

# My whale tale:



**Biological Science:** 

- Living things have structural features and adaptions that help them survive in their environment.
- Living things can be grouped on the basis of observable features
- Living things, including plants and animals, depend upon each other to survive.
- Living things have life cycles

# Science Inquiry skills:

- Science involves making predictions and describing patterns and relationships.
- With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge
- Suggest ways to plan and conduct investigations to find answers to questions.



- Use a range of methods including tables and simple column graphs to represent data and to identify patterns and trends
- Compare results with predictions, suggesting possible reasons for findings
- Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports

### Geography:

- The location of Australia's neighbouring countries and the world's continents and oceans.
- The types of vegetation and the significance of that vegetation to the environment and the world's oceans
- The different perspectives on how oceans can be protected.
- The natural resources in the environment that need to be sustained.
- An individual action that can be taken in response to a local geographical challenge in relation to the world's oceans.
- The sustainable management of country's waste from production and consumption within the world's oceans.....how???

#### **Mathematics:**

### **Statistics and Probability:**

- Collect data, organise into categories and create displays/ lists tables, graphs.
- Interpret and compare data displays

# Measurement and geometry:

- Measure, order and compare objects using familiar metric units of length, mass and capacity.
- Make models of three dimensional objects and describe key features
- Use a range of methods including tables and simple column graphs to represent data and identify patterns and trends
- Create and interpret simple grid maps to show position and pathways.

#### **Visual arts:**

- A set of tasks that support artistic investigation and exploration
- Use materials / techniques and processes to explore visual conventions when creating art works: Colour/ shape/ design/ texture and size.
- Manipulate and experiment with combination of various materials.
- Practice a variety of techniques and materials to interpret a theme: tie dyeing, Screen printing, collage, creating using marine debris collected from the river, using recycled products to make and create,

# Literacy/ language:

- Learn extended and technical vocabulary in relation to the research topic.
- Plan and deliver a short presentation providing key details of research in a logical sequence



- Build comprehension strategies to build literal and inferred meaning.
- Present findings in a range of communication forms, for example, written, oral, digital, graphic, tabular, and visual, and use geographical terminology
- Reflect on their learning to propose individual action in response to a contemporary challenge and identify the expected effects of the proposal.
- Plan, draft and publish a persuasive text demonstrating increasing control over text structures and language features that meets the needs of the audience.
- Reread and edit texts for meaning, appropriate structure, grammar and punctuation.
- Read and view a range of nonfiction texts and identify the main idea and identify different points of view

# Introduce inquiry with an Inquiry question such as 'What do we know about whales?'

Create a KW and then L chart to record student's thoughts.





# 10 Wonderful Whale Facts

#### Referenced from:

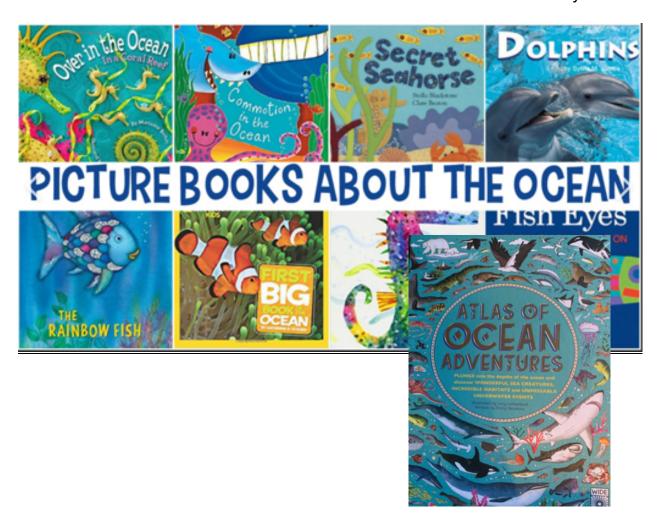
### NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION | USA

