

## Classification Activity 1: Teacher's Guide

### Overview

Students will demonstrate the importance of scientific classification and understand that living things can be grouped according to identified characteristics.

In this activity, individuals or small groups of students are asked to spread out **Classification Cards** and work out which marine animals should be classified under each heading – *crustaceans, echinoderms, mammals, reptiles, birds, fish*.

At the end of the activity, they may also classify the animals as vertebrates and invertebrates.

### Suitability

Year 1-3

Groups of 3-5 or individuals – great before or after an **Ocean Life Education** incursion

### Learning objectives

Students will...

1. Understand why living organisms are classified
2. Discover similarities and differences between different animals
3. Learn the importance of communicating scientifically
4. Partake in simple classification of animals

### Material/ Preparation

1. Print one set of 3 sheets per group or individual student (one sided) plus one for the teacher.
2. Cut out all boxes on each sheet:
  - Animal Cards x 12
  - Classification Cards x 6
  - Umbrella Classification Terms x2

### Key Terminology

**Classification** - The grouping of living things into groups according to characteristics and similarities, such as the way they function and how they have adapted to survive.

**Taxonomy** - The classification of organisms.

Follow us 😊



## Methodology

### Introduce Topic

- **Ask all students to stand up**
- Call out the names of all students with (maybe) brown hair and ask them to stand in one area (don't tell them that you are classifying them by hair color)
- Ask all students with blond hair to stand together and do the same
- Ask the class, 'Why have I grouped these students together?' – According to their hair/ eye color/ height'
- Ask students how else they could group the students in the class – sex, hair color, eye color, height etc.
  
- **Write 'Classification' on board**
- Ask students - who has heard of the word 'Classification'
- Explain that classification is sorting things into groups that have the same or similar features.
- Ask students to think of other things that are classified e.g. Books in a library, produce in a supermarket – fruit, veg, meat, bakery etc.
- Ask students why it is important to classify things. Why does a supermarket classify produce?
- Ask students to name two sea creatures. Show images of two different sea animals e.g. Sea stars and turtle ([link to animal fact sheet images](#)) – ask what they are. Why don't we call them both the same name? How do we tell them apart?

## Activity 1: Classifying Marine Animals

In this activity, students are asked to spread out the six **Classification Cards** along the top of the table. They then have to decide which classification the animals on the **Animals Cards** fit under. At the end of the activity, they may also classify the animals as vertebrates and invertebrates.

### Introduce Activity

You will be classifying different marine animals based on their characteristics.

### Preparation

- Divide students into small groups around tables
- Tell students they are going to 'Classify' different marine animals
- Give students the **Classification Cards** and talk through the description on each card

### Method

1. Ask students to spread the six **Classification Cards** along the top of the table – as headers
2. Give each group a set of **Animal Cards**
3. Ask students to look at the **Animal Cards** one by one and put it under a **Classification Card** header
4. Students allocate each Animal Card under a Classification

## Class feedback

1. Write each **Classification** header across the board and stick the animal cards randomly at the side of the board. Ask each group one by one to put an animal card under the correct heading on the board. Discuss their placement – Is this correct? Why?

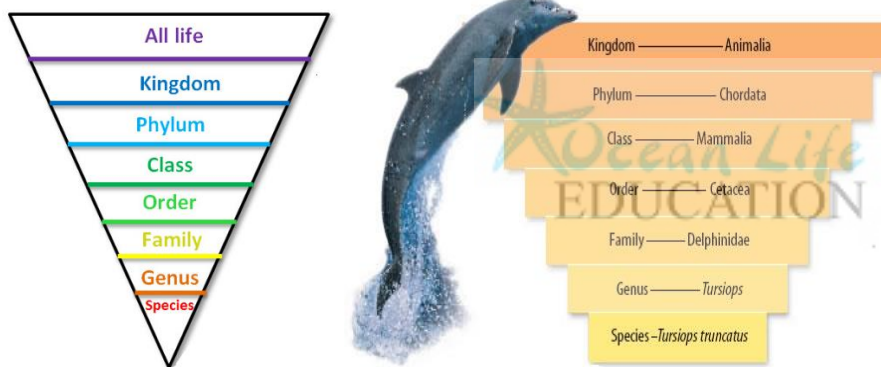
## Extra Classification Task

1. Write VERTEBRATE and INVERTEBRATE on the board – ask students if they know what the terms mean
2. Hand out the VERTEBRATE and INVERTEBRATE CARDS/ or continue to work on the board as a class
3. Ask the students/ groups which Classifications go under these terms

## Background for Educators

### Animal Classification

Taxonomists use the following framework to classify organisms:



### Who classifies and names new species?

Museums are the 'basis' of taxonomy. Taxonomists describe and name new species and research and agree the classification of organisms.

