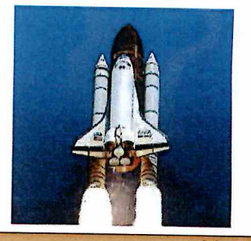
Year 3 Science, Autumn 1, Space

Key vocabulary

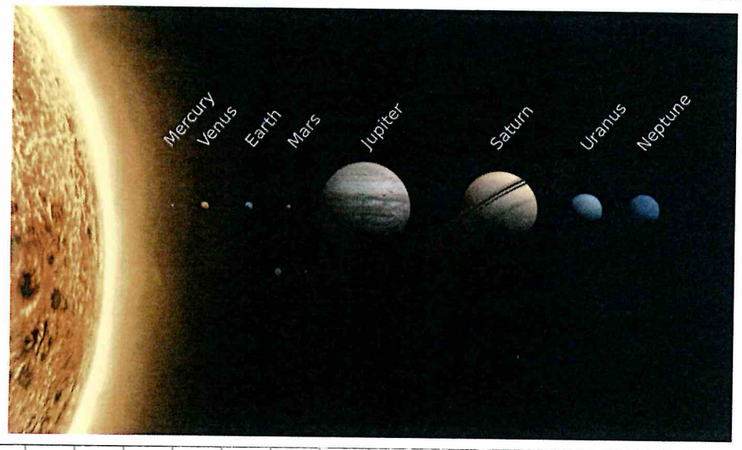
Solar system	A collection of eight planets and their moons
Planet	Spherical objects that orbit the sun
Terrestrial	Planets made up of rocks or metals
Moon	the natural satellite of Earth, usually visible at night by reflecting light from the sun.
Satellite	an object in orbit round Earth, a moon or another planet.
Orbit	a regular, repeating path that an object in space takes around another one.
Gas giants	Planets made up of gases
Ice giants	Planets made up of water and gasses
Craters	A large cavity caused by an explosion
Asteroids	Small rocky body orbiting the sun
Meteorites	A piece of rock or metal that has fallen to the Earth's surface from space
Star	A fixed luminous point in the night sky

Near and far side of the moon

Space rockets



The Solar System



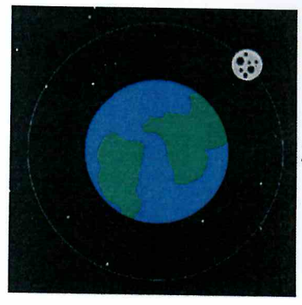
Moon Orbit

The moon orbits the earth.

It takes 28 days for the moon to complete one orbit of Earth.

During the orbit, the moon completes one rotation.

The same side of the moon face Earth all the way around the orbit!



The side of the moon we never see fr
om Earth is called 'the dark side' even though it does get light from the sun.

Wednesday 4th September

What is solar system?

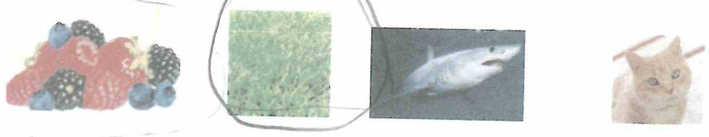
Retrieval Practice

A herbivore is an animal that only eats ~~meat~~.

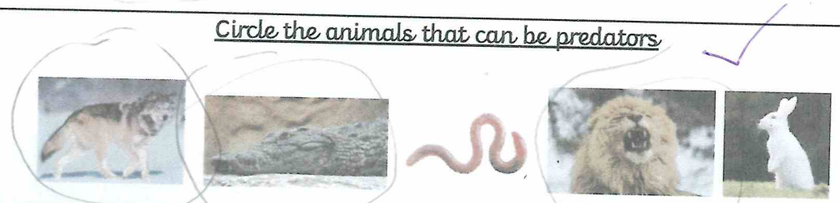
A carnivore is an animal that only eats ~~plants~~.

