

Mary Queen of Peace School
Curriculum Template

6

Subject

Science

5

Plant Classification, Structures, & Functions

**Unit
Name**

Grade

Stage 1: DESIRED RESULTS

Established Goals / Content Standards

3,1A Plants have basic needs for survival
3,1D Plants have different structures that serve similar functions necessary for survival
3,1B Plants go through cycles unique to different types of plants
3,1E Plants are classified based on how they are alike and how they are different
3,2A-C Plants contain cells with organelles that carry out processes
3,3A-C Plants differ in how they reproduce & carry chromosomes/DNA that pass information to offspring

Understandings

Plants need specific requirements for survival
Plants have structures that help meet their needs
Plants go through cycles for growth & development
Plants are classified into 4 main groupings
Plants have organelles that they need to carry specific functions – photosynthesis
Plants reproduce sexual & asexual & have Structures within the plant to do this.

Essential Questions

What are a plant's basic needs?
What are 3 structures on most plants?
What are examples of life cycles in plants?
What are the 4 main groupings of plants?
How do plants make their food?
How do different plants reproduce?
What structures on plants help them reproduce?
How do plants pass on genetic traits to their offspring?

Knowledge

Skills

Stage 2: ASSESSMENT EVIDENCE

Performance Tasks

Other Evidence

**Mary Queen of Peace School
Science Curriculum Grade 5 (2012)**

Key Criteria

--

Stage 3: LEARNING PLAN

TEXT HERE

**Mary Queen of Peace School
Science Curriculum Grade 5 (2012)**

Subject

Science

5

Periodic Table and States of Matter

**Unit
Name**

Grade

Stage 1: DESIRED RESULTS

Established Goals / Content Standards

1,1B Interaction of particles can changes states of matter
1,1C Changes in States of matter change the way molecules move
1,1D Changes in States of matter result from thermal changes
1,1F Periodic Table of elements organizes the elements according to their atomic structure and are found in nature as solids, liquids and gases

Understandings

Matter can be found as solids, liquids & gases
Changes in states are made when heat is added
Or taken away and affects molecules
The Periodic Table is used to organize the
Elements by their atomic number and are
Present in nature as solids, liquids, & gases

Essential Questions

What are the 3 States of Matter?
How does heat affect states of Matter?
How do the particles move in each state?
What is the Periodic Table?
How are elements arranged on the table?
What state are elements found in nature?

Knowledge

Geography of the Americas
History of migrations to the Americas

Skills

Use maps to analyze migration patterns
Make inferences about migration based on knowledge
of groups and cultures

Stage 2: ASSESSMENT EVIDENCE

Performance Tasks

A debate on migration of particular groups
Letters home from immigrants
Brochure advertising new homeland options

Other Evidence

Test
Contribution to class discussion
Class notes and notes from reading

Key Criteria

Demonstrated understanding of geography, time periods and migration patters

Stage 3: LEARNING PLAN

TEXT HERE

Mary Queen of Peace School
Curriculum Template

Subject

Science

5

Changes in Ecosystems & Construction in a Biome

**Unit
Name**

Grade

Stage 1: DESIRED RESULTS

Established Goals / Content Standards

4,1A All populations living together within a community interact to create a Biome to survive
4,1B,C Living organisms produce populations that have to adapt within their environment
4,1D The diversity of species within an ecosystem is affected by their environment which cause change
4,2A,B Energy flows through ecosystems causing food chains and food webs & is recycled within ecosystem
4,3C Some populations in an ecosystem are threatened, endangered or extinct as a result of outside factors

Understandings

Cycles in nature move materials in an ecosystem
Living things within an ecosystem interact
Organisms have to adapt in order to survive
Ecosystems have energy that flows through it
Land Biomes include biotic and abiotic materials
Some ecosystem's populations are threatened

Essential Questions

What is an ecosystem?
How are ecosystems constructed?
What cycles in nature move materials in ecosystems?
How do ecosystems interact?
What is a biome? Examples of water & land?
How does energy flow through an ecosystem?
How are ecosystems threatened & preserved?

