Grade level: 3 | **Course Title: Science** | **Topic/Concept: Ideas and Inventions**

Time Allotment: 7 Weeks | **Unit Sequence: 1**

Major Concepts to be learned:

- Rubbing Techniques
- Carbon Printing
- Color Writing

Expected Skills to be demonstrated:

- The students will be able to use the rubbing technique to observe things not easily seen.
- The students will be able to use the carbon printing tecnique to make fine textures visible.
- The students will be able to use paper chromatography to observe things not easily seen.

PA Standards/Anchors:	Eligible Content:
3.1.3.A1	S3.A.2.1 S3.A.2.2

Instructional Strategies:	Assessments:
• Science Notebooks • Observation • Small Groups • Teacher Directed • Discussions • Hands on Activities	• Teacher Observation • Science Notebook • Experiments • Teacher Created Assessments • Final Project

Grade level: 3 **Course Title: Science** **Topic/Concept: Earth and Space Science**

Time Allotment: 4 Weeks **Unit Sequence: 2**

Major Concepts to be learned:

- Embryology

Expected Skills to be demonstrated:

- The students will be able to identify the different stages of embryo development of a chick
- The students will be able complete proper cleaning and sanitizing steps of handling chicks.

PA Standards/Anchors:

3.1.3.A 3.1.1.C
3.1.6-8 E
3.1.4.A

Eligible Content:

Instructional Strategies:

- Science Notebooks
- Observation
- Small Groups
- Teacher Directed
- Discussions
- Hands on Activities
- Nonfiction Literature
- Technology
- Items provided by 4-H

Assessments:

- Teacher Observation
- Science Notebook
- Experiments
- Teacher Created Assessments
- Final Projects

Grade level: 3 | **Course Title: Science** | **Topic/Concept: Plant Growth & Development**

Time Allotment: 4 Weeks | **Unit Sequence: 3**

Major Concepts to be learned:

- Life Cycle of a plant.
- Basic needs of a living organism.
- Interdependence between plants and insects.

Expected Skills to be demonstrated:

- The students will be able to observe, describe, and record changes in plants.
- The students will be able to use graphs to display and compare growth patterns.
- The students will be able to compare and discuss the changes occuring in plants over time.
- The students will be able to make predictions about the life cycle of a plant.

PA Standards/Anchors:	Eligible Content:
3.1.3.A 3.1.3.G 3.1.1.H	

Instructional Strategies:	Assessments:
• Science Notebooks • Observation • Small Groups • Teacher Directed • Discussions • Hands on Activities • Nonfiction Literature • Technology	• Teacher Observation • Science Notebook • Experiments • Teacher Created Assessments • Final Projects

Grade level: 3 | **Course Title: Science** | **Topic/Concept: Earth & Space Sciences**

Time Allotment: 5 Weeks | **Unit Sequence: 4**

Major Concepts to be learned:

- Rainforest Classifications
- Deforestation

Expected Skills to be demonstrated:

- The students will be able to explain what organisms need to survive.
- The students will be able identify and explain how animals interact with the environment.
- The students will explain how deforestation effects life.

PA Standards/Anchors:

3.1.3.A	3.1.3.H
3.1.3.F	3.3.3.A
3.1.3.G	3.3.3.B

Eligible Content:

Instructional Strategies:

- Science Notebooks
- Observation
- Small Groups
- Teacher Directed
- Discussions
- Hands on Activities
- Nonfiction Literature
- Technology

Assessments:

- Teacher Observation
- Science Notebook
- Experiments
- Teacher Created Assessments
- Final Projects

Grade level: 3 | **Course Title: Science** | **Topic/Concept: Pollinators**

Time Allotment: 4 Weeks | **Unit Sequence: All Year**

Major Concepts to be learned:

- What is a pollinator?
- Why are they beneficial?

Expected Skills to be demonstrated:

- Students will be able to identify various kinds of pollinators
- Students will be able to state the process of pollinating
- Students will explain how to protect the different pollinators

PA Standards/Anchors:

3.1.3.A 3.1.3.G
3.1.3.B 3.1.3.H
3.1.3.F

Eligible Content:

Instructional Strategies:

- Observation
- Small Groups
- Teacher Directed
- Discussions
- Hands on Activities
- Nonfiction Literature
- Technology
- Munnell Run Farms

Assessments:

- Teacher Observation
- Science Notebook
- Experiments
- Teacher Created Assessments
- Final Projects