

PRIMARY SCIENCE

Syllabus for Primary Schools

YEAR 4

LEARNING OUTCOMES

for

YEAR 4

Sharing Our World

| 4.1 OTHER ANIMALS AND US | 4.2 PLANT LIFE | 4.3 HABITATS | 4.4 WEATHER WATCH |
|---|---|---|--|
| 4.1.1 Know the basic needs of animals. | 4.2.1 Know that plants need air, water and light to stay alive. | 4.3.1 Know that plants and animals in a habitat depend upon each other. | 4.4.1 Be able to record the weather over a period of time. |
| 4.1.2 Recognize the importance of eating a balanced diet. | | | |

Energy

| 4.5 FORCES | 4.6 ELECTRICITY | 4.7 SOUNDS | 4.8 LIGHT |
|--|--|--|--|
| 4.5.1 Know that there is a force of friction acting between any two surfaces. 4.5.2 Know that friction is larger between two rough surfaces than two smooth surfaces. | 4.6.1 Observe that some materials in a circuit allow a bulb to light whereas other materials do not. | 4.7.1 Know that sound travels in all directions. | 4.8.1 Know that multiple images can be produced by mirrors. 4.8.2 Know that images can be produced by curved mirrors. |

Materials Around Us

| 4.9 CHANGE | 4.10 USES AND PROPERTIES OF MATERIALS | 4.11 OUR PLANET AND ITS NEIGHBOURS | |
|--|--|--|--|
| 4.9.1 Know that some changes can be reversed while other cannot. | 4.10.1 Know that the same material can have many uses. | 4.11.1 Know that the Earth is one of the nine known planets in our solar system. | |
| | | 4.11.2 Know that there are other planets in space. | |

PROGRAMME

for

YEAR 4

4.11 Sharing Our World : Other Animals and Us

| Learning Outcomes | Notes |
|---|--|
| 4.1.1 Know the basic needs of animals. 4.1.2 Recognize the importance of eating a balanced diet. | <ul style="list-style-type: none">• know that animals differ from non living things. Animals need food (as a source of energy) to be active and move, breathe (can only survive where there is air) and excrete (remove toxic wastes from their bodies).• know that taking care of living things (such as in the case of pets and even wildlife) attention must be paid to these basic needs.• know that the type of food they eat influences the quality of their lives eg. eating too much sugar can cause damage to teeth as well as lead to weight problems. |

4.11 Sharing Our World : Plant Life

| Learning Outcomes | Notes |
|---|--|
| 4.2.1 Know that plants need air, water and light to stay alive. | <ul style="list-style-type: none">• know that as living things, plants need air, water and light in order to survive.• carry out simple investigations to show the effect that air, water and light have on the growth of plants. |

4.11 Sharing Our World : Habitats

| Learning Outcomes | Notes |
|---|---|
| 4.3.1 Know that plants and animals in a habitat depend upon each other. | <ul style="list-style-type: none">• explore how plants and animals are interdependent eg. how different animals make their homes in trees, how they feed on the fruit of trees.• should know about simple food chains and how these are used to describe feeding relationships in a habitat. |

4.11 Sharing Our World : Weather Watch

| Learning Outcomes | Notes |
|--|--|
| 4.4.1 Be able to record the weather over a period of time. | <ul style="list-style-type: none">• keep a record of the weather through the collection of weather reports etc. and through actual handling of weather instruments.• carry out simple investigations related to the weather eg. What difference would there be, if any, between the classroom temperature and the corridor temperature? By how much does the temperature vary during the day? |

4.11 Energy : Forces

| Learning Outcomes | Notes |
|---|---|
| <p>4.5.1 Know that there is a force of friction acting between any two surfaces.</p> <p>4.5.2 Know that friction is larger between two rough surfaces than two smooth surfaces.</p> | <ul style="list-style-type: none">• understand that it is difficult to move one surface against the other.• realise that this force acts against the direction of motion.• know that this force is known as friction.• understand that the rougher the surface, the greater is the friction present. |

4.11 Energy : Electricity

| Learning Outcomes | Notes |
|--|--|
| 4.6.1 Observe that some materials in a circuit allow a bulb to light whereas other materials do not. | <ul style="list-style-type: none">• know that electricity can flow through some materials and not others.• name some materials which allow current to flow through.• name some materials which do not allow current to flow through. |

4.11 Energy : Sound

| Learning Outcomes | Notes |
|--|---|
| 4.7.1 Know that sound travels in all directions. | <ul style="list-style-type: none">• show that sound can be heard from a distance away from the source.• investigate the loudness of a sound produced from different distances.• know that the further away you are from the source of sound, the fainter is the sound is heard. |

4.11 Energy : Light

| Learning Outcomes | Notes |
|--|---|
| 4.8.1 Know that multiple images can be produced by mirrors. 4.8.2 Know that images can be produced by curved mirrors. | <ul style="list-style-type: none">• Know that shiny surfaces reflect light and form images.• Know how to use a number of mirrors to produce multi-images.• Know about images formed by curved shiny surfaces. |

4.11 Materials Around Us : Change

| Learning Outcomes | Notes |
|--|--|
| 4.9.1 Know that some changes can be reversed while other cannot. | <ul style="list-style-type: none">• know that when an object melts, it can be made to become a solid again.• know that when an object is burned, it cannot be returned to its original state. |

4.10 Materials Around Us : Uses and Properties of Materials

| Learning Outcomes | Notes |
|--|---|
| 4.10.1 Know that the same material can have many uses. | <ul style="list-style-type: none">• explore the range of uses of different materials.• identify that some materials are more versatile than others and are used more widely. |

4.11 Materials Around Us : Our Planet and Its Neighbours

| Learning Outcomes | Notes |
|--|---|
| 4.11.1 Know that the Earth is one of the nine known planets in our solar system. 4.11.2 Know that there are other planets in space. | <ul style="list-style-type: none">• know about our solar system and name some of the planets found in our solar system.• know that the planets in our solar system are all different. Children should realise that our solar system is not the only one in the Universe. |