plants meat

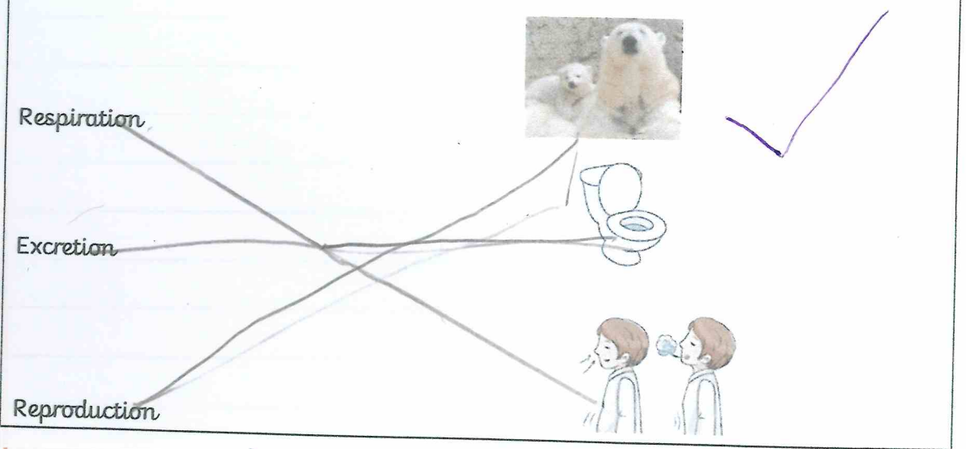
Circle the producers



Circle the animals that can be predators



Draw a line to Match the bodily function to the picture



1. There ~~is~~ 8 planets. (F)

2. The sun is not a star. (F)

3 The moon orbits around a big star. (T)

4 The sun orbits around the Earth. (F)

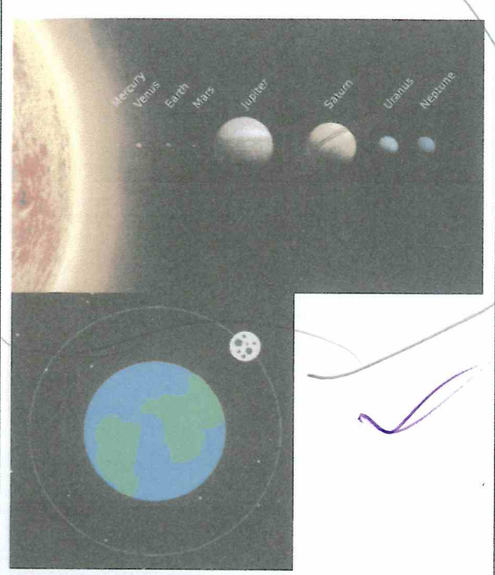
5 The sun is fully black. (F)

Wednesday 11th September

Planets

Retrieval

Circle the picture which shows the Solar System.



Choose the correct word to finish the sentences:

The Solar system is a collection of eight planets.

A planet is a spherical object which orbits the sun.

~~eight~~ ~~planet~~

The Solar System starts with the Sun.

True or false:

It takes the Earth 365 days to orbit the Sun. True

Wednesday 18th September

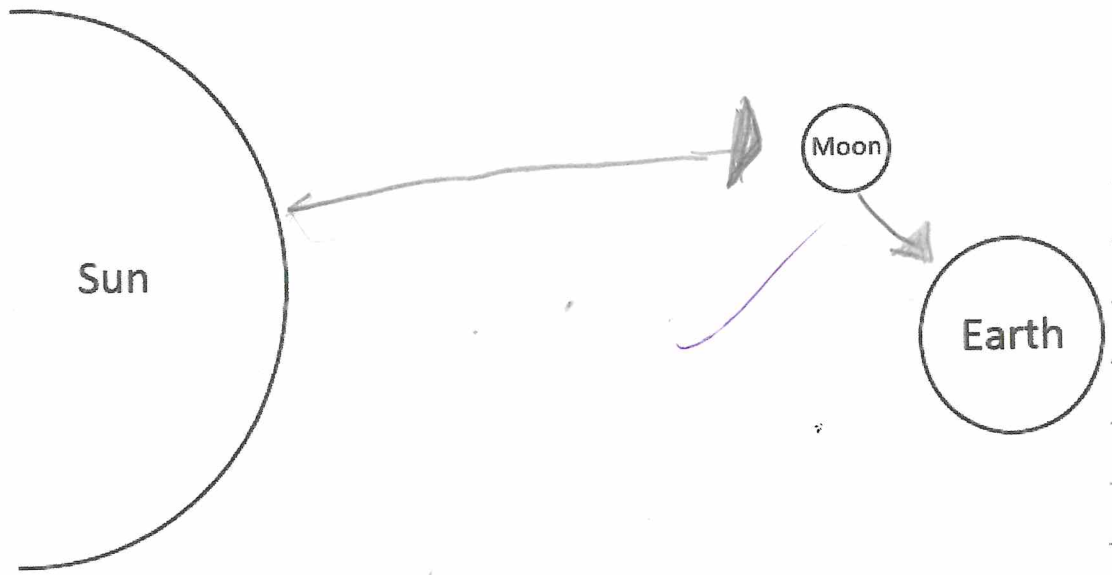
Earth and the moon

Name of Planet	Estimate of number of moons	Actual number of moons
Mearg	0	0
Venus	0	0
Earth	1	1
Mars	2	2
Jupiter	99	95
Saturn	142	146
Uranus	29	28
Neptune	19	16

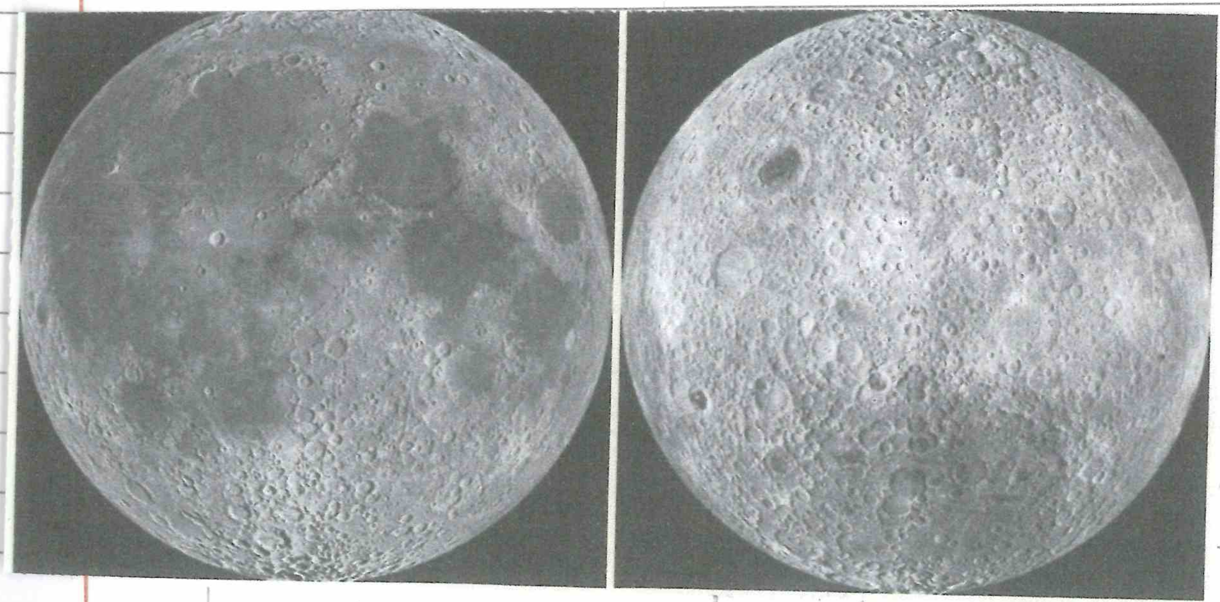
This planet is
~~Meury~~ Mecury
It's
~~Fake~~ Terrestrial planet
2,4517 Km [illegible]
This [illegible]
It's grey
~~21~~ [illegible] that's how old it
is
Mecury has no moons
[illegible] days on Mecury
Mecury is a little more
than 1/3 the width
Not only Mecury is the smallest
planet its also shrinking!

Wednesday 25th September

What is the near and far side of the moon?



We can see the moon because the sun shows light on the moon and the moon reflects the light.



Near side of the moon is warmer than the far side
Far side is way colder than the near side and it has more craters. It melts and bubbles. The near side is a little bit

black. The gas side is a little bit warm.

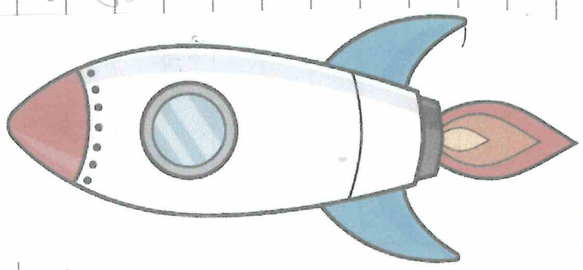
Wednesday 2nd October

Are they stars, planets or satellites?

