Science Task 1 - Properties of Rocks

Here is a list of the common properties of rocks:

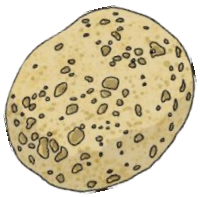
Hard or Soft

Some rocks, like granite, are incredibly hard and can only be cut or split with specialist tools.

On the other hand, clay is soft and can be easily moulded.

How to test it: Use a paper clip to scratch the surface of the rock. If it is tough to scratch then the rock is hard. If it is easy to scratch, the rock is soft.

Permeable or Impermeable

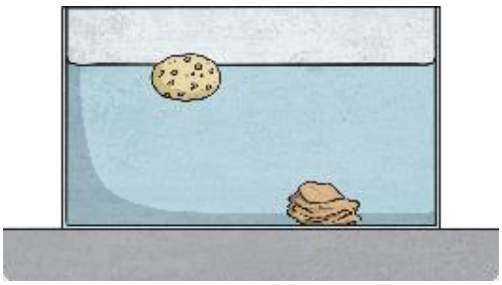


If a rock is permeable, for example pumice stone, this means it allows water to pass through it.

Rocks that are impermeable do not allow water to pass through.

How to test it: Place a couple of drops of water on the rock and leave it for 1 minute. If the water drop is still there, the rock is impermeable. If the water drop has disappeared, the rock is permeable.

Density



Density measures how 'bulky' the rock is not how heavy they are.

Density can be checked by testing the buoyancy (whether they float in water) of rocks.

High density rocks sink whereas low density rocks float.

How to test it: Get a bucket of water. If the rock sinks, the rock has high density. If the rock floats, the rock has low density.

Properties of Rocks Experiment:

You will need: 5 different rocks, 1 paper clip, 1 bucket of water.

1. Have a hunt in your garden or when you are on your walks for these types of rocks. You only need to collect 1 rock of each type.

If you cannot find these in your garden or on your walks, just choose 5 different rocks in your garden.

2. Create the table below in your Home Learning books for the results of your rock experiment. Use a whole page to give yourself plenty of space for each row as you need to draw a picture of the rock in the first column.

Name of rock and picture.	**Permeable or Impermeable** After 1 minute, what has happened to the drop of water? Is it in the **same position** or has it been **absorbed** into the rock?	**Hard or Soft** Can you scratch some of the rock? Was it easy, hard or impossible?	**Low or High Density** Does it float?

3. Test your rocks to decide what their properties are.

The first page will tell you how to test the rocks for the different properties. Write the results in the table you have created. This is an example:

Name of Rock and picture.	**Permeable or Impermeable** After 1 minute, what has happened to the drop of water? Is it in the **same position** or has it been **absorbed** into the rock?	**Hard or Soft** Can you scratch some of the rock? Was it easy, hard or impossible?	**Low or High Density** Does it float?
Limestone 	Permeable The water is absorbed.	Soft It is easy to scratch.	High density It sinks.

4. Explain to your parents or siblings what you have found out. What surprised you?

Challenge:

Pumice stones are igneous rock. They are often used to make your feet nice and smooth!

If you have a pumice stone in your bathroom, what will happen if you put it in a bucket of water?

If you don't have a pumice stone, research about what might happen to it when you put it in water.

Dinosaur Task

MY DINOSAUR FACT FILE

Name:

How to say the name:

Period: *Triassic, Cretaceous or Jurassic time?*

Picture:

Size and Weight:

Habitat: *Desert, jungle, grassland etc.*

Where did it live?: *Europe, North America etc.*

Diet:

Interesting Features: *Spikes? Frills? Teeth? Long claws?*

Fascinating Facts:

