

Integrated Social Studies and Science  
Second Grade Growing Season lesson Plan

**Ohio Standards Connections:**

**Grade Two (Social Studies)**

**History**

Students use materials drawn from the diversity of human experience to analyze and interpret significant events, patterns and themes in the history of Ohio, the United State and the world.

B. Place events in correct order on a timeline.

*Chronology*

3. Place a series of events in chronological order on a time line.

**Economics**

Students use economic reasoning skills and knowledge of major economic concepts, issues and systems in order to make informed choices as producers, consumers, savers, investors, workers, and citizens in an independent world.

A. Distinguish between goods and services and explain how people can be both buyers and sellers of goods and services.

B. Explain ways that people may obtain goods and services.

*Production, Distribution and Consumption*

2. Explain how people are both buyers and sellers of goods and services.

**Social Studies Skills and Methods**

Students collect, organize, evaluate and synthesize information from multiple sources to draw logical conclusions. Students communicate this information using appropriate social studies terminology in oral, written or multimedia form and apply what they have learned to societal issues in simulated or real-world settings.

C. Communicate information orally, visually or in writing.

*Obtaining Information*

1. Obtain information from oral, visual and print sources.

*Problem Solving*

6. Use problem-solving/decision-making skills to identify a problem and gather information while working independently and in groups.

**Life Sciences**

Students demonstrate an understanding of how living systems function and how they interact with the physical environment. This includes an understanding of the cycling of matter and flow of energy in living systems. An understanding of the characteristics, structure and function of cells, organisms and living systems will be developed. Students will also develop a deeper understanding of the principles of heredity, biological evolution, and the diversity and interdependence of life. Students demonstrate an understanding of different historical perspectives, scientific approaches and emerging scientific issues associated with the life sciences.

A. Describe that there are living things, non-living things and pretend things, and describe the basic needs of living things (organisms).

*Characteristics and Structure of Life*

1. Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water

and nutrients, living space and light to survive.

### **Scientific Inquiry**

Students develop scientific habits of mind as they use the processes of scientific inquiry to ask valid questions and to gather and analyze information. They understand how to develop hypotheses and make predictions. They are able to reflect on scientific practices as they develop plans of action to create and evaluate a variety of conclusions. Students are also able to demonstrate the ability to communicate their findings to others.

A. Gather and communicate information from careful observations and simple investigation through a variety of methods.

#### *Doing Scientific Inquiry*

1. Ask “How can I/we” questions.
2. Ask “How do you know” questions (not “why” questions) in appropriate.

#### **Lesson Summary:**

With this lesson plan students will come to understand the different cultures and ways of life within their own community, city, or state. Our lesson plan is geared toward second grade and involves plenty of social studies and science academic content standards. Through this lesson plan, students will learn how to communicate in different ways, and understand that different languages are entering their classrooms more and more each day. Children will learn the concept of team work and how important it is to work together when trying to accomplish a common goal. Also stressed, will be how hard the workers of the migrant community collaborate in order to accomplish their goals, and how important it is for everyone to play an equal role.

Children’s curiosity can stem from the teacher bringing in store bought produce and asking the children questions about it. Once the children become curious, research can commence that will answer questions regarding how plants grow.

By focusing our lesson plan in the fields of social studies and science, we are allowing students to make the connection between people and advancement. We have chosen the following goals for students because these are issues that are very relevant to the children’s every day lives and are in today’s society and situations that all Americans are coming in contact with. In the activities students must complete cognitive, emotional, physical, artistic, and social skills. In their development, students will be exposed to new and surprising ideas, learn the importance of verbal language, practice physical abilities, explore artistic and creative ways to communicate with each other, and learn to communicate in different ways.

Students in this lesson will be paired into groups of two. These groups will be given the challenge of not being able to communicate verbally throughout the whole class.

After a pre-assessment exercise is conducted and the students are divided, they will be given the task to research how to plant and grow an onion with materials that the teacher will provide.

After this activity is completed students can be introduced to a supplementary assignment; creating a timeline. The timeline will document the progress of the onion growth over a three week period.

After this lesson students will have a better understanding of the migrant workers and their daily lives. Students will also be able to recognize how the language barrier impacts the Hartville community.

#### **Estimated Duration:**

The estimated time needed for instruction is 50 minutes.

**Commentary:** This lesson plan has been created to collaborate with the book Growing Season. This unit plan may be

accompanied with a field trip to Zeller's Farm in Hartville, OH.

Teachers should have previously discussed migrant workers and what they do. Students will already have an understanding of the hard work and cooperation that go into growing the crops on the farms.

