



Lesson 1 Worksheet

What are coastal ecosystems?

Name -

Date -

What are coastal ecosystems?

1. Complete the following table to outline the characteristics of 3 coastal ecosystems

Ecosystem	Description of ecosystem	Key plants and animals	Abiotic factors influencing this ecosystem
Rock platform			
Beaches and dunes			
Intertidal estuaries			

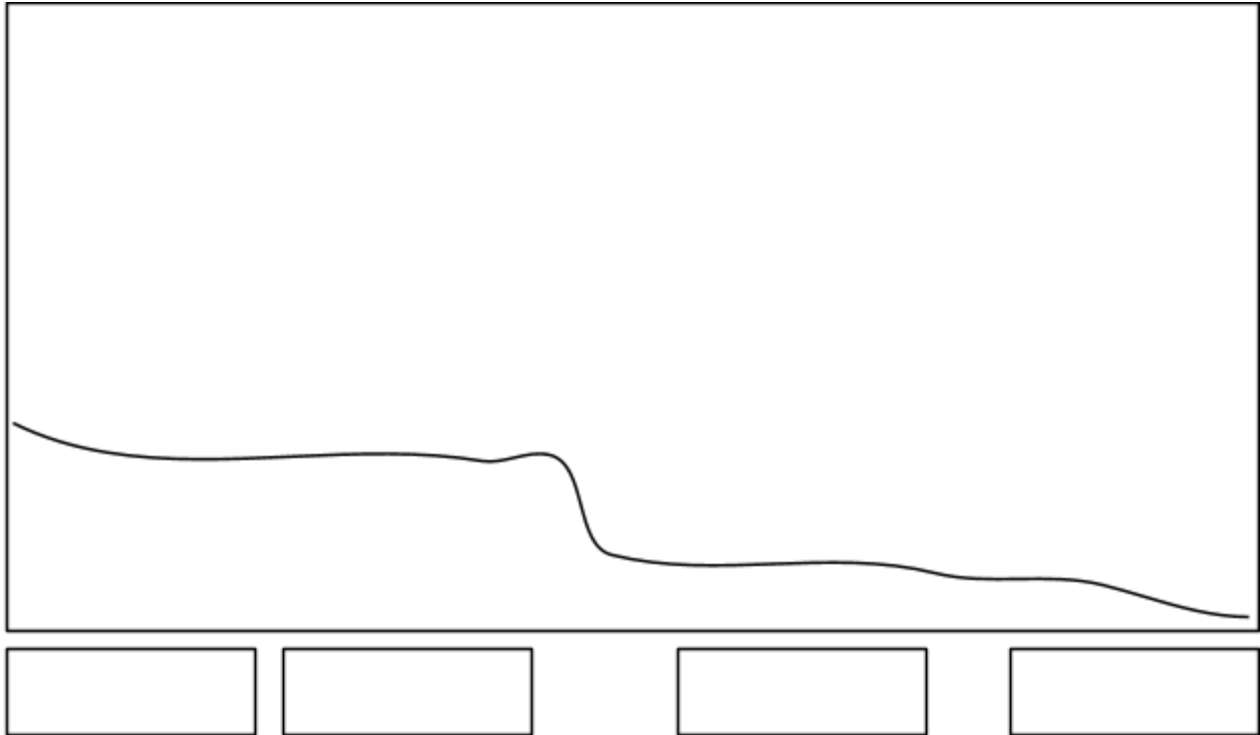
Minnamurra study site

2. Complete the following table to outline the characteristics of the Minnamurra study site

Ecosystem	Description of community	Key plants and animals	Abiotic factors influencing this community
Seagrass			
Mangroves			
Saltmarsh			
Sheoak			

Zonation of Minnamurra River's Coastal Ecosystem

3. Sketch the four plant communities along the Minnamurra river from the water landward. If using Google Docs, click on the diagram to edit and select the scribble tool to complete your diagram. Label the zones and indicate water level at low tide and high tide.



Impact of Tides

4. Title each paragraph with the corresponding abiotic factor.

During low tide, mud flats are exposed, which reach high temperatures and dry out.	At high tide, the mud flats are covered by water. Animals require gills in order to breathe in such conditions	Brackish water brought from the ocean by the tides limits the growth of many plants.	Waterlogged soil has very few air pockets, limiting the respiration of plant roots



5. Describe the movement of tidal flow and outline the implications of tides within Minnamurra's coastal ecosystems.

Impact of Salinity

6. Describe **two** ways in which the brackish environment along the Minnamurra could be damaging to plants.

The value of Coastal Ecosystems

7. Provide descriptions and explanations for each of the ecosystem benefits listed in the table below.

Benefit	Description	Why is this important?	Examples (seagrass, mangroves, saltmarsh or sheoak)
Enhances water quality			
Riverbank stabilisation			
A nursery for marine species			
Carbon sink			
Biodiversity			
Wind Break			