

Marine Life Pre and Post Visit Activities

Brainstorming and Graphic Organizing are useful classroom activities to introduce a topic or to prepare for excursion activities. These activities can be done in a number of ways, below are some suggestions. Class protocols are essential for effective brainstorming, for guidelines see <http://vels.vcaa.vic.edu.au/support/teaching.html#brainstorming>

Objectives: To establish prior knowledge;
To stimulate student engagement;
To establish learning priorities.

Marine Life A to Z

Ask students, working in small groups, to complete an alphabetical table (p. 4 *Marine Life A-Z* activity sheet) by writing a word associated with Victorian marine life for each letter.

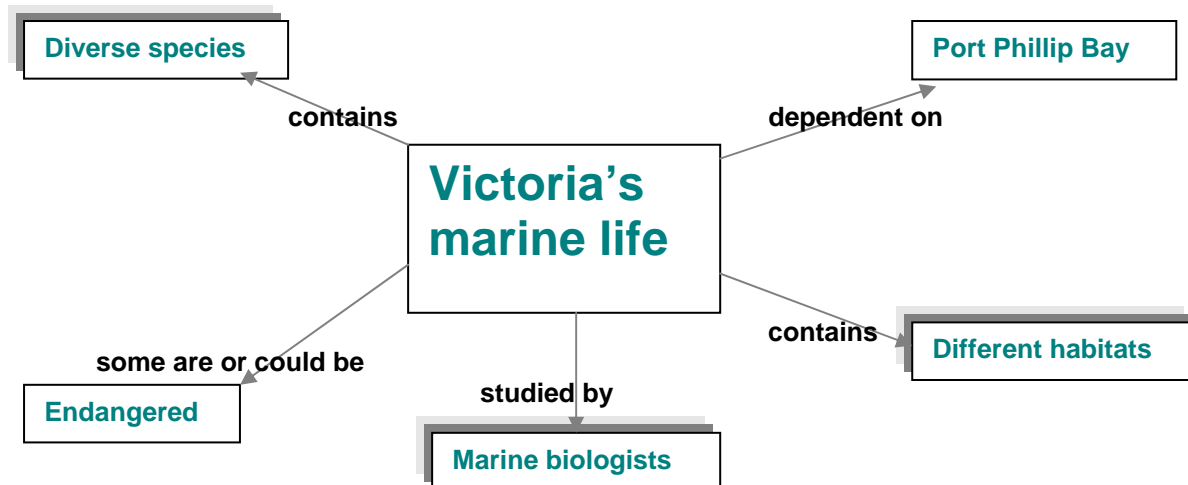
Extension: suggest that students draw diagrams or pictures, explain the relevance of their word or devise adjectives. Challenge groups to use alliteration in their table—curious crustacean, wacky wiggly worm...

Marine Life Concept Map

Mapping relationships between ideas or concepts is an effective way of identifying prior knowledge and understanding. Major gaps or issues can also be identified.

Beginning with the central idea or theme (middle box), ask students to suggest four to five components or sub-ideas around this and to consider how they relate. Each of these components can then be further brainstormed to determine students' understanding and interest.

Below is an example generated by the *Marine Life* exhibition team, however it is best to use ideas generated by students in the class.



Mind Map

Similar to a concept map, however images or words may be used. For hints on constructing mind maps, visit: www.jcu.edu.au/studying/services/studyskills/mindmap/howto.html

Marine Life K-W-L-H Organiser

Ask students to (individually) write down what they already know about marine life—and what they would like to know/learn about (p. 6 *Marine Life K-W-L-H* activity sheet).

The organiser provides students with a framework to explore prior knowledge and consider they want to learn. It is most effective when students are given the opportunity to reflect individually before sharing with others. (Activity sheets should be kept and columns L & H completed after the excursion or at the end of a unit of work).

K: students recall what they **KNOW** about the subject; **W:** students determine what they **WANT** to learn. **L:** students identify and reflect upon what they have **LEARNT** at the end of unit/activity; and **H:** **HOW** did they learn it—aiding meta-cognition by assisting students to reflect upon how they learnt what they did.

Sea Charades

Objective: To become familiar with some of the species names and scientific terminology used in marine biology.

Students love playing charades, although some may prefer to play in smaller groups, rather than 'perform' in front of a class. Teachers can arrange their own class/groups accordingly.

1. Divide the class into groups of roughly equal size.

2. Ask each group to make a pile of cards with words or phrases with a marine theme.

Initially you may wish to supply the words (p.7 *Sea Charades* mastersheet) for groups to select for their charades. However, once students have grasped the concept, they can formulate their own ideas—generally more fun as all the opposing team know the charade, and take great pleasure in the actions of their opponents.

3. Ask a student from the first group to take a card and act out the word or phrase to the rest of the group. If the group solves the charade within the time limit, they are given a point. Suggest a time limit of about 2 minutes. Students may need to be instructed in the hand gestures used in charades (see below) and the class may decide to make up some new ones such as 'species' or 'habitat' instead of 'film' or 'book'.

4. A student from the next group takes their turn, and this continues until all students have had a turn.

If groups are uneven, one student can take two turns. The winning team is the one with the most points at the end, and are crowned 'Marine Monarchs'.

Hand Gestures for charades:

- Hold up fingers to indicate number of words
- Place fingers against inner forearm to indicate number of syllables
- Hold pointer and thumb a short distance apart to indicate 'little word' eg. a, at, to, in, of.
- Slide pointer-finger of one hand along the dip between the thumb and pointer of the other hand to indicate 'the'

Extension: ask students to research one of the words or phrases and report their findings to their group or to the class.

