Science Curriculum Outcomes Addressed Through Project

Grade 3 Curriculum Outcomes

STSE/Knowledge Outcomes

Students will be expected to:

- 100-34 describe the properties of some common materials and evaluate their suitability for use in building structures
- 101-11 investigate ways to join materials and identify the most appropriate methods for the materials to be joined
- 102-16 identify shapes that are part of natural and human-built structures and describe ways these shapes help provide strength, stability, or balance
- 101-10 use appropriate tools in safely cutting, shaping, making holes through, and assembling materials
- 101-9 test the strength and stability of personally built structures and identify ways of modifying a structure to increase its strength and stability
- 102-17 evaluate simple structures to determine if they are effective and safe, if they make efficient use of materials, and if they are appropriate to the user and the environment

Skills Outcomes

Students will be expected to:

Initiating and Planning

- 200-2 identify problems to be solved
- 200-5 identify materials and suggest a plan for how they will be used

Performing and Recording

- 201-2 manipulate materials purposefully
- 201-3 use appropriate tools for manipulating and observing materials and in building simple models
- 201-6 estimate measurements
- 201-8 follow given safety procedures and rules and explain why they are needed

Analysing and Interpreting

- 202-5 identify and suggest explanations for patterns and discrepancies in observed objects and events
- 202-8 compare and evaluate personally constructed objects with respect to their form and function

Communication and Teamwork

- 203-2 identify common objects and events, using
- terminology and language that others understand
- 203-3 communicate procedures and results, using drawings, demonstrations, and written and oral descriptions
- 203-5 respond to the ideas and actions of others and acknowledge their ideas and contributions

Grade 4 Curriculum Outcomes

STSE Outcomes

Students will be expected to:

Nature of Science and Technology

- 104-1 demonstrate processes for investigating scientific questions and solving technological problems
- 104-4 compare the results of their investigations to those of others and recognize that results may vary
- 104-6 demonstrate that specific terminology is used in science and technology contexts
- 105-1 identify examples of scientific questions and technological problems that are currently being studied

Relationships Between Science and Technology

- 106-4 describe instances where scientific ideas and discoveries have led to new inventions and applications

Social and Environmental Contexts of Science and Technology

- 107-4 provide examples of how science and technology have been used to solve problems in the home and at school
- 108-1 identify positive and negative effects of familiar technologies
- 108-3 describe how personal actions help conserve natural resources and care for living things and their habitats
- 108-6 identify their own and their family's impact on natural resources

Skills Outcomes

Students will be expected to:

Initiating and Planning

- 204-1 propose questions to
- investigate and practical problems to solve
- 204-3 state a prediction and a hypothesis based on an observed pattern of events
- 204-6 identify various methods for finding answers to given questions and solutions to given problems, and select one that is appropriate
- 204-8 identify appropriate tools, instruments, and materials to complete their investigations

Performing and Recording

- 205-1 carry out procedures to explore a given problem and to ensure a fair test of a proposed idea, controlling major variables
- 205-3 follow a given set of procedures
- 205-5 make observations and collect information that is relevant to a given question or problem

Analysing and Interpreting

- 206-5 draw a conclusion, based on evidence gathered through research and observation, that answers an initial question
- 206-6 suggest improvements to a design or constructed object
- 206-9 identify new questions or problems that arise from what was learned

Communication and Teamwork

- 207-2 communicate procedures and results, using lists, notes in point form, sentences, charts, graphs, drawings, and oral language
- 207-6 work with group members to evaluate the processes used in solving a problem

Grade 6 Curriculum Outcomes

STSE Outcomes

Students will be expected to:

Nature of Science and Technology

- 104-8 demonstrate the importance of using the languages of science and technology to compare and communicate ideas, processes, and results
- 105-1 describe examples of scientific questions and technological problems that are currently being studied

Relationships Between Science and Technology

- 106-3 describe examples of improvements to the tools and techniques of scientific investigation that have led to new discoveries

Social and Environmental Contexts of Science and Technology

- 107-1 describe examples, in the home and at school, of tools, techniques, and materials that can be used to respond to their needs
- 107-3 compare tools, techniques, and scientific ideas used by different people around the world to interpret natural phenomena and meet their needs
- 107-6 provide examples of how science and technology have been used to solve problems around the world

Skills Outcomes

Students will be expected to:

Initiating and Planning

- 204-1 propose questions to investigate and practical problems to solve
- 204-2 rephrase questions in a testable form
- 204-6 identify various methods for finding answers to given questions and solutions to given problems, and select one that is appropriate
- 204-7 plan a set of steps to solve a practical problem and to carry out a fair test of a science-related idea
- 204-8 identify appropriate tools, instruments, and materials to complete their investigations

Performing and Recording

- 205-1 carry out procedures to explore a given problem and to ensure a fair test of a proposed idea, controlling major variable
- 205-2 select and use tools in manipulating materials and in building models
- 205-5 make observations and collect information that is relevant to a given question or problem
- 205-7 record observations using a single work, notes in point form, sentences and simple diagrams and charts
- 205-8 identify and use a variety of sources and technologies to gather pertinent information
- 205-9 use tools and apparatus in a manner that ensures personal safety and the safety of others

Analysing and Interpreting

- 206-6 suggest improvements to a design or constructed object
- 206-9 identify new questions or problems that arise from what was learned

Communication and Teamwork

- 207-2 communicate procedures and results, using lists, notes in point form, sentences, charts, graphs, drawings, and oral language