KINDERGARTEN FALL HARVEST: UNIT 3

CONCEPTS AND ENDURING UNDERSTANDINGS:

Unit: Fall Harvest

Time Frame: Four Weeks

Key Concepts: The Engineering Design Process, Past and Present, Harvesting, Growth Patterns (weather, animals, plants, people), Comparing Living and Non-living

ESSENTIAL QUESTION: How do changes in fall affect the world?

Great Idea: Scientists ask questions, observe, compare, and collect data about the world around them. They answer the questions by observing patterns and looking for evidence. There are different types of scientists involved in observing fall. A harvest is the process of gathering crops. The methods for harvesting crops have changed over time with technological advances. The harvest has been celebrated over time in different ways all over the world.

GUIDING QUESTIONS:

1. What is a scientist and how do scientists learn about the world around them?

- Define a scientist and identify their tools.
- Identify, sequence, and apply the Engineering Design Process.
- Utilize the five senses to define fall.
- Utilize meteorologist's tools and resources to determine fall weather patterns.

2. How do living things change in fall?

- Classify the characteristics of a living thing.
- Recognize and sort ways animals/people are affected by fall temperatures.
 - Migration
 - Hibernation preparation
 - Adaptations
- Compare and contrast two types of trees.
- Sequence the growth pattern of a tree.

3. How has harvest changed over time?

- Define harvest and harvested foods.
- Sequence the growth pattern of harvested foods.
 - o Apple
 - o Pumpkin
- Compare harvested foods and how they grow.
- Prepare a harvested food to understand past and present techniques.
- Determine why people celebrate Thanksgiving (First Thanksgiving).
- Show how people celebrate Thanksgiving (Present day Thanksgiving).

Lesson Sequence

Students will:

- 1. Define a scientist and identify their tools.
- 2. Identify and sequence the steps of the Engineering Design Process.
- 3. Utilize the five senses to define fall.
- 4. Apply the Engineering Design Process.
- 5. Utilize meteorologist's tools and resources to determine fall weather patterns.
- 6. Classify the characteristics of living things.
- 7. Recognize and sort ways animals are affected by fall temperatures (Migration).
- 8. Recognize and sort ways animals are affected by fall temperatures (Hibernation preparation).
- 9. Recognize and sort ways animals/people are affected by fall temperatures (Adaptation).
- 10. Compare and contrast two types of trees.
- 11. Sequence the growth pattern of a tree.
- 12. Define harvest and harvested foods.
- 13. Sequence the growth pattern of harvested foods (Pumpkin).
- 14. Sequence the growth pattern of harvested foods (Apple).
- 15. Compare harvested foods and how they grow.
- 16. Prepare a harvested food to understand past and present techniques.
- 17. Determine why people celebrate Thanksgiving (First Thanksgiving).
- 18. Show how people celebrate Thanksgiving (Present day Thanksgiving).
- 19. Fall Harvest Celebration/Summative Assessment- Apply content knowledge to complete an independent activity.

CONTENT STANDARDS:

Next Generation Science Standards

K. From Molecules to Organisms: Structures and Processes

https://www.nextgenscience.org/dci-arrangement/k-ls1-molecules-organisms-structures-and-processes

K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.

K. Earth's Systems https://www.nextgenscience.org/dci-arrangement/k-ess2-

earths-systems

K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

K. Earth and Human Activity <u>https://www.nextgenscience.org/dci-arrangement/k-ess3-earth-and-human-activity</u>

K-ESS3-1. Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.

Social Studies

https://marylandpublicschools.org/about/Documents/DCAA/SocialStudies/Framework/Kinder garten.pdf

2.0 Peoples of the Nation and World: Students will understand how people in Maryland, the United States and around the world are alike and different.

A.1.a. Use experiences, such as class trips, classroom visitors, stories, and electronic <u>media</u>, to give examples of different choices people make about meeting their human needs for food, clothing, shelter, and other commonalities, such as recreation, stories, and music.

A.1.b. Give examples of qualities, such as customs, interests, skills, and experiences that make individuals and families in their immediate <u>environment</u> unique.

C.1.a. Identify, discuss, and demonstrate appropriate social skills, such as listening to the speaker, taking turns, settling disagreements, and reaching compromise at home and in school.

3.0 Geography: Students will use geographic concepts and processes to understand location and its relationship to human activities.

D.1.a. Identify ways people adapt to the environment, such as wearing clothing that is appropriate to the weather.

D.1.b. Identify ways that people change their environment to meet their needs, such as planting crops or cutting forests.

5.0 History: Students will use historical thinking skills to understand how individuals and events have changed society over time.

A.2.a. Compare tools and toys of the past with those of today.

6.0 Social Studies Skills and Processes: Students shall use reading, writing, and thinking processes and skills to gain knowledge and understanding of political, historical, and current events using disciplinary and inquiry literacies.

Developing Questions & Planning Inquiries

A.1. Identify a disciplinary topic that requires further study.

A.2. Identify possible questions for inquiry into the topic.

