

Earth and Space - Revision Worksheet

What shape is the **Earth**?
.....

List the **planets** in the solar system starting with the closest to the Sun:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

Draw a sketch to show the current accepted **model** of the **Solar System**:

Why was **Copernicus'** model not accepted right away? How did **Galileo** provide more **evidence**?
.....
.....
.....
.....

How was **Ptolemy's model** different?
.....

What are some ways in which we can gather **evidence** about **Space**?

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-
-

Define the following words:

Orbit	
Elliptical	

What are the '**phases of the moon**', how are they caused?
.....
.....
.....
.....
.....

What causes the change in **seasons**?
.....
.....
.....
.....

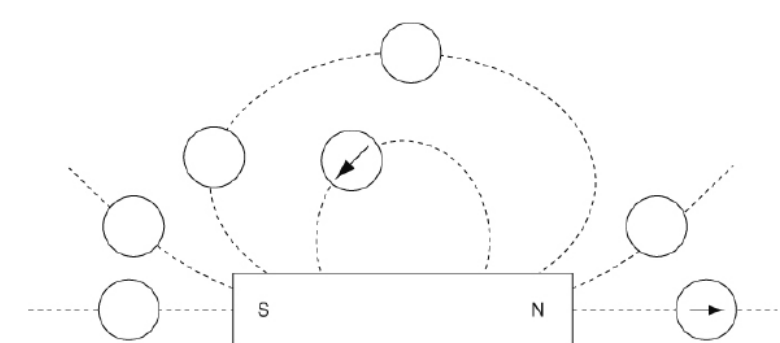
Give some characteristics of **Summer**:
.....
.....

Label which **hemisphere** is experiencing **Summer** and which is experiencing **Winter**:




What is a **compass**? Why do compasses point **North**?
.....
.....
.....

Draw arrows to show the direction of the **magnetic field**:



What force occurs between two objects that are near each other?

Draw an arrow to show which way **gravity** will '**pull**' each object:



Underneath each part of the **equation** write out the **units**:

Weight = mass x gravitational field strength
.....

What is the **gravitational field strength** on **Earth**?
.....

An object has a **mass** of **12kg** on **Earth**. Calculate its **weight**:

.....

An astronaut has a **mass** of **85kg**. He goes to **Mars** where the **gravitational field strength** is **3.7 N/kg**. Calculate his **weight**:

.....

What is a **satellite**? Give an example of a **natural satellite** and an **artificial satellite**:

.....
.....
.....

What factors can affect the **strength** of **gravity**?

.....

Define the following words:

Star	
Constellation	
Galaxy	
Universe	

Put the following into order of size: **Earth, Sun, Universe, Moon, Galaxy**

.....

What is the **Milky Way**?

.....

What is a **light year**? What is this distance in kilometres?

.....
.....

Rate the following on how well you think you can do them:



I can...

- Describe some ways of investigating the planets.
- Compare different models of the Solar System.
- Recall that an argument may be presented to persuade an audience.
- Identify the parts of an argument.
- Construct arguments.
- Use the tilt of the Earth's axis to explain the changes in seasons.
- Use a mode to explain the pattern of light and dark at the Earth's poles.
- Explain how to arrange magnets so they attract or repel each other.
- Describe the Earth's magnetic field and how it affects compasses.
- Describe how to find the shape of a magnetic field.
- Calculate weight.
- Recall the factors that affect the strength of gravity.
- Describe how gravity affects objects in space.
- Calculate ratios and percentages.
- Convert fractions to decimals.
- Express one number as a percentage of another.
- Describe stars, galaxies and constellations.
- Describe the Milky Way.
- Explain what a light year is.