### How many species are there?

It is estimated that there are 8.7 million species of animal. But the vast majority have not been identified - and cataloguing them all could take more than 1,000 years!

### Why are organisms classified?

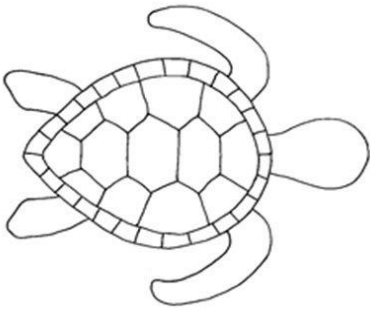
- Classification makes it easier to identify, describe and remember species.
- Taxonomists use an international classification which is agreed, applied and recognized worldwide. This means they can exchange information easily. Scientific names are always written in italics, with the genus name first, followed by the species name.
- Classification allows us to understand an organisms' biodiversity and ecology and plan to protect it for the future.

Follow us 😊

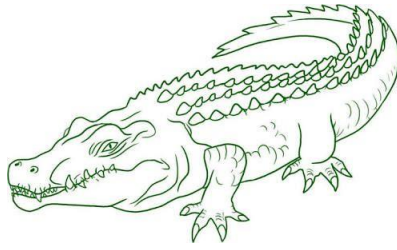


# CLASSIFICATION ACTIVITY 1: ANIMAL CARDS

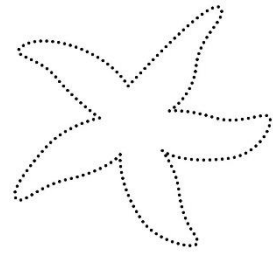
SEA TURTLE



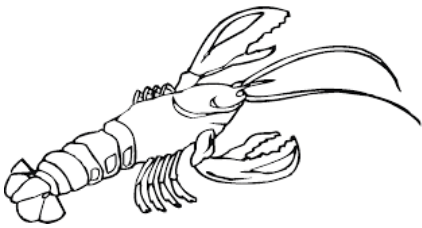
SALTWATER CROC



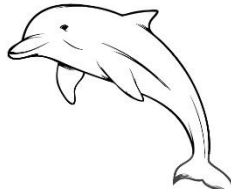
SEA STAR



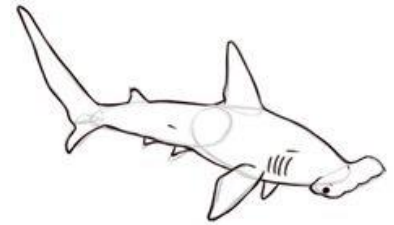
LOBSTER



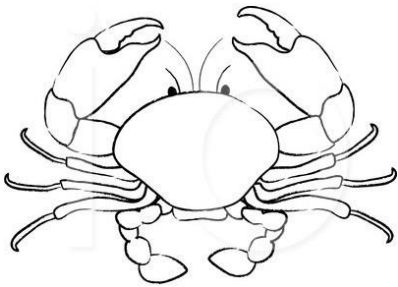
DOLPHIN



SHARK



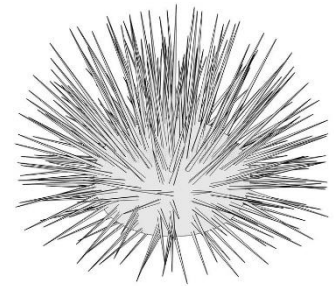
CRAB



SEA EAGLE



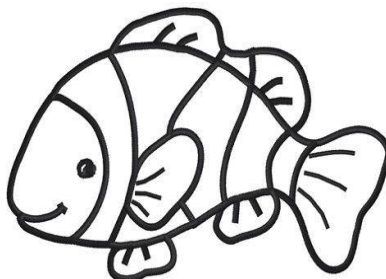
SEA URCHIN



WHALE



CLOWN FISH



SEA SNAKE



## CRUSTACEAN

- has an exoskeleton – body covered in hard shell
- usually has pairs of legs

## ECHINODERM

- has radial symmetry (central axis)
- has a spiny texture

## MAMMALS

- warm-blooded
- gives milk to young
- gives birth to live young

## REPTILES

- cold-blooded
- scales
- Lays eggs on land

## BIRDS

- warm-blooded
- has feathers, wings and no teeth
- Lays eggs on land

## FISH

- cold-blooded
- limbless
- has gills and fins
- lives only in water

# VERTEBRATES

(back bone)

# INVERTEBRATES

(no back bone -95% of animals)