Pequea Valley School District
Science

Unit: Living Things **Course: Science** **Grade: 1**

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s):

Unit EQ: How do organisms live, grow, respond to their environment, and reproduce?

Lesson EQ's:

What is an organism?
How are living and nonliving things different?
What do living things need to survive?
What are the parts of a plant?
What do the roots do?
How do stems and leaves help plants?
What is a seed?
What does a seed need to grow?
How are animals alike and different?

Keystone Eligible Content/PA Core Standard

3.3.K.A5
3.2.K.B3
3.2.1.B3
3.3.1.A5

Pacing: Approximate number of class sessions per unit

- 3rd Trimester

Tier 3 Vocabulary (Content specific vocabulary)

- Basic Needs
- Living
- Nonliving
- Organism
- Roots

- Seed
- Leaves
- Stem
- Grow
- Fruit
- Flowers

Know - What do learners need to **know** in order to be able to do and understand? ***List concepts, such as facts, formulas, key vocabulary and knowledge "nuggets".***

- Plants need water and light in order to live and grow.
- Living things need water, air, and resources from the land, and they live in places that have the things they need.
- Organisms have external structures that help them survive, grow and meet their needs.
- Plants and animals have a life cycle.

Understand - What do learners need to **understand**? What is the **big idea**? ***List broad concepts or "big ideas" in a statement of enduring understanding.***

- Understand plants need water and light in order to live and grow.
- Understand living things need water, air, and resources from the land, and they live in places that have the things they need.
- Understand organisms have external structures that help them survive, grow and meet their needs.

Learning Outcome - What do learners need to be able to **accomplish** by the unit's end? ***List skills and competencies.***

- The learner will be able to observe and categorize living and nonliving things by external characteristics.
- The learner will be able to make observations and describe the different parts of organisms that help them survive, grow, and meet their needs.
- The learner will be able to classify plants and animals according to physical characteristics they share.
- The learner will use observations to describe what plants need to survive.
- The learner will use a model to explain the relationship between the needs of different plants or animals and the places they live

Literature:

Software/Resources:

Pequea Valley School District
Science

Unit: Matter **Course: Science** **Grade: 1**

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s):
Unit EQ: How can one explain the structure, properties, and interactions of matter?
Lesson EQ's:
What is matter?
What is a solid?
What is a liquid?
How do liquids differ from one another?
How do solids differ from one another?
What is a mixture?

Keystone Eligible Content/PA Core Standard
3.2.K.A1
3.2.K.A3
3.2.1.A1

Pacing: Approximate number of class sessions per unit

Tier 3 Vocabulary (Content specific vocabulary)
- Matter
- Solid
- Liquid
- Mass
- Mixture
- Balance
- Ruler

Know - What do learners need to **know** in order to be able to do and understand? ***List concepts, such as facts, formulas, key vocabulary and knowledge "nuggets".***

- Different types of matter exist in various states
- Matter can be described by its observable properties

Understand - What do learners need to **understand**? What is the **big idea**? ***List broad concepts or "big ideas" in a statement of enduring understanding.***

- Understand different types of matter exist in various states
- Understand matter can be described by its observable properties

Learning Outcome - What do learners need to be able to **accomplish** by the unit's end? ***List skills and competencies.***

- The learner will be able to observe, describe, and classify matter by properties and uses (e.g. size, shape, weight, solid, liquid, hardness, texture, color)
- The learner will organize simple weather data sets to record local weather data and identify day-to-day variations.

Literature:

Software/Resources:

Pequea Valley School District
Science

Unit: Weather **Course: Science** **Grade: 1**

Planning the Focus Based on the Desired Result
What do you want all students to know, understand and do by the end of the unit?

Unit Essential Question(s):
Unit EQ:
What is the weather like today?
How do you describe the wind?
How do you measure rain?
How can clouds be sorted?
What is the temperature?
What is a thermometer?
What is the water cycle?
What are the different types of precipitation?

Keystone Eligible Content/PA Core Standard
3.3.K.A5
3.2.K.B3
3.2.1.B3
3.3.1.A5

Pacing: Approximate number of class sessions per unit

Tier 3 Vocabulary (Content specific vocabulary)
- Clouds - Cumulus, Stratus, Cirrus
- Weather
- Wind
- Precipitation - rain, snow, hail, sleet
- Thermometer
- Temperature
- Rain Gauge
- Meteorologist
- Fahrenheit

- Water Cycle

Know - What do learners need to **know** in order to be able to do and understand? ***List concepts, such as facts, formulas, key vocabulary and knowledge "nuggets".***

- Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time.
- There are different kinds of precipitation (snow, rain, hail, sleet)
- A thermometer is a tool used to measure temperature.
- A rain gauge is a tool used to measure rain.
- Recognize that there are different kinds of clouds.
- The water cycle
- The relationship between water, clouds, and temperature.

Understand - What do learners need to **understand**? What is the **big idea**? ***List broad concepts or "big ideas" in a statement of enduring understanding.***

- Understand weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time.
- Understand the different kinds of precipitation
- Understand how to use a thermometer to measure the temperature.
- Understand how to use a rain gauge to measure the rainfall
- Understand the different kinds of clouds.
- Understand the water cycle.
- Understand the relationship between water, clouds, and temperature.

Learning Outcome - What do learners need to be able to **accomplish** by the unit's end? ***List skills and competencies.***

- The learner will use and share observations of local weather conditions to describe patterns over time.
- The learner will be able to demonstrate the relationship between water, clouds, and temperature.

Literature:

Software/Resources:

Pequea Valley School District
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Unit: Matter **Course: Science** **Grade: 1**

Planning the Focus Based on the Desired Result
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