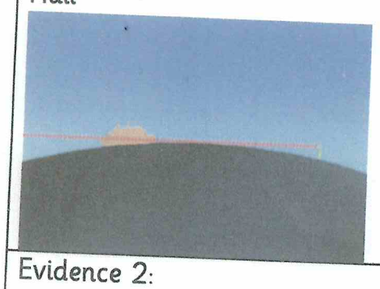
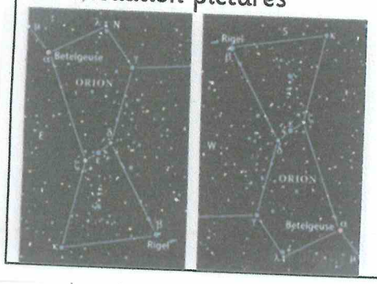
Wednesday 9th October

How does a space rocket work?

- A rocket moves forward because of a thrust force.
- The engine blast down, the rocket goes up.

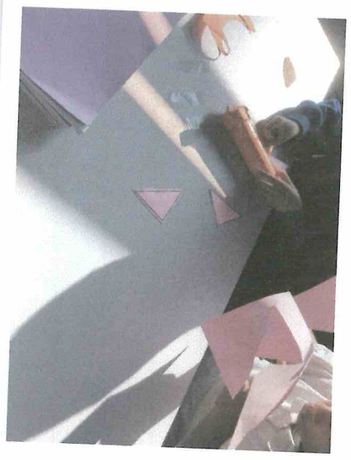


Investigation: How can we prove the shape of the Earth, sun and moon?

	Explanation:	Conclusion
Evidence 1: The Disappearing Hull 	Aristotle saw a ship on the sea. He saw the hull of the ship disappear chg. ✓	He said the Earth must be spherical so the ship wouldn't disappear. ✓
Evidence 2: Shadows on the moon 	The shadows are cast in a semi circle on the moon. ✓	The Earth can not be flat if it casts a circle shadow. ✓
Evidence 3: Constellation pictures 	The constellations are clipped in the northen and southeth hemisphere. ✓	The Earth can not be flat if people are looking at a diffrent night sky. ✓

Wednesday 16th October

The children learnt about how the rocket moves and the thrust force needed. The children then used card to create their rockets and launched them with their partners.



Year 3 Science , Autumn 1, Rocks and Fossils

Key vocabulary

Permeable	Allows water to pass through.
Impermeable	Does not allow water to pass through.
Sediment	Matter (e.g. dead animals, plants or pieces of rock) that settles to the bottom of a liquid.
Ore	A rock or mineral that contains metal.
Magma	Hot fluid or semi-fluid material below or within the Earth's crust.
Igneous rock	Lava or magma that has cooled, forming rock.
Metamorphic rock	An igneous or sedimentary rock that has been changed by extreme heat and pressure.
Sedimentary rock	Rock that has formed from the build-up of sediment at the bottom of rivers/oceans over many years, which has been squashed under the weight of the liquid and more sediment.
Crystals	Minerals that join together to make a type of igneous rock.
Fossil	The remains or impression of a prehistoric plant or animal embedded in rock and preserved by minerals replacing decomposed matter.
Aggregates	A collection of particles
Crust	Earth's outer layer
Mantle	A second layer of rock
Outer – core	A layer of Earth made of liquid
Inner – core	A layer of Earth which is solid and made of iron and nickle
Minerals	Natural occurring element
Tectonic plates	Earth's upper mantle is divided into sections
Organisms	Living things
Weathering	Breaking down or dissolving of rock

Stem sentences

"Rock a and rock b are similar because ....."

"Rock a and rock b are different because ....."

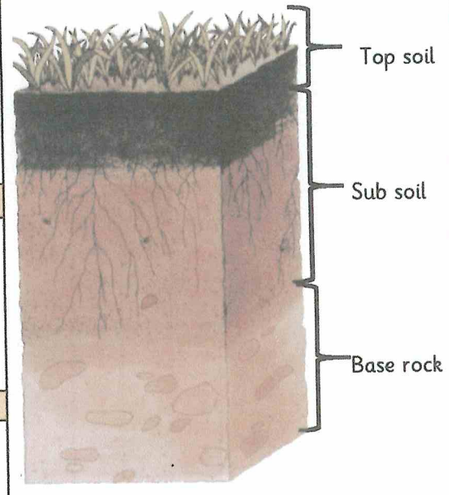
"I predict rock will be the most suitable to make a monument because it is type of rock meaning it is properties."

