

## Junior Primary Poster Kit Activities

### What you need to know

1. To obtain your free set of posters email [info@ausmepa.org.au](mailto:info@ausmepa.org.au)
2. Go to the website [www.ausmepa.org.au/poster](http://www.ausmepa.org.au/poster) to download information sheets to be used with the posters
3. The titles of the posters are:
  - a. Anemonefish
  - b. Cuttlefish
  - c. Dangers
  - d. Hermit crab
  - e. Fairy penguin
  - f. Seahorses and seadragons
  - g. Sharks and Rays
  - h. Turtle
4. These activity sheets cover the Australian Curriculum for Foundations Year to Year 4
5. In the future we hope to also provide some smartboard activities which will be available on the AUSMEPA website.

## Year 3

Australian Curriculum	Content description
Science	Living things can be grouped on the basis of <a href="#">observable</a> features and can be distinguished from non-living things ( <a href="#">ACSSU044</a> ) Science involves making predictions and describing patterns and relationships ( <a href="#">ACSHE050</a> ) Science knowledge helps people to understand the effect of their actions ( <a href="#">ACSHE051</a> )
Geography	The similarities and differences in individuals' and groups' feelings and perceptions about places, and how they influence views about the protection of these places ( <a href="#">ACHGK018</a> )
English	Plan and deliver short presentations, providing some key details in logical sequence ( <a href="#">ACELY1677</a> ) Identify the <a href="#">audience</a> and purpose of imaginative, informative and persuasive texts ( <a href="#">ACELY1678</a> ) Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over <a href="#">text</a> structures and <a href="#">language features</a> and selecting print, and multimodal elements appropriate to the <a href="#">audience</a> and purpose ( <a href="#">ACELY1682</a> ) Use software including word processing programs with growing speed and efficiency to construct and edit texts featuring visual, print and audio elements ( <a href="#">ACELY1685</a> )

### Teacher and classroom preparation:

- Download and skim through the poster factsheets before the lesson. Have the factsheets handy if you want to refer to them during the lesson.
- If you are going to use the worksheets, you will need to make copies.
- A touch table of material commonly washed onto the beach would be valuable.
- Equipment to show powerpoint presentations.
- Computers or tablets for students to access the internet.

### Lesson 1 – Observing and grouping features

#### Prior learning

- Divide the class into small groups
- Each group is to make a list of sea animals with the following features
  - Has four or more legs
  - Has eyes
  - Has wings
  - Has teeth
  - Has fins
  - Its feet help it swim
  - Has a hard body
  - Has a long tail
- Then each group looks at the list of features and chooses the animal on their list that has the most of these features.

### Identifying features

- Organise the posters around the room and provide students with the activity sheets 'Observing and grouping features.'
  - Explain to students that they are to look at the posters and tick which features they can observe and how the animals get their oxygen, in the air or from the water.
  - When completed, discuss with students why they ticked certain boxes. It may be that students have different definitions for some features.
  - Make a note of any questions students have which are unanswered. These can be investigated when students do their research.
  - Confirm that students know that birds and turtles breathe air. Most of the other sea creatures use gills to get oxygen from the water.

### Touch table

- If you have collected materials from a beach to make a touch table, allow students to handle the material. Discuss what features each of the items have.

### How do marine animals move?

- The posters are organised around the room and students are provided with the activity sheets 'How does it move?'
  - Explain to students that they are to look at the posters and tick how the animal moves, if it is able to hide and it has features that help it hang on.
  - Once completed as a class discuss what features these animals have for moving and those that can hang on and hide.
  - Make a note of any questions students have which are unanswered. These can be investigated when students do their research.

### Research an animal

- Print the factsheets. Place the factsheets and the posters together.
  - Small groups choose which of the animals they will research.
  - They can identify questions they want to answer.
  - Besides the factsheets they can find further information on the internet.
  - After writing their notes they could make a short research report on a computer.
  - They have permission to download and use photos from the Ausmepa website photo library <http://www.ausmepa.org.au/photos.asp> (can also enter the photo library from 'Student research' from Ausmepa homepage).

### Marine celebrity head

- Print out some small photos from the Ausmepa photo gallery that students will be familiar with.
  - Use whatever is at hand so the photo can be placed on a student's head eg pinned to a cap.
  - Choose a student to wear the unknown animal.
  - The student wearing the animal has to ask questions about its features and where it lives. The class can only respond with yes, no or bad question. Make sure the rules are applied.
  - The alternative is that students ask you questions and you reply. They must not name the animal unless they first get your permission.

## Lesson 2 – Using our marine resources

### What is happening to some of our marine resources?

- Use the powerpoint 'What was it?'
- Go through the first part of the powerpoint
  - Each slide has some specific questions for students to answer. Most slides provide students the name of the kind of animal on the slide. When students are asked to guess, they should attempt to propose an answer with supporting observations, ideas or past experience.

- The first part of the powerpoint examines food products used from the sea.
- The second half shows a range of dead animals found on the beach. Many have died naturally, but not all of them. The protein in all the animals will rot away. Bones and shells will gradually be pulverised by waves and storms.
- Discuss how seafood is an important source of food for many people around the world. Introduce the concept that to protect seafood, their habitat needs to be protected and that we should not remove too many animals so their numbers are always able to recover.

### **Lesson 3 – What is marine pollution?**

#### **What happens when things are left in water?**

- Obtain 5 large jars with lids.
- Gather some typical waste that becomes litter. This would include, paper, plastics, aluminium and food including processed (bread) and fruit peel. The items should be all small enough to go into the jars.
- The lids should prevent the experiment from smelling.
- Explain to students that five common items of litter will be placed in five separate jars of water.
- Provide students with the activity sheet. 'My stinking experiments.' The experiments won't really stink if you don't place meat or dairy products in the jars and the jars will have lids on them.
- Ask students what they might expect will happen when the five items are placed in water over a period of time (week).
- Students write their predictions onto the activity sheet.
- The experiment is set up.
- After two or three days students make and record their first observations. This could include taking photos with a tablet.
- Students make their final observation at the end of a week.
- Discuss which items rotted and which did not.
- What happens to the quality of the water when food items rot?
- Students could start to write a small report on what happens when litter gets into the sea.

#### **The reason litter and other pollutions are super dangerous?**

- Show students the powerpoint 'Pollution in the sea'
- Students discuss the consequences of pollution
  - How does plastic affect many sea animals?
  - How does plastic get into the sea?
  - What can we do to prevent plastic going into the sea?
  - What does oil do to beaches?
- Use the internet to find pictures of oil affected wildlife. Good combinations of search words are 'pollution bird oil.' This can be done for the web or for images.
  - Look at the impact on marine life.
  - Find out how birds are recued.
- Watch the video <http://science.howstuffworks.com/environmental/green-science/cleaning-oil-spill.htm> on how stuff works. There may be a short commercial before the video starts. Students could find more videos by searching in Google 'oil spill cleanup.'

#### **Is your beach clean?**

- Dissolving something in water
  - Use a packet of salt, spoons, small bowls and water.
  - Ask students about the properties of the water and the salt
  - Ask them what they think will happen if the two are mixed?
  - Get students to mix the water and salt. Only use a small amount as it takes time to dissolve. even when stirred.

- Using cold water, you may need to wait until the next day for the water to look clear again.
- If the experiment has been done under clean conditions, student can see if the water tastes salty. (From their experience of the sea they would expect it to be so.)
- Ask students what beach they like to visit.
- Recall the stormwater drains in the powerpoint and what else goes down these drains.
- How do some council's keep beaches clean?
- What do the tractors pick up?
- Recall the rotting bread. Once the bread has rotted and gone smelly what will happen to it? Can the tractor clean things that have dissolved into the water?
- What happens to dog droppings?
- Discuss how a dog dropping is going to dissolve in the rain and get washed into the stormwater.
- What else might be washed into the storm water?

#### **Discovering where marine pollution starts?**

- Take students outside.
- Look for openings in the school's stormwater drains.
- Can they find litter, leaves or other things that can get washed into the drains?
- Use an iPad to take photos of the litter and the entrances into the stormwater system.

#### **Let's make some rules**

- Discuss what kind of rules we can make to reduce the wrong things getting into the stormwater drains.
- If students started a short report, they can now complete their report and include their rules or they can make a list of rules they think are most important.
  - They could include photos taken in the school ground.
  - They could use the AUSMEPA photo gallery and download images.
  - They could draw their own illustrations.

### **Lesson 4 - Visiting the beach**

#### **Preparing students**

- Safety at the beach
- Download the safety fact sheet and read it before the lesson.
  - Use the safety poster with the class. Look at each item on the poster and discuss how each one might be a safety problem when visiting the beach.
  - Read relevant text from the safety fact sheet to fill in student information.
  - Point out that there are many other safety issues such as drowning and sunburn as examples.
  - Discuss how broken glass and fish hooks may have got onto a beach.
  - Complete the activity sheet 'How will I stay safe?'
- Decide on what other rules and preparation are required eg:
  - Suncream
  - Hydration
  - Clothing and footwear
  - Getting wet?
  - Distance from a supervising adult
  - Going to a toilet
  - Running on slippery surfaces
  - Handling wildlife
  - What will students do with their rubbish?
- Other preparation

- Providing students with a beach bucket and a plastic ruler helps them explore and reduces the chance of students handling harmful material. An excellent piece of equipment rather than a ruler is a cheap plastic spaghetti spoon.
- Decide what activities and equipment you need for the beach.
- Have a plan B if the weather is going to be nasty.
- Accompanying adults/parents need to be provided with a set of instructions. (Advise that these adults have no smaller children with them and they are not to disappear to a nearby coffee shop)
- Designate an adult to inspect the beach for dangerous objects when you arrive.
- Consider using a large tarp and tent pegs for students to have their lunch on.
- Beach toys are useful but large blow up plastic balls will blow away even in a light wind.
- Designate some supervising adults to take photos with student assistance of the following:
  - Students doing activities.
  - The general environment of the beach.
  - Any litter that can be found on the beach.
  - Any material of interest that has been washed up on the beach.
  - These photos can be used by students.