Knowledge

Skills

Stage 2: ASSESSMENT EVIDENCE

Performance Tasks

Other Evidence

Key Criteria

Stage 3: LEARNING PLAN

TEXT HERE

Mary Queen of Peace School
Curriculum Template

Subject

Science

5

Animal Classification, Characteristics, & Reproduction

**Unit
Name**

Grade

Stage 1: DESIRED RESULTS

Established Goals / Content Standards

3,1A Animals have basic needs for survival
3,1B Animals progress through life cycles unique to different types of animals
3,1D Animals have different structures that serve similar functions necessary for survival
3,1E Biological classifications are based on how organisms are related
4,3A Animals have mutations and adaptations, found in fossil records
4,3B Reproduction is essential to the continuation of every species
4,3C Natural selection is the process of sorting individuals based on their ability to survive

Understandings

Animals must have needs met to survive
Animals have life cycles that are necessary for survival
Animals have different structures that help them to survive & are used to classify them
Animal must adapt to survive
Animals grow & reproduce in different ways

Essential Questions

What are the needs animals have to survive?
How is the life cycle of a frog different from a butterfly?
What are some unique structures that help an animal to survive?
What is the difference between a learned behavior and one that is inherited?
What are some examples of adaptations in animals?
How do animals reproduce sexually & asexually?

Knowledge

Skills

Stage 2: ASSESSMENT EVIDENCE

Performance Tasks

Other Evidence

Key Criteria

Stage 3: LEARNING PLAN

TEXT HERE

**Mary Queen of Peace School
Curriculum Template**

Subject

Science

5

Scientific Inquiry, Measurement & Tools Used

**Unit
Name**

Grade

Stage 1: DESIRED RESULTS

Established Goals / Content Standards

7,1A Use scientific inquiry to formulate a testable question and explanation using the Scientific Method
7,1B Use method to gather evidence and make observations using the 5 senses & tools w/metric measure, determining when to use meters, liters, grams or celcius
7,1C Evaluate results using laws, models, principles, & theories in light of data and scientific principles
7,1D Be able to communicate results and justification of explanations
8,1 A,B Use technology and tools to collect data and to communicate conclusions more effectively
7,1B Teach metric values and conversions

Understandings

The Scientific Method is use to test a question
Meters measures length or distance, liters measures volume or capacity, grams measure mass or weight
Understand all parts of the Scientific Method
When scientific laws, principles, & theories are used results can be evaluated
Communicate results with written conclusions, data tables, graphs, & oral presentations
Understand how and when to use tools
Understand the metric system

Essential Questions

What are the parts of the Scientific Method?
What metric tool is used to measure length, mass, volume & temperature?
What laws, principles, or theories back your findings and support your hypothesis?
How does a data table, graph, or written conclusion communicate the your results?
When do you use graduated cylinders, triple beam balances, meter sticks, beakers?
What are the metric measurements, values, abbreviations?

Knowledge

Skills

Stage 2: ASSESSMENT EVIDENCE

Performance Tasks

Other Evidence

Key Criteria

Stage 3: LEARNING PLAN

TEXT HERE

Mary Queen of Peace School
Curriculum Template

Subject

Science

5 & 6

Impact of Science, Technology and Human Activity

**Unit
Name**

Grade

Stage 1: DESIRED RESULTS

Established Goals / Content Standards

8,1A-C Designed objects are used to do things better & easier and sometimes result in improved data
8,2A People of different gender and ethnicity have contributed to scientific discoveries & inventions
8,2B Scientific theories are developed and must be questioned and tested for validity
8,3A People make discoveries about nature and invent new ways to solve problems
8,B,C The progress of science and technology are influenced by social, political, ethical, & environmental factors that must not knowingly subject people to health risks

Understandings

Through time people change theories about science when new or better technology is found
All gender and ethnic contributions are made
New technology must be tested for validity
Inventions and discoveries improve our lives
Progress in Science are influenced by social, political, ethical, & environmental factors but may not pose a health risk to mankind

Essential Questions

How have theories about (example) changed over time?
Who is responsible for this discovery?
How has this technology been tested?
How has this technology improved or advanced science?
What are the social, political, ethical, or environmental ramifications of this discovery

Knowledge

Skills

Stage 2: ASSESSMENT EVIDENCE

Performance Tasks

Other Evidence

Key Criteria

Stage 3: LEARNING PLAN

TEXT HERE