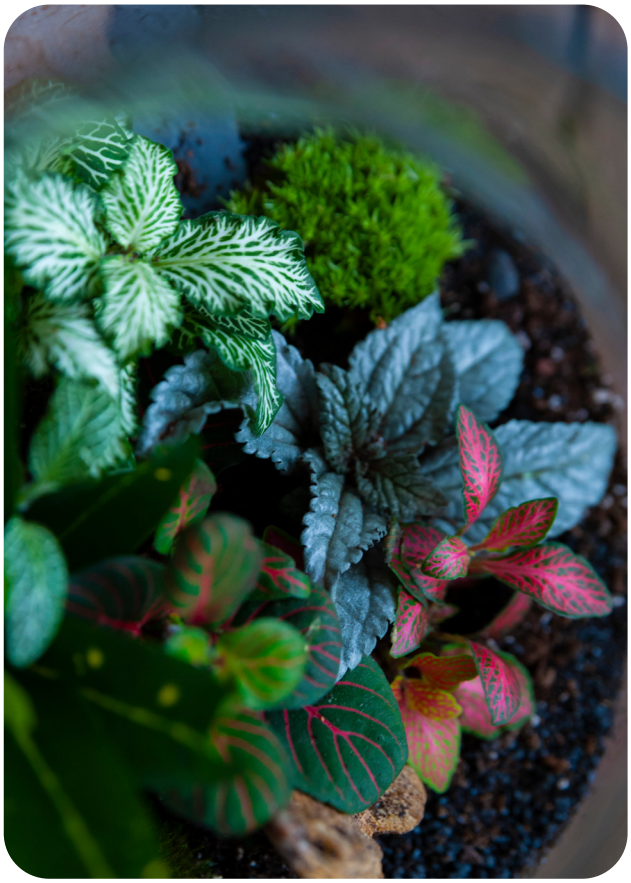
FUN DAMENTAL THE SERIES

MAKE A RAINFOREST

What you will need

- A glass jar with a lid and a wide base
- Small pebbles or gravel
- Potting soil
- Moss and plants such as tiny ferns, baby spider plants or miniature African violets (have a look in your garden for plants and moss you could use)
- Cup of water



Why are rainforests so special?

They're the largest source of oxygen on the planet, absorb carbon dioxide and occupy just 6% of the Earth's surface area yet house 50% of the world's plant and animal species...
What are they? Rainforests!

Vast areas of dense forest found in tropical locations with heavy rainfall, eg: South America, Asia and Africa. Each rainforest has its own ecosystem, with temperatures between 27–32°C, and they're made up of layers, with the emergent layer – ie the trees poking out through the canopy – at the very top, then the canopy itself, where you'll find the majority of trees, followed by the understory layer, which is populated by many birds, snakes, lizards and larger predators, before lastly reaching the forest floor, which only receives 2% of the sunlight. It's the combination of this structure, high temperatures and rainfall that help form this unique microclimate.

Instructions

1. Have a look around your garden to see if there are any plants and moss to use in your mini rainforest.
2. Cover the base of your jar with pebbles, then spoon in a layer of soil about 5cm deep.
3. Next, spray your plants with water. Plant your small plants into the soil.
4. Add little pieces of moss to the jar around the plants.
5. Water your rainforest a little.
6. Put the lid on and place the jar in a warm, well-lit spot.
7. Watch your rainforest bloom and record what happens over the next few weeks.

Reflection

You will see first-hand how a rainforest's microclimate works and will learn that rainforests don't in fact require much rainfall at all.

Change the challenge level

Do some research in to the cycle of water, specifically about how the heat warms up the jar and how water vapours – or gases – are turned into liquid, forming on the inside of the jar and dripping down into the soil, which the plants take up through their roots.
Think about what would happen, for example, if the jar had no light.