Cast fossil

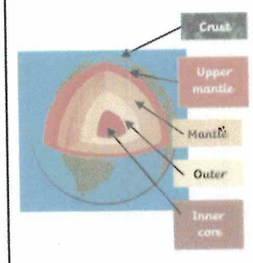
Replacement fossil

Whole body fossil

Soil



Structure of the Earth



Igneous rock

Granite / Obsidian

Sedimentary rock

Limestone / Sandstone

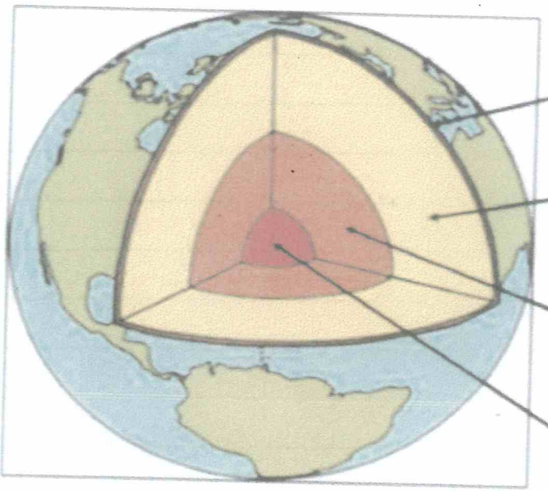
Metamorphic rock

Marble / Slate

Wednesday 6th November

How is earth structured?

Task 1



crust: where we live

mantle: its a burning

outer core: its solid

inner core: its the hottest thing in earth

mantle outer core crust inner core

Crust: where we live
Mantle: its a burning liquid
Outer core: its solid
Inner core: hottest thing in earth

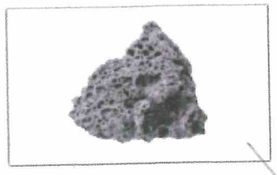
1) The thickest layer of the earth is the mantle.

2) A layer that is liquid and made from iron and Nickel is outer core. ✓

3) We live on the crust. ✓

Monday 11th November

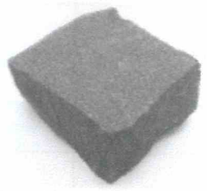
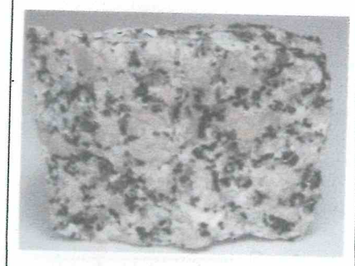
What are rocks



soft white rock

light coloured rock with grains

light rock with small holes

Rock	Description Colour? Grainy? Glassy? Any patterns?	Texture
 Gabbro	Hard Bumpy Grey Opaque Grainy Shelf good ✓	rough bumpy warm
 Gneiss	Yellowish grey stripy glassy shiny solid hard ✓	Bumpy hard rough warm heavy
 Basalt	Smooth light dark coul grey ✓	light smooth impermable soft
 Granite	Smooth textured courlogul grainy black shiny ✓	smooth heavy soft
 Sandstone	grainy grangy redy brown heavy ✓	

Monday 18th November

What are the types of rocks?

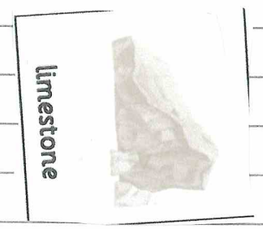
R.P

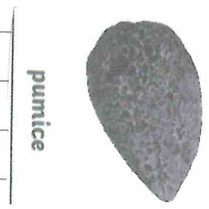
1 True ✓

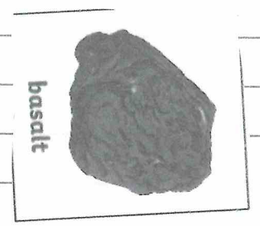
2 False ✓

3 False ✓

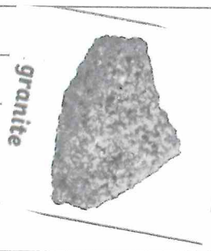
Sedimentary







Igneous



Metamorphic

Monday 25th November

What is soil?

Soil sample:	Observations:	Amount of water ml
 Clay Soil	· Grainy · Red - Orangey colour · Sediments · Small rock particals · Large rock particals	45 ml Most permeable
 Chalky Soil	· Beigey - grey · Large rock particals · Rough texture	36 ml 4
 Sandy Soil	· Grainy · Boown · Large rock particals · Small rock particals	27 ml least permeable

1) I think Clay Soil and Chalky because they both have big rocks.

2) Sandy Soil is the most different because it only has brown in it.

3) Clay Soil and Sandy Soil are similar because they both contain shades of brown.