



Lesson Schedule

TOPIC A: PHYSICAL SCIENCES – FRICTION AND FLOATING
WEEK-LONG LESSON SCHEDULE



THE AQUARIUM OF WESTERN AUSTRALIA

SEA FOR YOURSELF

	Day 1 (after excursion)	Day 2	Day 3	Day 4	Day 5
Literacy	<p>Read: Big Blue Whale by Nicola Davis. ISBN:978-0-7445-7896-6</p> <p>This book is full of fun facts about the biggest creature that has ever lived. All information links well to the upcoming investigations and to the information gained at AQWA.</p> <p>Read: Inky the Octopus by Erin Guendelsberger ISBN: 978-1-4926-5415-8</p> <p>True stories of octopuses that have escaped from their exhibits and lots of fun facts about the unique features of octopuses.</p>	<p>Group discussion about the different ways that animals move. Students listen for and share key points.</p>	<p>Write up Orange Plops experiment.</p>	<p>The creature they have created is now on exhibit at AQWA! Students need to create a sign that will go next to the exhibit. The sign needs to let people know how it moves and what makes it special. It also needs to include a title, a picture of the animal, and a close up of one of its special features. Students then present their work to the class/other years.</p> <p>**STEM element – technology – use of digital camera to take an image.</p>	
Science Investigation **STEM	<p>Investigate if the objects you collected on your nature walk float or sink. Can students discover any pattern?</p>	<p>Orange Plops experiment (lesson plan supplied).</p>	<p>Boat Builder – Plasticine Imagineer investigation (lesson plan supplied).</p>	<p>Rainbow Tower investigation (lesson plan supplied).</p>	<p>Floating Fish investigation (lesson plan supplied).</p>

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Music and Movement **STEAM	Move like different sea creatures. Play music and when it stops call out the name of a sea creature – students need to start moving like that creature. Last one to start moving or who does a different creature is out and needs to bob down and move their arms like seaweed until there is a winner.	<ul style="list-style-type: none"> • Move like slime – what actions and sounds would you use? • Friction – what movement and sounds do you think of when you hear this word? • Flow – can you move like you are sliding through water? 	<p>Work in groups to create new words to the tune of the song: Baby Shark.</p> <p>Base your lyrics on the features of an animal you saw at AQWA.</p>	Create actions to go with the lyrics you made up yesterday.	Groups teach the class their actions and then perform their new song, with the rest of the class copying their actions.
Art **STEAM	Use watercolour paints to create shapes of all different colours. Once dry, use a black marker to turn your shapes into a creature.	Cut out images of sea creatures. How many shapes can you find in each creature? E.g. Shark: oval body, triangle teeth, triangle teeth. Sea horse: round eye, cylinder mouth.	Create a Creature activity (lesson plan supplied).	Box construction – can they turn their drawing into an object? **STEM – engineering element.	Create some habitat for your creature. Combine your creature, sign and habitat into an exhibit.
Outdoor Investigation	Search for different shapes and collect objects on a nature walk and use these in your investigation for today (see above).	Find rough and smooth surfaces to investigate under a microscope. Do they still appear rough and smooth? **STEM element – use of digital microscope.	Evidence of animal movements – sea creatures often use movement or vibrations in the water to tell if there is a creature moving nearby. Go outdoors, stand quietly, look around you and listen. What evidence is there of animals' movements? (E.g. trails in sand, seeing birds fly overhead, shadows of birds flying overhead, noise of insects.)	Use prisms to make a rainbow.	Draw a map of your outdoor area including as many natural features as you can. Variation: draw a map from the classroom of the year group you are inviting to see your exhibits to your classroom.

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Maths **STEM	Animal symmetry – can students draw lines of symmetry on these marine creatures? Jellyfish, shark, fish, lobster, octopus, and starfish.	You are in charge of all the ocean guides at the aquarium. Create a schedule of talks and write the time that these talks will be: on a clock face, on a digital clock and in words. If each talk goes for a quarter of an hour, when will the talks finish?	The sharks are fed 2 kg of food a day. If they get half their food in the morning and then a quarter of their food in the afternoon, how much food (in grams) is left to feed to them at night?	Work in pairs to create a list of items for sale in the aquarium gift shop. How much is each item? Take turns: choosing what you would like to buy if you have \$20 to spend, adding up the cost of the items and working out the change.	Using the AQWA map can you write/describe to your buddy directions from: <ul style="list-style-type: none"> • The entrance to the sharks. • The jellyfish to the Touch Pool. • The sea snake to the Marina. • The crocodile to the nearest toilets. • If I am at the clown fish where is the nearest place I can sit down? • What exhibit area is the sea snake in? The octopus?
HASS	Brainstorm with students on the different marine environments seen at AQWA and describe what made them different to each other. Create a KWL chart of what students know and want to learn. Over the week, investigate each topic and record what they have learned (HASS questioning and researching WAHASS26). You can organise a visit from AQWA's Education Manager to answer your students' questions by emailing sasha@aqwa.com.au				

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