



REPUBLIC OF TRINIDAD AND TOBAGO
MINISTRY OF EDUCATION

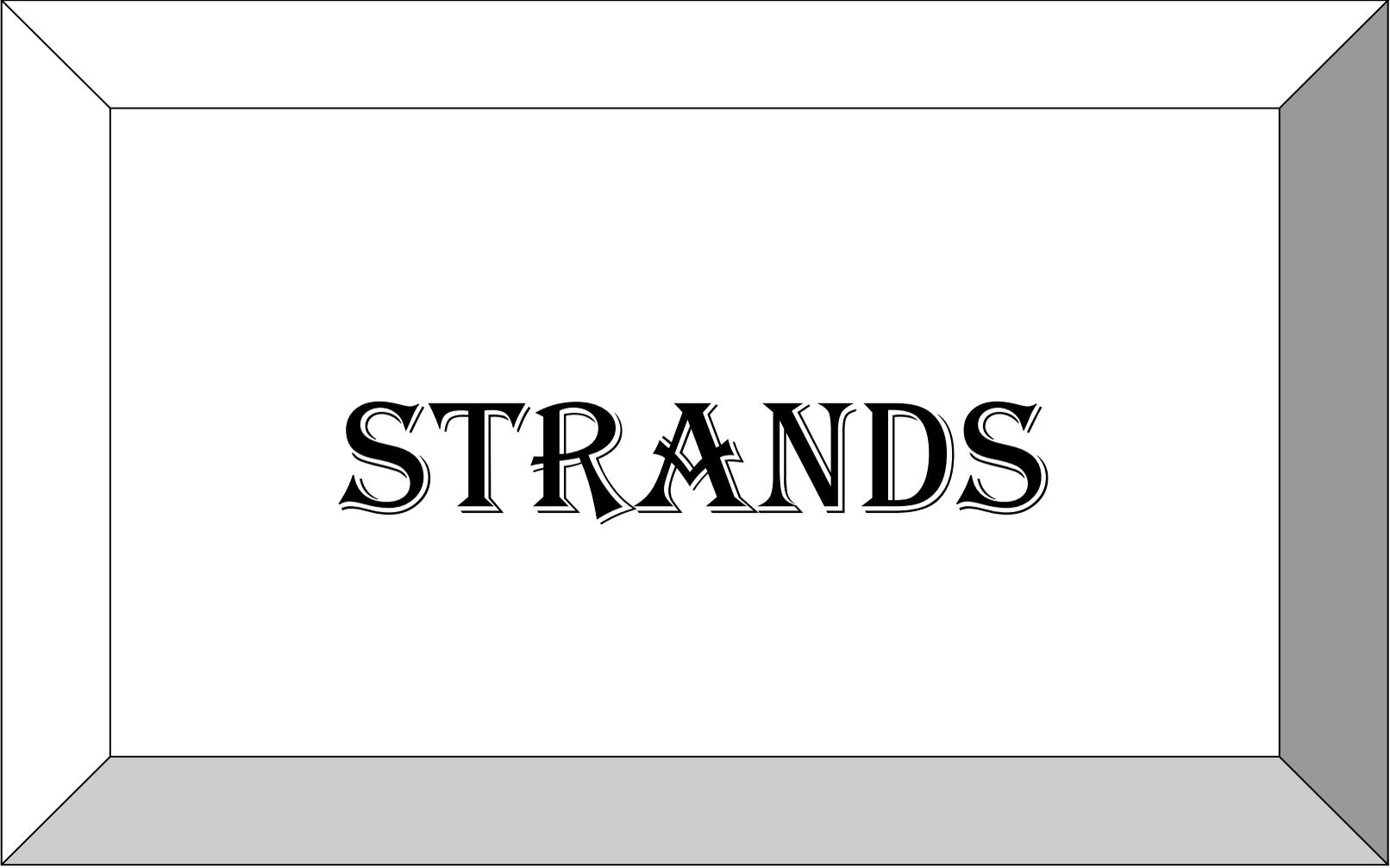
GORTT/IBRD BASIC EDUCATION PROJECT

Primary School Syllabus

Infants - Standard One

SCIENCE

February 2003



STRANDS

STANDARD 1 – ECOSYSTEMS:

Concepts	Objectives	Enquiry Skills	Suggested Teaching/Learning Strategies	Suggested Assessment Strategies
<p>It is important to preserve the habitats of organisms.</p>	<p>Pupils will be able to:</p> <ol style="list-style-type: none"> 1. identify the effects of pollutants on aquatic organisms 2. Investigate the effects of damage/destruction of terrestrial habitats. 	<p>Predict consequences of pollution of a river</p> <p>Predict consequences resulting from the removal/destruction of plants</p>	<p>Pupils are provided with appropriate pictures/video illustrating a polluted aquatic habitat. Pupils suggest possible pollutants present. Discussion of the effects on these pollutants on organisms in the water.</p> <p>Discussion on the effects of the removal of trees and shrubs from an area e.g.: loss of animals homes/source of food, exposure of soil, flooding, etc</p>	<p>Presented with a picture of an oil spill, pupils are asked to tell a story of a fish's experience in this environment.</p> <p>Pupils are asked to list the effects of the removal of flowering plants to the butterfly population in an industrial area. Suggest a solution to the problem.</p>

