



# MAKE A RAINFOREST

Recreate the microclimate of the Amazon on a super-small scale

## 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.

Photos: iStock, Getty

### DID YOU KNOW?

The rainforest is home to meat-eating plants that emit a powerful odour to attract and trap insects





## FACTFILE

- Frogs, birds, monkeys, insects, turtles and jaguars live in the rainforest
- Foods such as vanilla, chocolate, ginger, pepper and nuts grow here
- A quarter of natural medicines were discovered in the rainforest
- The rainforest helps to regulate the world's temperatures and its weather patterns

### ACTIVITY

#### Suitable for all

Source some natural materials for the jar, and assemble it outdoors.

#### You will need

- a glass jar with a lid and a wide base
- small pebbles or gravel
- potting soil
- moss
- herb seeds
- plants such as tiny ferns, baby spider plants or miniature African violets
- cup of water

### Instructions

- 1 Ask your section to cover the base with pebbles, then spoon in a layer of soil about 5cm deep.
- 2 Next, ask the group to spray the plants with water.
- 3 Show the young people how to plant out the tiny ferns etc.
- 4 Now they can take turns to poke holes in the soil to place seeds in, then cover them with soil. Add little pieces of moss to the jar.
- 5 Get your section to water their 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 two to three weeks.

### TIME NEEDED

30 minutes

### BADGE



Rolls-Royce partners the Cub Scientist Activity Badge

### PARTNER

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### OUTCOMES

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

### TAKING IT FURTHER

Talk to your group about 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. Discuss with your section what would happen, for example, if the jar had no light.

### MORE INFORMATION

Rolls-Royce partners the Cub Scientist Activity Badge to inspire young people about science, technology, engineering and maths. Fun and educational activities like this aim to take the fear out of science for Cub Leaders and support Cubs in achieving their Scientist Activity Badge. See: [scouts.org.uk/rollsroyce](https://scouts.org.uk/rollsroyce).

