

CLIMATE COMPARISONS

RAINFOREST

and a

DESERT.

They have very different amounts of rainfall because they have very **different climates!**

1. COLOUR IN THE RAIN GAUGES WITH YEARLY
← RAINFALL FOR EACH ENVIRONMENT →

THE AMAZON RAINFOREST

Average rainfall per year:

(Colour any value between these)
2,000 - 10,000mm

THE SAHARA DESERT

Average rainfall per year:

(Colour any value between these)
25 - 100mm

2. CIRCLE THE CORRECT WORDS

RAINFORESTS ARE MOSTLY:

Wet Dry Sunny
Clouded Hot
Fertile Lush Bare
Arid Cold

DESERTS ARE MOSTLY:

Hot Bare Wet
Cold Sunny
Clouded Dry Lush
Fertile Arid

3. WHICH ENVIRONMENT FEELS LIKE IT HAS MORE
MOISTURE IN THE AIR (HIGHER HUMIDITY)?

The Rainforest Environment

RAINFOREST CHALLENGES



There's so much water in the rainforest, plants are wet all the time! Water on their leaves can get heavy, block light, or make the plants rot or grow mould.

HOW DO PLANTS SURVIVE IN VERY WET ENVIRONMENTS?

1. Rainforest plants have "drip tips", meaning pointy ends on their leaves. This means water runs off their leaves more easily.

FIND TWO PLANTS WITH DRIP TIPS, WRITE THEIR NAMES, AND DRAW THEIR LEAVES.

a. _____

Most rainforest plants.

b. e.g. _____

Xanthosoma violaceum



2. They have a glossy surface so water runs off and they don't get mouldy.

FIND AMORPHOPHALLUS TITANUM AND FEEL ITS BIG GLOSSY TRUNK!

(in the big pot)

3. Some plants in the rainforest don't even bother putting their roots in the soil to find water. They perch in other trees and collect water with leaves shaped like water-slides!

FIND SOME PLANTS THAT LIVE IN OTHER TREES. WHAT ARE THEIR NAMES?

E.g. Tillandsia tenuifolia, Tillandsia neglecta,
Epidendrum ciliare (any tree-trunk trellis plants).

DESERT CHALLENGES



There's so little water in the desert that plants need to keep all the water they can! All plants need water to survive. If they dry out, they will die.

HOW DO PLANTS SURVIVE IN VERY DRY ENVIRONMENTS?

1. Desert cacti have no leaves, as they would dry out. Instead they have hairs or spikes, which can collect water when it rains.

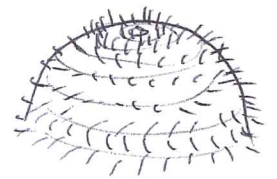
FIND TWO PLANTS WITH HAIRS, WRITE THEIR NAMES, AND DRAW EACH ONE.

a. _____

Many of the cacti

b. e.g. _____

Mammillaria hahniana



2. They have waterproof skin to keep water inside, stored in their juicy stems.

FIND THE HAWORTHIAS. SEE THE LIGHT SHINE THROUGH THEIR JUICY INSIDES?

(star shapes, in the rockering on the succulent side).

3. Some desert plants have very long, deep roots. Others have lots of very shallow, wide-spread roots.

WHICH ONES SUCK UP RAINWATER?

Shallow, widespread surface roots.

WHICH ONES TAP INTO UNDERGROUND STREAMS AND AQUIFERS?

Long, deep roots.