- 1. Male humpback whales found in U.S. waters sing complex songs in winter breeding areas in waters near Hawaii, in the Caribbean, and elsewhere that can last up to 20 minutes and be heard miles away.
- 2. The blue whale is the largest animal that ever lived and can grow to 90 or more feet and weigh as much as 24 elephants! That's more than 330,000 pounds (150,000 kg).
- 3. Some species of whales are among the longest living mammals. Scientists estimate bowhead whales (a baleen whale found in the Arctic) can live for more than 200 years, and killer whales (a toothed whale found in various habitats worldwide) can live for more than 100 years.
- 4. Killer whales are highly social and often travel in groups that are matrifocal—a family unit focused or centred on the mother. Learn more about the Southern Resident killer whale, a NOAA Fisheries Species in the Spotlight.
- 5. Beluga whales have flexible necks, allowing them to move their heads. Their complex communication repertoire of whistles, clicks, and chirps has prompted the nickname "canaries of the sea." Learn more about the Cook Inlet beluga whale, a NOAA Fisheries Species in the Spotlight.
- 6. Gray whales make one of the longest annual migrations of any mammal: they travel about 10,000 miles (16,000 km) round trip!
- 7. The minke whale is the smallest baleen whale in North American waters.
- 8. North Atlantic right whales gather small organisms near the water surface, straining seawater with their long baleen plates. The whales' surface feeding behavior and buoyancy make them vulnerable to collisions.
- 9. Sperm whales were almost driven to extinction by commercial whalers who sought the whales' blubber and the unique oil derived from the "spermaceti organ" found in their massive heads. The spermaceti organ is a key part of their echolocation system.
- 10. In 2014, a Cuvier's beaked whale made the deepest and longest dive ever recorded for a cetacean when it reached a depth of 1.9 miles (2,992 m) and stayed submerged for more than 2 hours.



## **Tuning in:**

Explore some fiction and non-fiction texts and then images / youtube clips, about whales and the world's oceans with the students in class for a day or two.



# Discuss what the students are noticing:

Create a Whale wonder wall: write up key information. Get the students to add their own notes to the wall

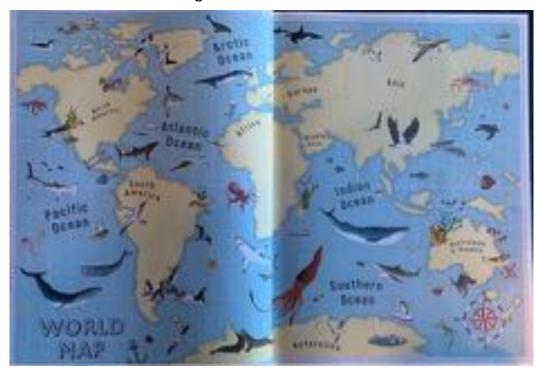
e.g There are nearly 90 species of whales, dolphins, and porpoises in the order Cetacea, which is divided into two suborders, the Odontocetes, or toothed whales, and the Mysticetes, or toothless baleen whale.





# Look at a map of the world's oceans:

What are the students noticing about the distribution of particular species of whales? Add these noticings to the Wonder wall.



Show the students a variety of ocean images to stimulate discussion on the whale's habits and whale pathways around the world.

What makes whales happy and healthy?

How do we know?

Where do they go?

What do they do?

Follow the pathways of several whale species past the continents and the oceans that they inhabit.

# Off the coast of Western Australia what whales might we see if we go Whale watching?

- Humpback
- Southern right
- Blue whales
- Orcas
- Minke whale
- Beaked whale



Create a Whale word wall with the correct spelling of all of the whale words that the students might need when creating a Whale tale.

#### Finding out:

Information below comes from https://www.whalefacts.org/whale-habitat/ Whales are marine mammals and make up around 30 – 40 species within the cetacean family.

Unlike fresh water dolphins whales live solely in saltwater environments, which is believed to have certain health properties that allow whales to heal from injuries quickly and avoid getting sick.

Salt water environments also provide whales with the abundant food sources they need in order to survive.

When it comes to a whales habitat as a species whales can be found swimming in all of the major oceans from the Arctic and Antarctic environments to the tropics located near the centre of the equator.

