Year 7

Name:

Teacher:

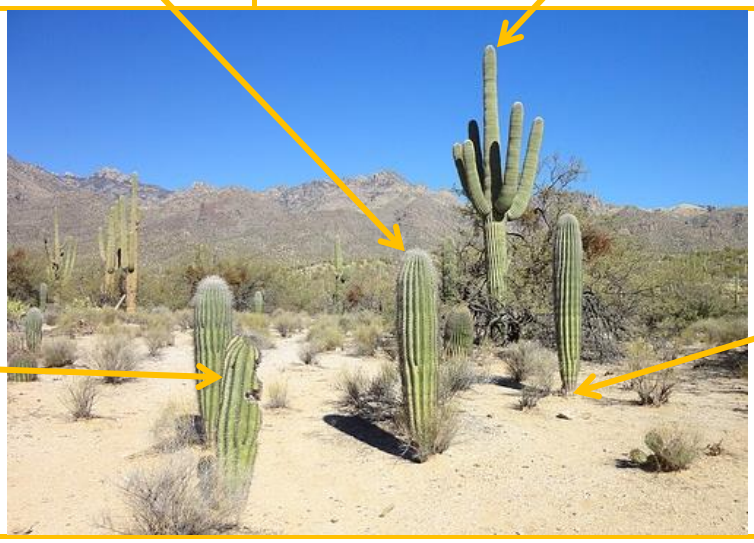
Title: How do animals and plants live in deserts?

Task 1: Plants are adapted to live in the hot deserts. Below in the diagram are some ways cactuses are adapted to live in the hot and dry deserts!

The cactus has spikes/spines instead of leaves. This is to **reduce the surface area** and reduce **water loss through transpiration** (water lost from evaporation in plants)

Having **spikes protects the plants** from animals that want to eat them for their water

The skin **is thick and waxy** which helps **reflect the heat and conserve (hold) water**



A **shallow network** just below the **surface the can soak up any rain water** quickly

Explain the three ways that cactuses reduce water loss (transpiration).

1. Shallow network of roots =

   _____

   _____

2. Thick and waxy skin =

   _____

   _____

3. Spikes/spines and not leaves =

   _____

   _____

Task 2: Using the success criteria in the green box below, design your own animal or plant species that lives in the desert.

Your design **must include labels that explain how it is adapted.**

Success criteria:

- How does your species store water for the hot and dry days? – *e.g. has an extra-large belly to store fat which can be broken down later into water.*
- How does your species stay warm during the night time when temperatures drop to 0°C? – *e.g. the animal buries itself underground in a burrow, and sleeps in the sand where it is warmer at night time*
- How is your species adapted to predators? e.*g. spikes or sharp claws to protect itself from being eaten*
- How does your species or plant make/find food? *e.g. hunts smaller animals for food*
- Where is your species in the food chain? *e.g. is a plant so is at the bottom of the food chain*

Name of species: _____