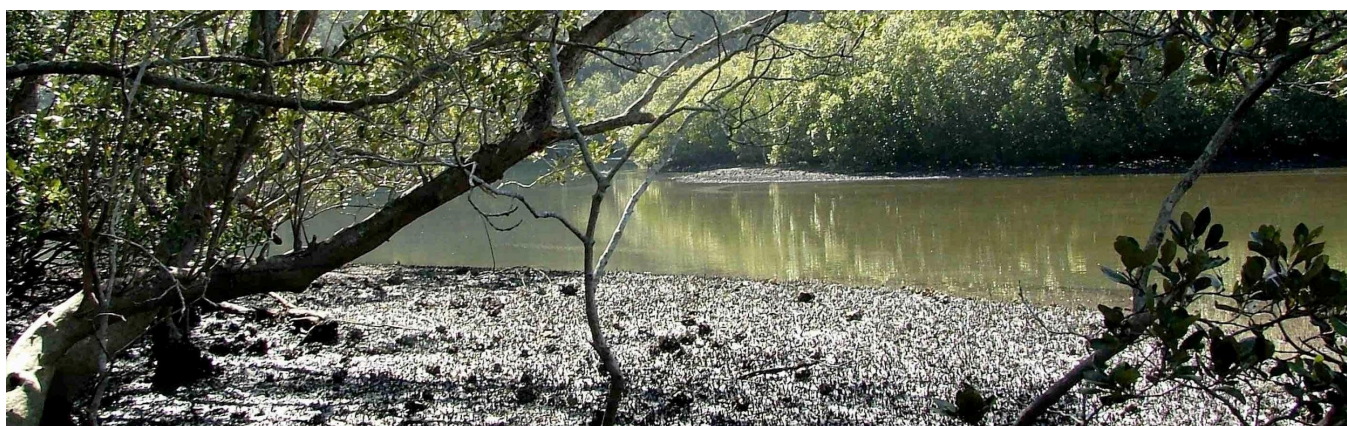


# Investigating Intertidal Wetlands

## Stage 6 Investigating Science



## Student Pre-visit Booklet



The following student Student Support Booklet was designed to be used and completed in association with the [Intertidal Wetlands Resource Hub Resource Hub google site](#).

### Before the Fieldwork

1. Download and save the Student Pre-visit Booklet into your own drive before you begin.
2. Use the top menu on the Intertidal Wetlands Resource Hub to navigate through the pre-visit activities, completing each in your booklet.

# Context

Read the information and watch the video to answer the questions below.

1. Observation and inference are used in science to collect data. Explain the difference in quantitative and qualitative data?

Answer:

2. What is the intertidal zone and what is it composed of?

Answer:

3. In your own words, what is the purpose of your investigation?

Answer:

4. What Working Scientifically skills will you be using during the fieldwork tasks

Answer:

# Fieldwork Preparation

## 1. Mangrove Ecosystem

Use the links under this heading to answer the questions below.

1. What are mangroves?

Answer:

2. Why are they important to the environment and to humans?

Answer:

3. What are their key functions?

Answer:

4. What is the status of mangroves worldwide and what are their threats?

Answer:

5. List three ways mangrove ecosystems are managed?

Answer:

# Mangroves at Bobbin Head

Click on the [Gibberagong youtube channel](#) and watch the videos to answer the questions below

6. Watch the video for Question 6. What is the process for commencing an investigation?

Answer:

7. Watch the video for Question 8. How do you prepare for a fieldwork investigation?

Answer:

8. Watch the video for Question 11. How do you process and analyse data?

Answer:

9. Watch the video for Question 13. What potential human impacts do the mangroves at Bobbin Head face now and into the future?

Answer:

10. Why are crabs important in a mangrove ecosystem?

Answer:

## 2. Water Quality Measurements

Read the information and watch the videos on the page and answer the questions.

1. View the photo/image for each piece of equipment and record in the table below

Water salinity	
Water pH	
Water temperature	
Turbidity	
Dissolved oxygen	
Phosphates	

2. What is the method for measuring water pH? (Watch the video)

Answer:

### 3. Crab Distribution

#### Crab Sampling Techniques

Read the information on the page to answer the question.

1. Why are we able to assume that when counting the abundance of crabs that:  
***one crab hole equals the presence of 1 crab?***

Answer:

#### Ecosystem Survey Techniques: Quadrats

Read the information and watch the video on the page to answer the question.

2. Summarise the information from the video “*Sampling Organisms*”

Answer:

### 3. Aboriginal understanding of Country and Place

Read the information and watch the videos on the page to answer the question

1. What are some ways in which Aboriginal Peoples connect and care for Country?

Answer:

2. How are Aboriginal and Torres Strait Peoples engineers? And what knowledge do they need to have?

Answer:

## 4. Site Information

### Visitor Information

The following questions refer to the [National Parks Website](#)

1. Who manages Bobbin Head and list four ways they manage the park?

Answer:

### Risk Management

Read the risk management plan and visit the [Bureau of Meteorology \(BOM\) site](#) to answer the following questions.

3. Name and describe 3 risk factors that need to be considered whilst doing this fieldwork.

Answer:

4. Why does the BOM site and tidal charts need to be consulted when doing fieldwork?

Answer:

### Historic Photos

[View the photos to answer the questions.](#)

5. Describe two changes to Bobbin Head over the last 100 years?

Answer:



6. What are some of the potential human changes that occurred at Bobbin Head that may have impacted on the intertidal zone?

Answer: