

Plant Survival

The desert is extremely hot and dry – not really ideal for most plants! You might think it would be impossible for anything to grow, but some plants have evolved incredible adaptations to survive in this harsh environment.

So How Do Cacti Survive in Deserts?:

We couldn't visit the desert without looking at of the most well-known desert plants – cacti!



*Image Credit:
Alex Furguele*



*Image Credit:
Nicolas Moscarda*



*Image Credit:
Stephanie Green*



*Image Credit:
Cody Doherty*

All cacti are slightly different, but here are some clever adaptations that they can have:

- Thick, waxy skin helps keep water inside
- Large stems to store water
- The water stored inside attracts thirsty animals, so spines and spikes keep them from munching on the cactus
- Some have roots that go deep underground to reach water stored far below the surface
- The plants don't grow until the rain falls (this is called dormancy)

Plant Adaptation at Home:

Although desert plants have to overcome extreme heat and drought, all plants have adaptations that help them live in their own environment.

Plant Scavenger Hunt

Let's see if we can spot any adaptations in the plants around us.

Go out into your garden, local park or green space and try to find around 9 different plants (you could even take a camera and photograph them or try to draw them).

Try to think of why they might look the way they do – why might the shape, colour etc. make it easier to survive?

Hints:

- Flowers help attract pollinators (animals that help plants reproduce)
- Spines make the plant unattractive to hungry animals
- Berries and fruit attract animals who then take the seeds drop them away from the parent plant
- Little hairs help keep water inside the plant
- Tough, waxy leaves are harder to digest and less likely to get eaten
- Little spouts on leaves help water to fall toward the roots
- The green colour comes from a chemical that lets the plant take energy from the sunlight (called chlorophyll)

There are lots more examples of adaptation in the plants we see around us all the time!

Here is an example of our plant scavenger hunt from around Edinburgh:

