

(b) You have just learnt how plants adapt themselves to obtain and conserve water and the importance of freshwater. Water is a scarce resource in Singapore. How do we overcome the challenges of this lack of supply? Discuss with a partner and list at least four ways in the table here.

| S/N | Method(s) |
|-----|-----------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |

Name: _____

Water for Life



Lower Secondary Activity Sheet

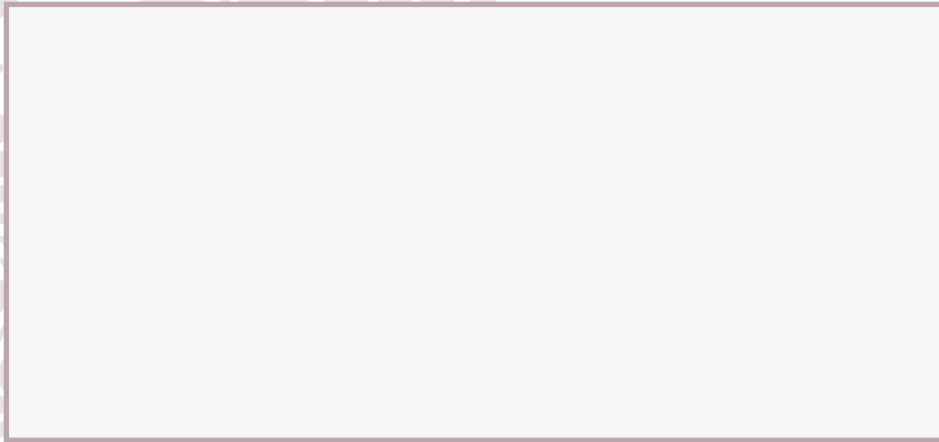
ACTIVITY 1: BRAVING THE DROUGHT

(a) At *The Baobabs* in the Flower Dome, you will find trees with swollen, bulging trunks. When they drop their leaves, they look like drumsticks!

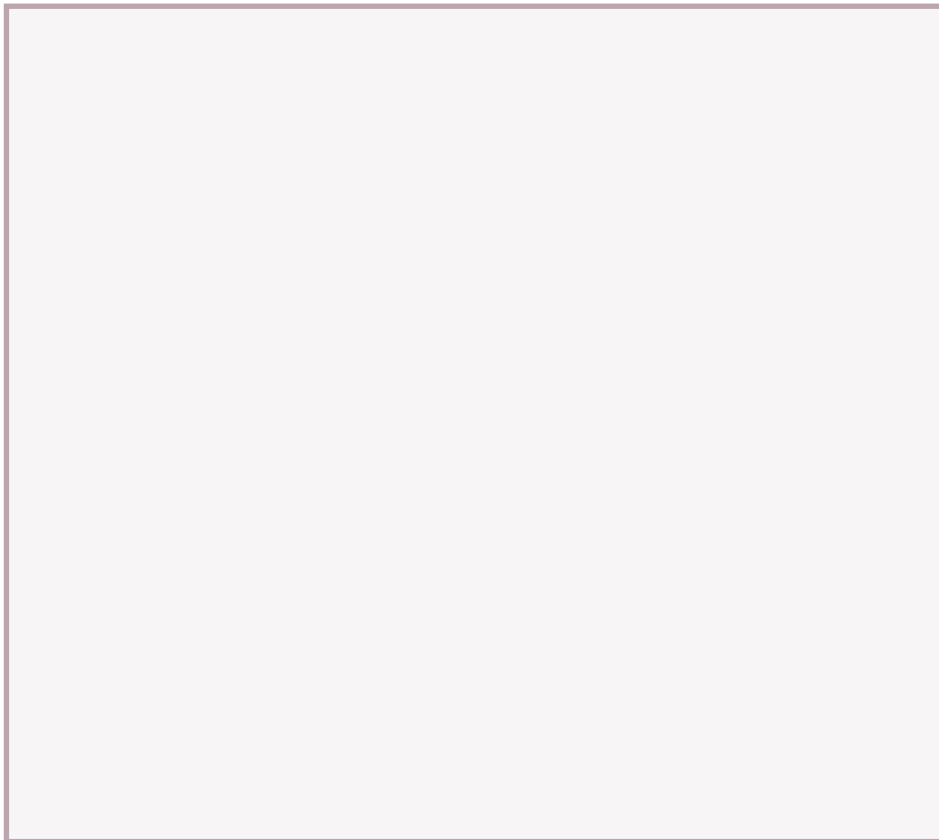
What is the name of these trees?

(b) Read more about the tree identified in (a) above. What is stored in its swollen trunk? State its function.

(c) Proceed to the *Succulent Garden* at the Flower Dome. You will find many plants here that have adapted to a dry environment with prolonged exposure to sunlight and extended periods of drought. Observe them. What are some common physical features that they have? List at least three in the space provided on the next page.



(d) What are the functions of the physical features you have identified in (c) above?



ACTIVITY 2: MANAGING WATER

As you enter the Cloud Forest conservatory, enjoy the magnificent view of the waterfall that greets you at the entrance.

Cloud forests are moist tropical or subtropical montane forests with persistent low-level cloud formation. The plants in cloud forests are well-adapted to the high humidity and low temperature generated by a cloud-immersed environment.

Cloud forests around the world are important sources of freshwater. The plants capture rainwater and vapour that condenses from fog and clouds. Some of this makes its way down the mountain through streams, rivers and waterfalls, supplying people, plants and animals living downstream with a water source, while adding freshwater back to the ecosystem.

(a) A higher sea surface temperature caused by global warming will result in clouds forming at higher altitudes. What will happen to the plants and animals currently living in cloud forests when this happens?