Depending on the species of whale, the abundance of that species and several other factors some species may be very abundant in some parts of the ocean while almost completely absent in others, especially during migration periods where a particularly large abundance whales will leave one environment and temporarily relocate to another in order to mate or feed.

Factors such as food supply, the whales overall size (which affects the climate the whale can comfortably survive in) and the whale's mating grounds can affect the environment that a particular species can be found living in.

Most whales are concentrated in areas where there is a large food supply and are likely to migrate to areas where they food supply is traveling.

Humpback whales will migrate away from their food supply for mating purposes and will travel thousands of miles from the colder polar regions to the warmer tropical environments found near the equator in order to find a mate or bare offspring.

There are also several species of whale that inhabit small regions all year-long and do not migrate through the various seasons.

The bowhead whale for example travels in and around the Arctic/sub Arctic waters throughout the year only taking the occasion small trip from one location to another from time to time.

So, where do whales live? Which whales can be tracked where? What are the variety of whales off our coast called? Why do they journey long distances?



- Blue whales can be found traveling throughout all the major oceans. They can often be seen swimming in the colder regions during feeding season and will migrate towards tropical waters when mating.
- Humpback whales can be found traveling all over the world they prefer the cold waters in and around the Arctic and Antarctic oceans.
- Orcas are called Killer whales but they are actually cranky dolphins and can be seen traveling throughout the world's major oceans. They typically prefer cooler climates compared to the tropical climates found near the equator. As stated earlier the migration pattern of these dolphins is more often than not determined by their prey's migration.
- Minke whales There are two known species of minke whales currently in existence, the common or north Atlantic minke whale (which inhibits the north Atlantic waters) and the Antarctic or southern minke whale (which lives in the Antarctic region south of the equator). Due to differences in climate changes in both regions the two species of whale do not meet one another during mating periods when they travel towards the equator to mate and bare offspring
- Southern right whales are Baleen whales and inhabit oceans South of the equator. They are distinguished from others by callosities on their head, a broad back with a dorsal fin and a large arching mouth that begins above the eye. Its skin is very dark grey or black.
- Sperm whales can be found in all of the world's major oceans. Female sperm whales and their young prefer to stay in near tropical waters all year-long while the males can be seen traveling back and forth from the colder climates to the warmer climates during mating periods.

### **Sorting out:**

Collect a series of whale images of whales from the above list:





#### List the common features of a whale:

What makes a whale a whale?

- Size
- Shape
- Colour
- Breathing through blowhole
- Features: Eyes, nose, mouth etc.,
- Family structure
- Skin texture
- Life cycle
- Food chain
- What do they eat?
- Sleep
- Where so they live?
- iourneys
- How endangered are they?

Get the students to choose a favourite whale that visits Western Australia on its way north or south, from the images presented to research:

Get them to draw their whale...using the image provided so that they are paying attention to its size, shape, colour etc.,

When they have drawn their whale get them to transfer their image to a sheet of printing foam.



Trace their drawing onto the foam sheet and cut out the shape of the whale to use as a print.

Make sure the features of the whale's body are drawn into the image.

Print the image of the whale onto a sheet of blue card as a Cover page and get the students to make a title....

# 'My whale tale'

### Going further:

The students research the key features of their whale and build up their knowledge.

### Pages inside their whale tale could include:

- A Whale mind map
- A KW and then L at the end of the tale.
- A simple description of the whale:
- Size
- Shape
- Colour
- Feeding
- Breathing
- Features
- A foam print of the whale identifying chosen features
- A map of the whale's journey and the name of the oceans and continents of the world nearby
- A drawing of the whale's food chain using arrows
- A narrative about the chosen whale: 'A whale's tale'
- Notes from an interview with a whale scientist.
- Why we should look after whales.
- A simple graph about numbers of whales off the coast each year
- A paragraph about the endangered status of the whale using an intro, 2/3 main idea and a conclusion
- A page of interesting facts about the chosen whale.



## **Exhibition:**

Here are our Whale tales:

Students present their knowledge to the class in a short oral presentation.

Use an image of the whale's tails in the classroom display:

