

YEAR 7&8 SCIENCE

Earth and Space

- Unit Outline -



Course Description:

This unit aims to give students a very broad overview of Earth, including its structure, relationships with the sun and moon and about how we (humans) use its resources.

In this unit students will be introduced to the layers of the Earth and atmosphere, how these layers are related to the crust (we live on) and weather, as well as how different types of rock are formed during these processes. This means they will explore predictable phenomena on Earth that are related to the relative positions of the sun, Earth and moon; including weather, seasons, lunar and solar eclipses.

Course Outcomes:

By the end of this unit you should be able to:

- Name the layers of the Earth and what state of matter they are.
- Name the layers of the atmosphere and their characteristics.
- Name the different types of rock and describe their formation.
- Understand why weather and seasons occur in relation to the position of the Earth and sun.
- Understand why eclipses occur and describe the position of the Earth in relation to the sun and moon.

Course Organisation:

The organisation of the unit will be:

- The students are presented with both theoretical and practical work to develop their knowledge and skills.

Student's activities will include:

- Developing a knowledge base using notes, questions, bookwork/worksheets.
- Conduct practical activities to explore and visualise theoretical concepts.
- Practice using terminology and language in oral and written activities.

Course Timeline:

Wk	Activity	Assessment
1-2	Layers of the Earth and atmosphere <ul style="list-style-type: none">• What they are and what they are made of.• How they interact.	Quiz at the end of Wk 2.
3-4	Measuring weather <ul style="list-style-type: none">• How to measure temperature, wind speed, humidity and air pressure.• How meteorologists predict weather.	Quiz at the end of Wk 4.
5-7	Rocks <ul style="list-style-type: none">• Types of different rocks• The rock cycle	Quiz at the end of Wk 7.
7-10	Predictable phenomena <ul style="list-style-type: none">• Seasons• Eclipses	Test in week 8/9

Course Vocabulary:

- Crust
- Mantle
- Outer Core
- Inner Core
- Lithosphere
- Sedimentary
- Metamorphic
- Rotation
- Axis
- Eclipse
- Lunar
- Solar
- Water
- Ice
- Vapour
- Cycle

- Assessment Outline -

Course Assessment:

Wk	Assessment type	Weighting	Marks achieved	Your Total
1-7	Class quizzes	70%		
1-9	Participation in practical activities	30%		

*specific marks to be advised

Specific Equipment required for each lesson:

- File/book to write in
- Pens, ruler, calculator