STANDARD 1 – MATTER AND MATERIALS

Concepts	Objectives	Enquiry Skills	Suggested Teaching/Learning Strategies	Suggested Assessment Strategies
Matter exists in different states	Pupils will be able to: <ol style="list-style-type: none"> <li data-bbox="666 367 1064 431">1. compare the properties of different states of matter. <li data-bbox="666 651 1064 748">2. state that matter can be converted from one state to another. 	Observe the properties of solids, liquids and gases. Observe the phenomena – freezing, condensing, evaporating, melting.	Ask pupils to sort samples of everyday materials including powder into solids, liquids, gases. Describe the properties of material in the solid, liquid and gaseous state. Pupils in groups, create a poster describing the properties of matter. Ask pupils to suggest what must be done to change something from solid, to liquid and to gas. Pupils are presented with activities to demonstrate a change in state. Pupils identify conversions.	Teacher presents pupils with different samples of materials. They identify their state. Design a poster to display how matter can be converted from one form to another.
As matter changes its state its mass remains the same	<ol style="list-style-type: none"> <li data-bbox="666 865 1064 995">1. demonstrate that mass is conserved when a change of state occurs. 	Measure mass of substances in different containers.	Pupils are presented with a problem. Would the mass of ice remain the same when it melts? Pupils investigate and present findings.	Group presentations are assessed.

STANDARD 1 – STRUCTURES AND MECHANISMS

Concepts	Objectives	Enquiry Skills	Suggested Teaching/Learning Strategies	Suggested Assessment Strategies
Forces act on structures.	Pupils will be able to: 1. Identify push and pull, squeeze and twist when a structure is subjected to a force.	Observe effects of forces on objects.	Teacher provides opportunities for students to observe the effects of a force on various objects.eg: small cardboard box, plastercine, snack pack, styrofoam cuboid. Pupils describe their observations.	Provided with other materials – students identify push, pull, squeeze, twist when a force is applied. Pupils write a report.
When objects move, they change their position.	1. explain how simple mechanisms facilitate movement.	Observe movement in common objects.	Pupils and teacher discuss movement of objects. They talk about what is involved in movement – pushing and pulling cause change of position. They give examples of how objects are moved in everyday life. Do you move a desk in the same way you would move a lunch kit? How do the movers from the store transport a refrigerator? How is sand and gravel moved when building a house? How do you move a chair? How does an adult move a chair? How did you get from home to school today? Discuss dragging an object against using wheels to move it.	Design and produce a mechanism that facilitates easy movement e.g.: wheel-barrow, trolley.

STANDARD 1 - ENERGY

Concepts	Objectives	Enquiry Skills	Teaching/Learning Strategies	Assessment Strategies
<p>Wind is a source of energy.</p>	<p>Pupils will be able to:</p> <ol style="list-style-type: none"> 1. identify visible effects of wind action. 2. identify the uses of wind as a form of energy in our daily lives. 	<p>Observe the effects of wind.</p> <p>Observe pictures showing uses of wind.</p>	<p>Pupils are taken outside the school building to observe various effects of the wind e.g.: dust being raised, leaves blowing, trees swaying and clothes blowing. Questions asked to determine pupils' views on the origin of the movement.</p> <p>Discussion of other experiences that pupils may have had of the wind, e.g. (1) an electric fan can be used to simulate some of the effects of wind in its absence (2) drying clothes (3) windmills (4) flying flags.</p>	<p>Pupils will write a paragraph on the effects of the wind.</p> <p>Ask pupils to design a device that uses wind. (e.g.: fan, kite ,paper plane).</p>

STANDARD 1 – EARTH & SPACE

Concepts	Objectives	Enquiry Skills	Suggested Teaching/Learning Strategies	Suggested Assessment Strategies
<p>The sun affects weather conditions</p> <p>Weather conditions can be recorded using symbols</p>	<p>Pupils will be able to:</p> <ol style="list-style-type: none"> 1. describe weather patterns using data from the observations of the weather and from weather reports 2. demonstrate the use of a record of weather conditions using standard symbols 	<p>Interpret data on weather patterns.</p> <p>Communicate using standard weather symbols.</p>	<p>Pupils are asked to collect data of weather over a period of time. Pupils discuss patterns emerging from the observations.</p> <p>Pupils are invited to suggest ways of recording the data. Standard symbols are introduced.</p>	<p>Given observations about the weather and weather reports, pupils describe weather patterns.</p> <p>Given a variety of weather conditions, pupils are asked to construct a weather chart using standard symbols.</p>