

## Activity - Rainmakers

**This activity introduces pupils to the water cycle and the important role of trees.** It also includes a factsheet showing why rainforest trees are important for our climate.

### Curriculum links:

#### Geography:

Growth and nutrition - the effect of light, air, water and temperature on plant growth

The part played by evaporation and condensation in the water cycle

### Starter questions:

Where does rain come from?

Why is rain important?

Is rain the same everywhere?

### This might help:

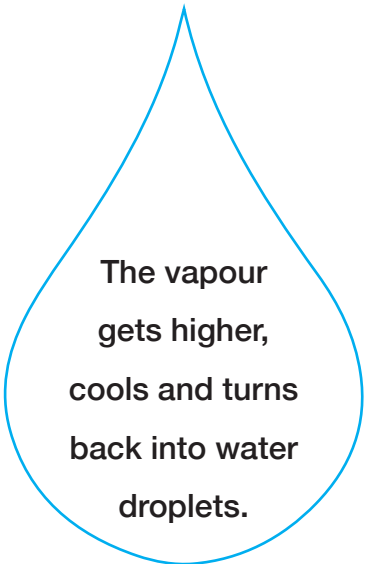
Water cycle - for more detail on the water cycle why not try MET Education's weather resources.

[metoffice.gov.uk/education/teachers/key-stage2](http://metoffice.gov.uk/education/teachers/key-stage2)




## Activity Sheet - Rainmakers

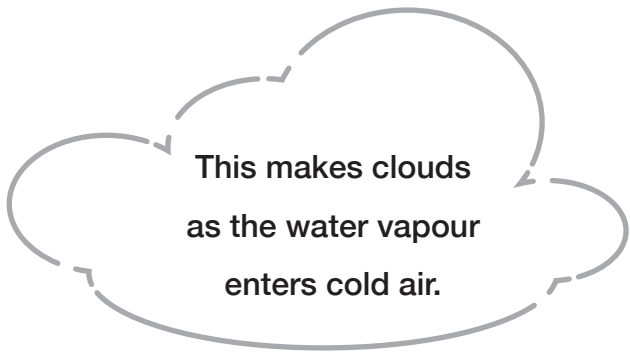
Read the sentences and put them in order by numbering them, for example 1 = The hot sun shines through the trees. Can you turn all the sentences into a picture that shows the water cycle?



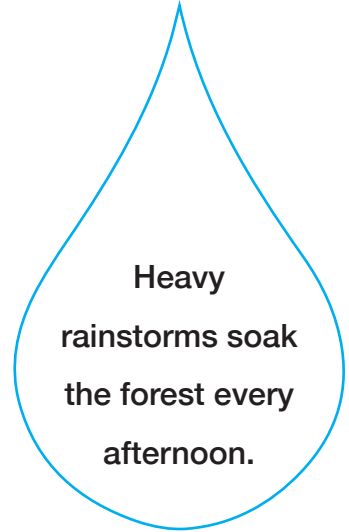
The vapour gets higher, cools and turns back into water droplets.




This is called evaporation.



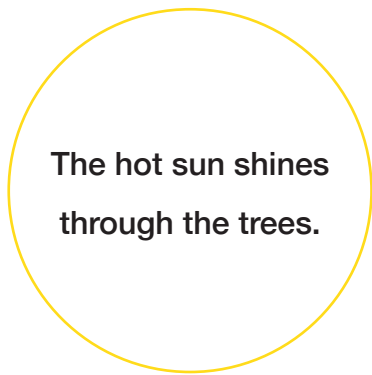
This makes clouds as the water vapour enters cold air.



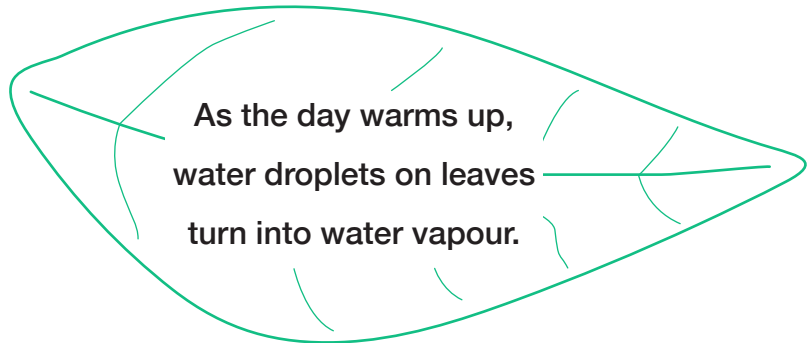
Heavy rainstorms soak the forest every afternoon.



Misty vapour rises into the sky.



The hot sun shines through the trees.



As the day warms up, water droplets on leaves turn into water vapour.

## The invisible rivers of the rainforest

**The Amazon rainforest is very hot.** Every day billions of litres of water vapour are released into the air through a process called evaporation. As the air moves away from the rainforest to the high mountains of the Andes, it is forced southwards, transporting the water vapour like invisible flowing rivers in the sky. This eventually falls as rain not only in South America but also in places as far away as Africa.

## Why are rainforest trees important for our climate?

**If rainforest trees are cut down the air becomes drier.** There is less rain in the forest and less water vapour evaporates into the atmosphere. This would lead to less rain around the world and more problems with drought.



**Trees store carbon in their trunks, branches and roots.** When trees are chopped down, burnt or die, they give off carbon dioxide. About one fifth of all carbon dioxide being released into the atmosphere comes from dying trees.



**If all the Amazon rainforest was destroyed, 77 billion tonnes of carbon dioxide would be released into the atmosphere.** This would mix with other dangerous 'greenhouse gases' and contributes to global warming.

