

YEAR 1 UNIT 4: Treasure Island (Animals, including humans and everyday materials)

Enquiry Question: What do humans need to survive?

Related units: Reception Unit 5: My world; Year 2 unit 1: How to keep healthy; unit 3: Living things and their habitats – what are the similarities and differences between animals?

Unit overview

National Curriculum Link Year 1: Animals, including Humans
Children will identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. They will identify and name a variety of common animals that are carnivores, herbivores and omnivores. They will describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). They will identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. This unit builds on Reception's experience of children knowing the main parts of the body such as eyes, ears, head, mouth and nose although they might not know how to write and spell them.

Assessment (Expectations)

1. Explain which material would make the best waterproof jacket and why
2. Describe and compare the structure of a fish with humans
3. Name 3 things that humans need to survive on a desert island
4. Explain how a fish is able to live in its habitat

Scientific vocabulary

- Edible
- Material
- Raft
- Shelter
- Float
- Island
- Sink
- Waterproof
- Windproof
- Life jacket
- Marooned
- Seaworthy

Activities and working scientifically learning outcomes

- To identify and name a variety of plants
- To identify and name a variety of animals including fish, amphibians, reptiles, birds and mammals
- To describe and compare the structure of a fish with humans and some other animals
- To describe the simple physical properties of a variety of everyday materials
- To ask simple questions and recognise that they can be answered in different ways.
To use their observations and ideas to suggest answers to questions
- To gather and record data to help in answering questions.

Cross-curricular links

- English: Use science-specific language when talking and writing.

Teacher knowledge

Desert Island: Children will need to consider what it would be like to be marooned on a desert island.

Shelter: One of the first tasks on a desert island is to make a shelter. The children should understand why it is so important – as protection from the sun, wind, and rain as well as to provide sleep and safety from animals. Children should talk about important features they have discussed already in science such as being waterproof, windproof and strong.

Weather: Children will need to think about what the weather might be like on the desert island and how they would find food. They should understand the problems about living in very hot weather and the benefits of carrying a sunshade around with them and what would be the most useful object to provide this shade e.g. parasol, hat with or without visors, visors, scarves etc.

Escape: Children need to consider what would happen if the boat or raft overturned, and how they would need to make a life jacket from material they already had e.g. bubble wrap, plastic bags, packaging etc.

Food: Children will need to consider what kind of food they might find on a desert island, the dangers of eating anything they can find e.g. berries, which foods would be safe e.g. coconuts, bananas, pineapples, fish. This is an ideal opportunity for children to try a wide range of tropical fruits to broaden their knowledge and taste buds. Hard Tack Biscuits used to be eaten by sailors on long voyages. They are made from flour, water and salt. The word 'tack' was sailors' slang for 'food'. Although the biscuits are cereally hard and not that tasty, they were important because they were not perishable like many other foods.

Fish: A food that a castaway could catch and eat is fish. This topic offers an opportunity to show children a real fish, to feel it and observe its parts closely. Fish are cold-blooded and have a backbone and scales which are covered in slime. This and their shape helps them to move easily through water. Fish have gills which are for taking oxygen from the water. Some fish are camouflaged so they cannot be seen by predators. They also have fins which have different jobs; dorsal fin stops the fish from rolling over; the tail fin helps it move through water and the pectoral fins control direction and slow fish down. The activity's purpose is to compare the parts of a fish with other animals including humans, so it is important to have pictures of other animals (particularly vertebrates) to compare against.

Fresh water: During the topic it is important to talk about the importance of finding water on a desert island. They need to know what people and other animals need to survive and whether food is more important than water. In fact, both are essential for living, however it is more important to find water first because we can live for less than one week without it, whereas we can live for much longer without food. Children should consider whether drinking sea water is ok and why humans cannot drink salt water – it makes us more thirsty.

Misconceptions

- Some children may think that all food is edible (Discuss the signs that food may not be edible)

Resources

Carry out classification activities on http://www.bbc.co.uk/bitesize/ks1/science/properties_of_materials/play/

Useful websites www.show.me.uk/site/news/teachers/tNatural-World/STO628.html

<https://www.bas.ac.uk/polar-operations/life-in-the-polar-regions/clothing/>

Resources: Aluminium foil, Aquaria Balsa wood, Card Corks, Fresh fish, Leaves, Plastic bottles, Plastic containers, Plastic drinking cartons, (large) Plastic sheets, Plasticine, Polystyrene trays, Scissors, String, Trays, Twigs, Washing up bowls