A.3 Identify key disciplinary concepts and facts associated with the compelling questions.

B.1. Construct supporting questions that connect with the compelling question.

B.2. Identify key disciplinary concepts and facts associated with the supporting questions.

C.1. Identify the kinds of sources that will be helpful in answering the compelling or supporting questions.

Applying Disciplinary Concepts & Tools

Geography

A.1. Construct maps, graphs, and other representations of familiar places.

A.2. Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them.

A.3. Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.

Communicating and Critiquing Conclusions & Taking Informed Action

A.1. Construct an argument with reasons.

A.2. Construct explanations using correct sequence and relevant information.

A.3. Present a summary of an argument using print, oral, and digital technologies

B.1. Ask and answer questions about arguments.

B.2. Ask and answer questions about explanations.

C.1. Identify and explain local problems and some ways in which people are trying to address these problems.

C.2. Identify ways to take action to help address local problems.

C.3. Use listening, consensus-building, and voting procedures to decide on and take action in their classroom.

Reading English Language Arts

https://www.marylandpublicschools.org/programs/Documents/ELA/Standards/Grades_PK_K_ MCCR_ELA%20Standards.pdf

Reading: Literature

Craft and Structure

RL.K.4. Ask and answer questions about unknown words in a text.

RL.K.5. Recognize common types of texts (e.g., storybooks, poems).

Integration of Knowledge and Ideas

RL.K.9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Range of Reading and Level of Text Complexity

RL.K.10. Actively engage in group reading activities with purpose and understanding.

Reading: Informational Text

Key Ideas and Details

RI.K.1. With prompting and support, ask and answer questions about key details in a text.

RI.K.2. With prompting and support, identify the main topic and retell key details of a text.

Range of Reading and Level of Text Complexity

RI.K.10. Actively engage in group reading activities with purpose and understanding.

Reading: Foundational Skills

Print Concepts

RF.K.1.a. Follow words from left to right, top to bottom, and page by page.

Writing

Texts Types and Purposes

W.K.2. Use a combination of drawing, dictating, and writing to compose

informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

Research to Build and Present Knowledge

W.K.8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.

Speaking and Listening

Comprehensions and Collaboration

SL.K.1.a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and text under discussion).

SL.K.1.b. Continue a conversation through multiple exchanges.

Presentations of Knowledge and Ideas

SL.K.4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.

SL.K.5. Add drawings or other visual displays to descriptions as desired to provide additional details.

SL.K.6. Speak audibly and express thoughts, feelings, and ideas clearly.

Language

Vocabulary Acquisition and Use

L.K.5.a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

L.K.5.c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).

L.K.6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Health

https://marylandpublicschools.org/about/Documents/DCAA/Health/Health_Education_Frame work_July_2022.pdf

1.0 Mental and Emotional Health

A.1.a. Demonstrate positive communication among peers.

6.0 Food Production

B.1.a. Identify foods that come from different sources, such as plant and animal.

Physical Education

<u>https://www.marylandpublicschools.org/about/Documents/DCAA/PE/MDPEFramework.pdf</u> 6.0 Social Psychological Principles

C.1.a. Imitate socially acceptable behaviors of cooperation, respect, and responsibility to interact positively with others.

Visual Arts

https://www.marylandpublicschools.org/programs/Documents/Fine-Arts/Visual+Art+Standards+Grades+P-12.pdf

Creative Expression and Production

3.1.c. Create artworks that explore the uses of color, line, shape, and texture to express ideas and feelings.

FAMILY NEWSLETTER



Dear Families,

We are beginning a new social studies and science unit called Fall Harvest. In this unit, your child will learn how a scientist asks questions, observes, compares, and collects data about the world around them. Scientists answer the questions by observing patterns and looking for evidence. There are different types of scientists involved in observing fall. A harvest is the process of gathering crops. The methods for harvesting crops have changed over time with technological advances. The harvest has been celebrated over time in different ways all over the world.

Here are some ideas you can do to enrich your child during this unit:

- Visit local farms, orchards, and farmer's markets to:
 - Identify the types of fall harvested foods
 - Observe the growth patterns of harvested foods
 - Observe the methods used to harvest food
 - Pick apples, pumpkins, etc.
 - Discuss the foods that can be made from the harvested crops
- Discuss harvested foods with your child during grocery trips
 - Use grocery circulars to create a harvested food menu
 - Have your child help select the food you are purchasing
 - Identify in-season harvested foods (this may lead to a discussion about how some food is grown elsewhere and brought in when it is not in season locally)
- Include your child in the preparation of meals
 - Identify the foods on the table that were made from harvested foods
- Take a fall walk with your child to discuss seasonal changes
 - Collect fall artifacts
- Review the traditions in your family that occur during Thanksgiving
- Take a trip to the library to explore fall literature
- Take a trip to the Maryland Science Center, Maryland Zoo in Baltimore, Museums, etc.

Please enjoy the fall season and thank you for your partnership in learning.

Your Child's Kindergarten Teacher,