Marine Hall of Fame

Objectives:

- To stimulate student interest in marine creatures;
- To consolidate and expand students' ICT skills;
- To find, organise and present data in a variety of ways.

In this activity, students are invited to join the exhibition team for the *Marine Life* exhibition, and produce an interesting *Hall of Fame* for marine creatures from Victorian waters (p.8 *Marine Hall of Fame* activity sheet). They are asked to decide which categories to include, what to research, and how to present the *Marine Hall of Fame*. Information to be displayed may include graphs, pie charts or pictograms to explain the data as well as text, photographs or models.

You may wish to take your students to visit the 'bug' *Hall of Fame* whilst at Melbourne Museum. It is located in the *Bugs Alive!* exhibition opposite the entrance to *Marine Life*. This wall-display includes extremes such as the biggest moth, the deadliest people killer, the bug with the loudest call and other amazing creatures.

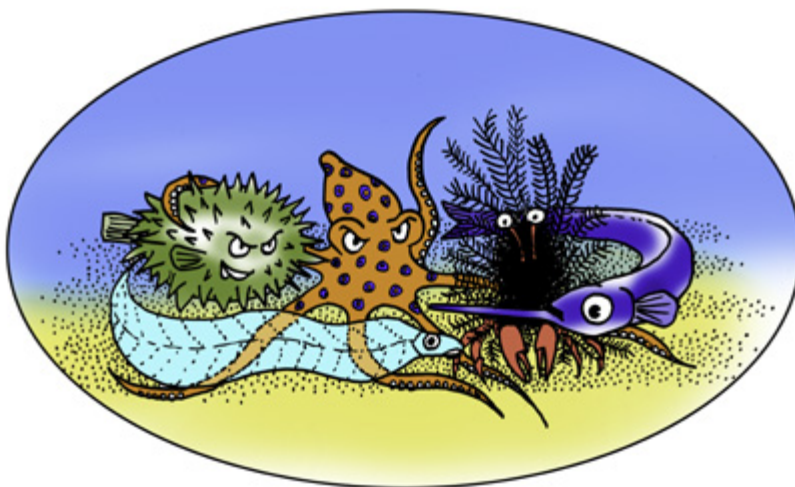
Extension: Develop and produce a school exhibition. For an outline of production roles, see *Treasures* education activities www.museumvictoria.com.au/treasures/resources/.

Ridiculous Rhymes

In the *Marine Life* exhibition there is a display called 'Superheroes of the sea' which looks at some of the amazing adaptations that some marine animals have to either catch food, or more commonly, to avoid being caught. Shells stuck to the wall act as headphones so that visitors can listen to some ridiculous rhymes and silly skits that the exhibition team came up with to get the message across.

Now it's your turn! Ask your students to describe something that they found interesting about the exhibition or about marine life. Next they choose a fun way of telling their story—they could record a short audio-play, write a poem or limerick, or any creative way of communicating the message.

Extension: students create a poster from their *Marine Life A-Z* table, adding new words, images or descriptions from their visit to Melbourne Museum. The poster *Cool Water Wonders A-Z* could be used as a visual stimulus (available from the Queenscliff Marine Discovery Centre or Melbourne Museum Education Service).



Illustrator Mark Norman.

Marine Life A to Z

Complete the table below by writing a word associated with marine life around Victoria. Use any resources you have available.

Be as creative and imaginative as you can, as there will be a bonus for groups who produce a word that no other group has thought of!

A	B
C	D
E	F
G	H
I	J
K	L
M	N
O	P
Q	R
S	T
U	V
W	X
Y	Z

Marine Life K-W-L-H

1. Write down what you already know about life in the sea.
2. What you would like to find out about life in our sea or deep oceans?

What I know	What I want to find out	What we learned	How we learnt it

Marine Life Charade Cards

Weedy seadragon	Porcupine fish	Seagrass meadow
Sponge garden	Giant squid	Tasselled anglerfish
Hermit crab	Port Phillip Bay	Twelve Apostles
Old Wife	Spider crab	Jellyfish
Bottle-nose dolphin	Flying fish	Orange Roughy
Little Penguin	Gummy shark	Banjo shark
?		

Marine Life Hall of Fame

You are invited to join the exhibition team for the *Marine Life* exhibition. Your task is to produce a *Hall of Fame*—presenting the most interesting marine creatures that live in the sea around Victoria.

1. Brainstorm

First your team needs to decide what categories to include in the exhibition. Some ideas to consider are: the biggest, smallest, most poisonous, longest-lived, weirdest shape.

2. Research

Next use the internet, library or other resources to research the selected categories. Museum Victoria's *Marine* web-portal www.museumvictoria.com.au/marine/ has links to images, information sheets and other sites that may be useful.

3. Displaying information

Once you have collected enough information, think about the ways to explain the categories in your *Hall of Fame*.

Labelled diagrams, graphs, pie charts, pictograms may be useful methods of explaining your data—good presentation can make a lot of information easy to understand.

4. Production

Present your *Marine Hall of Fame* concept using available media—discuss possible choices with your team.

Some ideas are:

- Create a display poster or exhibition catalogue;
- Construct a wall or table-top display of objects with printed labels;
- Make a multimedia slide-show or a webpage.



Illustrator Mark Norman.