeer sniff out lichen beneath the snow and use their curved hooves or antlers to uncover it.

Find out more reindeer facts: [Nat Geo Kids](https://www.natgeokids.com/uk/discover/animals/general-animals/reindeer-facts/)

**The effects of wind**

**What type of force is this?**

The speed and direction of the wind is governed by three forces; the pressure gradient force (PGF), the Coriolis Force and friction.

Curious facts about wind power on: [Fun Kids Radio](https://www.funkidslive.com/learn/curious-kate/curious-facts-wind-power/)

**Habitats**

**How many different types of habitat can you find on your walk?**

**What kind of animals live in these different habitats?**

Find out more about: [ecosystems and habitats](https://www.bbc.co.uk/bitesize/topics/zxhhvcw)

**Birds nest**

**Can you see a bird’s nest in a tree?**

**What kind of bird do you think it might belong to and why?**

Birds nest in various hedgerows, shrubbery and trees and identifying where the nest is, can be a useful starting point to find out which type of bird is nesting. Remember never to touch or move a nest, and it might help to find some specific images for each birds nest type, to help you identify the nest: [Discover Wildlife](https://www.discoverwildlife.com/how-to/identify-wildlife/how-to-identify-garden-bird-nests/)

**Different types of rocks**

**What type of rocks have you found?**

All rocks are either igneous, sedimentary, or metamorphic. Perhaps the rock has been weathered or compressed. Find out how these three types are formed and more detail at: [BBC Bitesize resource](https://www.bbc.co.uk/bitesize/guides/zwd2mp3/revision/5)

**Different types of birds**

**Can you name the birds you have seen?**

The RSPB (Royal Society for the Protection of Birds) has an online bird identifier that you can use to help.

Once you know what kind of bird you have seen, you can find out about where they live, what they eat and differences from other birds.

Visit the: [online bird identifier](https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/identify-a-bird/).

**Animal tracks**

**What type of animal do you think has made these tracks?**

Look at the shape of an animal’s feet to give you a clue as to who has left the prints. Perhaps it has sharp claws, or webbed feet, maybe even cloven hooves. Online, you can find websites that show lots of different prints so you can identify which animal made the ones you found.

Find out more: [Wildlife Trusts](https://www.wildlifetrusts.org/how-identify/identify-tracks)  or [Discover Wildlife’s](https://www.discoverwildlife.com/how-to/identify-wildlife/how-to-identify-animal-tracks-and-trails/) ‘how to identify tracks’

**How fast do you think they were moving and how can you tell?**

Examine the depth of the imprint and how far apart the footprints appear to work out pace. You could even conduct a science experiment with your friends to work out human prints, based on speed and distance of shoeprints.