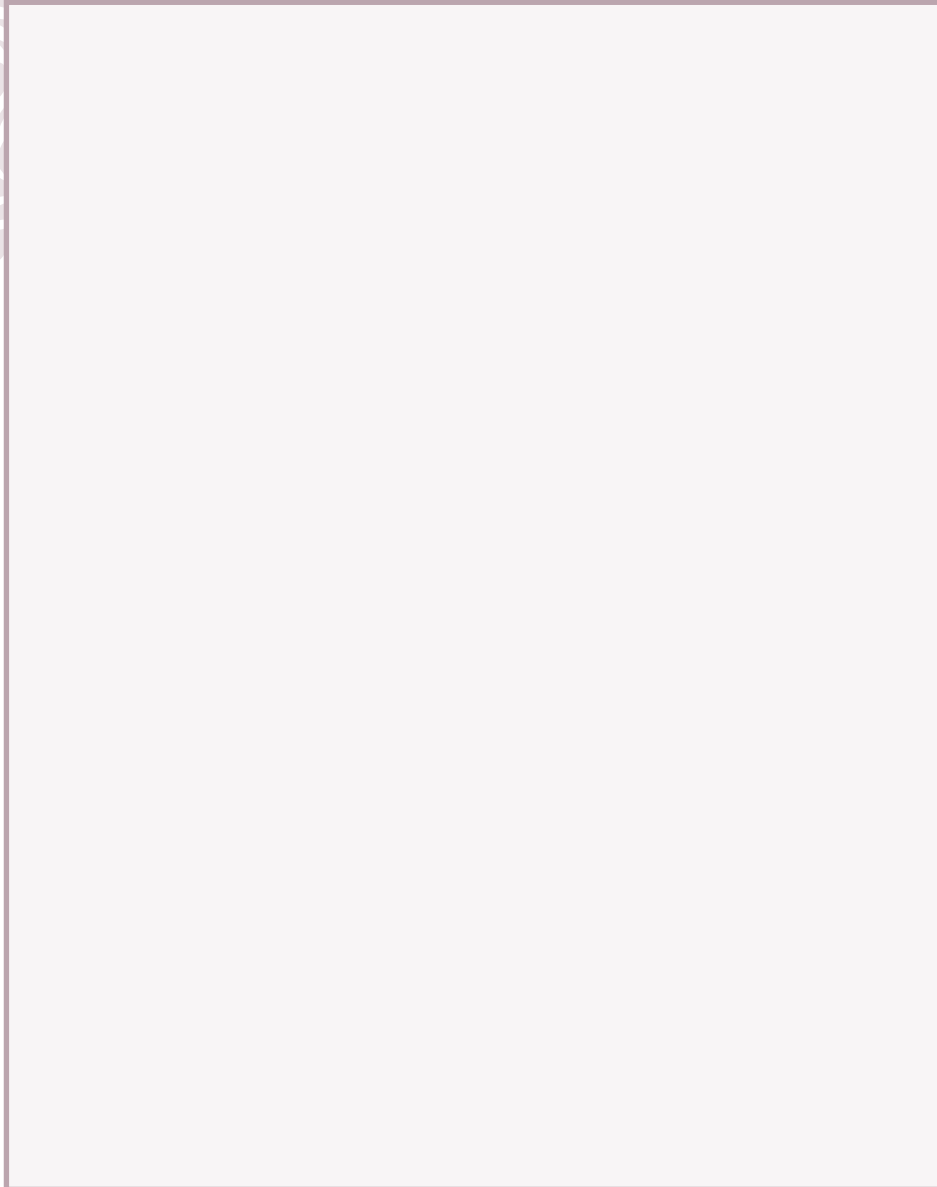


(b) You have just learnt about the sustainable practices of Gardens by the Bay. If you are an architect of a new housing development in Singapore, how would you design these buildings to be environmentally sustainable? Draw your designs in the space provided and share it with your class.



