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- B2. What do phytoplankton do in the photic zone? B3. What lives in the intertidal zone of an exposed shore?
- B4. What is a red tide?
- B5. How do corals feed and reproduce?
- B6. What is coral bleaching?
- B7. How do molluscs feed, breathe* and kill?
- B8. What's so unusual about spiky skinned animals?
- B9. Can you prepare some answers to whale questions asked by tourists?
- B10. How do turtles feed and reproduce?
- B11. How do sharks move?

Part C Classification 40

C1.	What	lives	in	the	tree	of	marine lif	e?
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- C2. How are sharks and rays classified?
- C3. Why do we need a system to classify marine life?
- C4. What is the definition of a species?
- C5. How are new species discovered?
- C6. How are identification keys made a
- C7. What structural characteristics the N arate

Part D: Marine Ecology

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Teacher's guide notes

- All information to answer the questions is contained in the textbook *Marine Science for Australian Students 2005, 2007 and 2009 Editions.*
- Students use the marine biology exercises to obtain basic facts before they complete their field work. (The models in A6 and B3 identify basic habitats)
- The appendixed overhead transparency masters support the exercise book and provide additional illustrations that could be turned into worksheets.
- The answers are suggestions.
- The questions were designed to help the student practise answering different levels of literacy question (see page 591 of your textbook).
 - For example the harder questions have more challenging verbs such as interpret, distinguish between and decide, whereas easier questions will have verbs such as name, state, label, list or complete.
 - Each State has its own literacy guidelines on this so please consult these first.
 - The verbs have been underlined in Exercise A1.
- The lectures were designed for TAFE classes for Marine Biology guides.

Please drop me an email at bmoffatt@wetpaper.com.au if you have any comments as they would be most welcome

Bob Moffatt Wet Paper Publications

Part A: Mangroves and seagrasses

A1. What do mangroves look like?

Aims

- To identify and describe common mangrove features.
- To describe some mangrove adaptations.
- To explain mangrove distribution in terms of latitude.

What to do

• Read pages 259 - 261 of your textbook - *Marine Science for Australian Students* and answer the questions below.

Questions

- Q1. <u>Label</u> the following external features in Figures 5.1 and 5.2: Pneumatophores, trunk, leaves, fruit.
- Q2. <u>Distinguish between</u> the different ways the term *mangrove* can be used.
 - (1) a trees
 - (2) as a forest and
 - (3) as a habitat or ecosystem
- Q3. <u>Describe</u> where mangroves are found.

Mangroves are found growing in the intertidal areas of

sheltered shores, estuaries and bays.

They are also found in the lee of large islands, river entrances

and creeks where mud has been deposited.

Q4. <u>Complete</u> the missing words -Mangroves are the temporary (*hakuats*) for fish populations and are in the top of the *most productive ecosystems on Earth*.





Q5. <u>Draw</u> a graph in the space below to <u>distinguish between</u> the numbers of mangrove species found at different latitudes. <u>Explain</u> why more mangroves are found in the tropics compared to temperate latitudes.

Tropics - higher rainfall, greater biodiversity, protected coastline

Temperate - lower rainfall, colder, unprotected coastline - high wave action, shorter creeks and rivers





Figure 6.2 Mangrove distribution