

# Survival of the fittest: Find out how plants are adapted to different environmental conditions

Step 1

## Explore different biomes

Journey through Kew and look for plants that have interesting adaptations.

**Hint:** Plants have developed specific adaptations to survive environmental stresses in different climates.

### For example:

- To reduce water loss, the leaves of many plant species have waterproof, waxy surfaces.
- Pine trees have evolved needle-like leaves, which minimise surface area and reduce water loss. This helps them survive in the frozen taiga biome, where liquid water is often scarce.

Step 2

## Adaptations

Observe the plants and record their adaptations.



Broad leaves



Spikes



Bright flowers



Strong smell



Low-growing



Needle-like leaves



Shiny surface



Silvery hairs



Thick trunk

Step 3

## Environmental conditions

Which environmental conditions have the plants adapted to in order to survive?



Humidity



Temperature



Sunlight



Wind



Rainfall



Lack of pollinators



Presence of herbivores



Competition

## Challenge:

Observe five plants that look very different. Record their adaptations and the environmental conditions to which they have adapted in order to survive.

## Key vocabulary:

adaptation, climate, humidity, temperature, photosynthesis, pollinators, herbivore, competition

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Name of plant	Adaptations	Environmental challenges driving survival adaptations