Name: _____

Unique Biodiversity



Secondary Activity Sheet

ACTIVITY 1: UNIQUE BIODIVERSITY

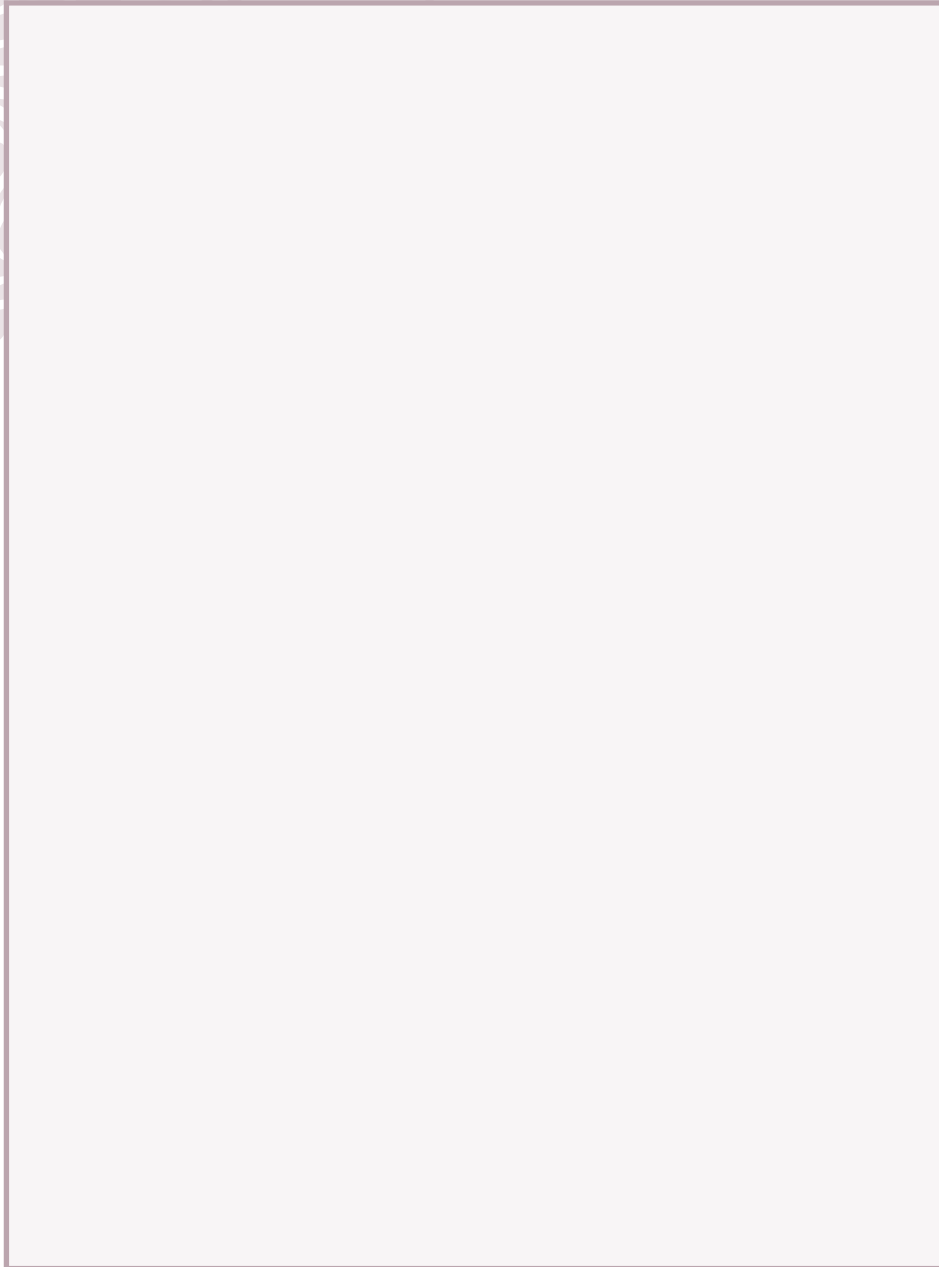
(a) Located at the extreme south-western region of South Africa is the *Cape Floral Region*, home to one of the greatest concentration of non-tropical vascular plant species in the world. The area is filled with extremely diverse plants, with nearly three-quarters of them endemic, found naturally only in this part of the world. Learn more about some of these plants at the South African Garden, at the Flower Dome.

What are the three distinct types of plant communities that can be found in this region? State their characteristics in the space provided.

(Hint: Read about them at the information panels here)

	Name of Plant Community	Characteristics of the Climate / Environment	Type / Example of Plants
1			
2			
3			

(b) The unique plants in this amazingly diverse region are threatened by human activities. Name and elaborate on three of these threats.

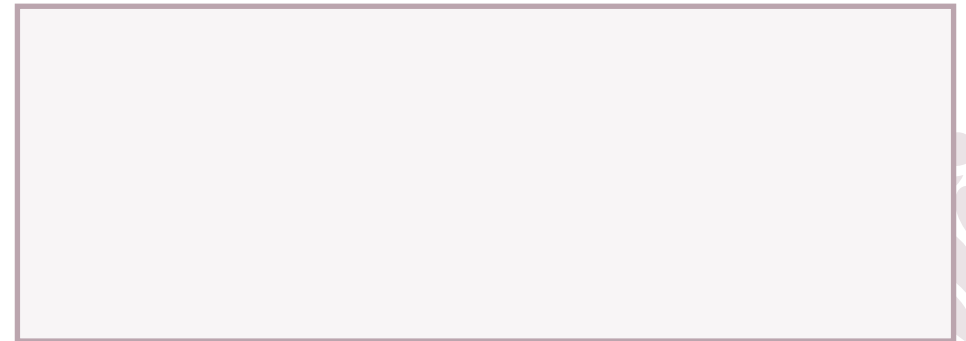


ACTIVITY 2: HIGHLY ADAPTED

Cloud forests around the world are important sources of freshwater and are unique habitats of a large number of endemic species. Many of these flora and fauna are highly adapted to survive in a very specific set of cool and moist conditions that exist at a certain elevation but not another. Explore the Cloud Forest at the Gardens.

How are these organisms affected by global warming?

(Hint: Find out more from the information panels at the Forest Floor, Cloud Walk and Cloud Forest Gallery.)



ACTIVITY 3: ALTERNATIVE SOLUTIONS

(a) To play our part in maintaining a balance with nature and reducing our carbon footprint, Gardens by the Bay uses sustainable energy and practices. Proceed to watch the animation and illustration of the Gardens' sustainability strategies at Cloud Forest Theatre, to find out more.

What is an alternative, renewable energy source used at Gardens by the Bay? How is it used here?