### Examples of activities

- Where will you visit
  - If the beach you visit is regularly cleaned by a tractor then there may be little for students to find. However there are often places the tractor can't go which may be full of washed up marine bits and pieces. You will need to be aware of these locations before your visit.
  - The location must have easy and safe access to toilets.
- What we can see at the sea
  - Gather students in a line or a circle. A circle usually works best. Choose a location where there are some interesting objects on the sand.
  - Ask students to look for different things in the circle and provide different students to describe them. The teacher can move in the circle and point out the different objects being described.
  - When finished asked students to turn around so they face outside the circle.
  - Students are to pick out different landforms, plants, feature etc that they learnt about in class. This will need to be done twice by getting the circle to move half way around.
  - Take note of lines of tidal seaweed and other marine objects.
- Sounds
  - This can be done while students are still in the circle.
  - Students close their eyes and place their hand over them
  - Direct students to listen to different sounds which will include waves, wind, birds and possibly cars, dogs, aircraft, other people etc. Start each sentence by saying "listen to." If you say "Can you hear?" they will answer you and that interrupts their listening.
- Seaweed collection
  - Using their buckets and rulers/spaghetti spoons, students collect seaweeds washed up onto the beach.
  - The spread their collection out and form a circle around it.
  - Go through the different seaweeds and describe their features. Look at shape, length, colour and feel the texture.
  - Talk about why they are washed up and what will eventually happen to them.
  - Students could use their collection of seaweed to sort into different types and find which is the longest.
- Tides

- If you want to introduce students to tides you will need something like a garden stake that can be placed at the water line when you first arrive at the beach.
- Towards the end of their visit they can see how the water line has changed,
- Smallest shell
  - Find a location where the tide has accumulated shells.
  - Have a competition among students to find the smallest shell.
  - If students are allowed to remove shells from the beach, tell them they can only take three home (this is a simple way to introduce sustainability).
- Acting out our favourite animals
  - Designate each student an animal that lives on the beach or in the sea.
  - Ask students to move like that animal and if it makes a noise to imitate the sound.
  - Go around and help students to perfect their movements.
  - Once everyone is in the groove, ask them to think what features their animals have and how they use them? Can they add anything to their act?
- Where seaweeds live?
  - Rockpools are the easiest place to observe live seaweeds.
  - Look at where and how they are anchored.
  - See how the plants float in the water.
  - Observe the colours and shapes. Most of the seaweeds are not green.
- Where animals live?
  - The easiest animals to observe will be birds. Look at where they are and what they can do. How do they move on the beach, in the air and on water?
  - If there are wet exposed rocks, an adult could turn them over to find crabs.
  - Many snails and other shellfish will be holding tight onto rocks.
  - The most likely place to find sea stars, sea urchins and sea cucumbers is in rockpools.
- How do those creatures use their features?
  - Using buckets and rulers, students collect as many animal objects on the beach as students can find.
  - They talk about the features on the objects.
  - They then work out how the animals could use their features.
- Drawing in the sand
  - Using their rulers, students are provided challenges to draw different marine related themes in the sand.
  - To extend the activity they could draw a comic strip about a marine animal having an adventure.
- Litter watch
  - Students are taken in a group to observe litter. The teacher could use a ruler/spaghetti spoon to point to litter. (students should be discouraged from picking up any beach litter)
  - What is the kind of litter?
  - Will it rot?
  - Will it float or sink?

### **Lesson 5 – Keeping our seas clean presentation**

- Explain to students that they will be in small groups preparing and presenting what they think will help to keep the sea clean.
- Identify how long their group will do their presentation eg 2 minutes. Everyone in the group will need to take part.
- Decide if they will use a digital projector/smartboard, poster etc. The method they use will affect the amount of time required.
- Structure their time so they can complete their preparation eg:

- 10 minutes to discuss what they want to present
- 5 minutes to list down what they want to do
- 15 minutes plus to do any research
- 15 minutes to write their draft
- 10 minutes to locate images or draw pictures
- 5 – 10 minutes to check including showing their teacher.
- 5 minutes to organise their time
- 15 minutes plus to write their final presentation.