Creative Task - Additional Pictures

Playdough/Plasticine Dinosaurs

Clay Dinosaurs

Lego Dinosaurs

Junk model Dinosaurs

World Oceans Day

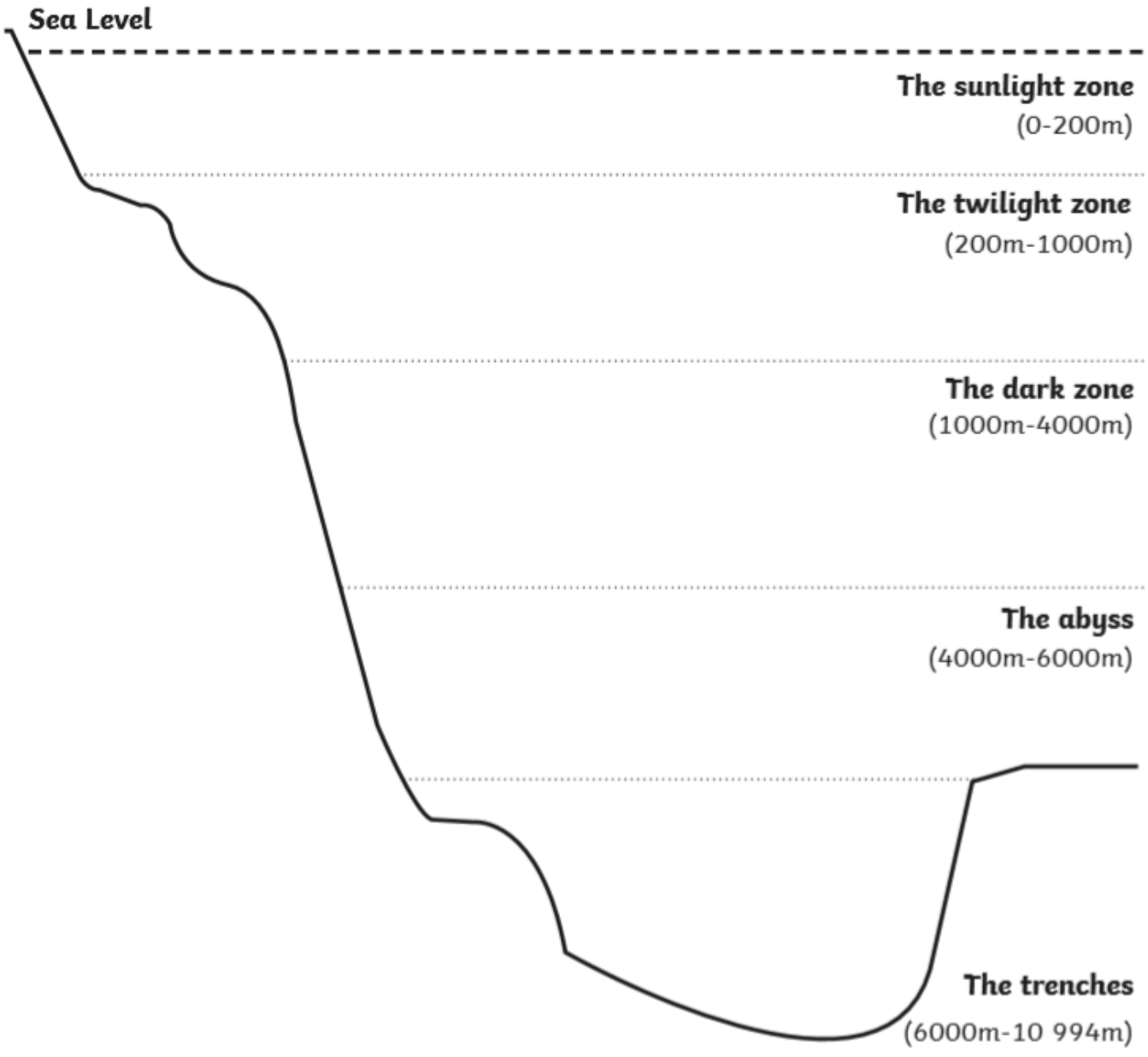
8 June 2020

The Blue Planet

Use the Internet and non-fiction books to research the different zones of the world's oceans. Record your findings on the diagram

Include:

- the average temperature in each zone
- examples of plants and animals living in the zone
- the effects pressure would have at that depth
- what human exploration has been carried out in each zone



Challenge: Choose your favourite animal that you would find in the ocean or sea and write a mini fact file about it.