Students and teachers have previously researched together how to grow an onion. They are knowledgeable of the steps they need to take.

In this class there is a child with Dyslexia, See "Differentiated Instruction" below.

### **Pre-Assessment:**

This activity is student centered.

Students can start discussion in the class by asking questions about the content they will be exposed to in the upcoming lesson. Some sample questions that students can ask, or teachers can prompt are:

Who has been grocery shopping with their parents?

Where do you think the food and produce come from?

How long do you think it takes for the food to grow?

What do growing plants need to survive?

Who plants and harvests the food?

Once those questions are answered you can delve into topics like how the food is grown and who grows it. Then, teachers can ask things like:

Where are the planters from?

How are their jobs/lives unique?

Where do their children go to school?

What does it take for the migrant workers to harvest crops successfully?

What would happen if the migrant workers didn't work together?

How do the migrant workers communicate with their community?

After this exercise, teachers can ask if the students are interested in doing a growing experiment to learn more about how plants grow. Once students are interested, they can divide into pairs.

### **Scoring Guidelines:**

Student participation in the discussion will be documented. Once the discussion is complete students will be asked to share with the class something new that they learned during the discussion. The teacher will document observations and responses from the students.

### **Post-Assessment:**

Students will be assessed based upon their knowledge of the growth cycle of the onion. This can be done either through verbal discussion or a written assignment. Students should also be able to distinguish how communication played a factor while growing the onion. See attachments for sample worksheet.

### **Scoring Guidelines:**

See Attached Rubric.

### **Instructional Procedures:**

The class will discuss the importance of cooperation, communication, empathy, community, and culture. Teachers ask what the children think about the language barriers that some people experience everyday. Students should have some prior knowledge based on previous in class activity and discussion. (approx. 10 minutes)

Teachers will ask the children to pair off in groups of two. Teachers will ask what we can do to experience a language barrier first hand. List the student's responses. Agree on one. (approx. 5 minutes)

Teachers then will distribute materials to students. This is when teachers should explain to the students that from this point on they will no longer be able to communicate verbally to each other. Just as some of the migrant workers are unable to speak to others on the farm, but still are expected to accomplish work. Now instructions will be given for students to come up with a plan to divide the work among each other to grow their onion without communicating with words. Remind the children that they agreed to only use pictures and writing.

Students will be given 15 minutes to draw or write plans to grow their onion in pairs. If more time is needed, allow an extra five minutes.

After this step is completed, students will begin the process of planting their onion.

Fill cup  $\frac{3}{4}$  ways with dirt.

Place onion bulb  $1\frac{1}{2}$  inches into soil

Water plants occasionally

Plants will be fully grown when leaves become 8-10 inches tall

(Approx. 10 minutes)

Once the above steps are completed students should be given time to begin their timelines. Explain to students that their timeline must include a drawing of what the state of their plant is in on day 1. Be sure that they include the date of project. (Approx. 10 minutes)

### **Differentiated Instructional Support**

For Dyslexia:

One way to help accommodate people with dyslexia is to use a sans serif font. These fonts help eliminate unnecessary extensions on letters. The less confusing a font is, the more helpful it can be to an individual with dyslexia (Reid, 2003, p.2). An example of these fonts would be Microsoft Sans Serif.

Teachers can also pair instruction with audio or visual aides to accommodate their students (Fletcher, 2006, p.137).

All worksheets that will be handed out for this lesson will be typed in Sans Serif font.

### **Extension**

These are ideas for all students to continue learning on this topic -- in class or outside of class:

The migrant center is always looking for donations and volunteers. Teachers can help students establish communication with the Migrant Center to get more involved.

A class visit to Hartville or Zeller's farm will enrich the student's experience.

Many other ideas and lesson plans, as well as student responses will be posted on the Growing Season website.

### **Homework Options and Home Connections**

Students can also take their onion plants home and use them in various ways. Teachers can also have a class cooking session if they are able to.

If individual timelines cannot be completed in class, students may finish at home.

### **Interdisciplinary Connections**

This lesson incorporates standards from Science and Social Studies, however, writing assignments or projects can be included to cover Language Arts content standards and reinforce the material students are learning.

Also, math content can be covered if students consider the amounts of produce a farm is growing compared to the profit that is made, the percentage of revenue reserved for workers, and the cost to grow.

### **Materials and Resources:**

*For teachers*

Supplies:

Styrofoam cups

Soil

Onion bulbs

Paper

Coloring utensils

*For students*

Books:

Dig and Sow! How do Plants Grow?: Experiments in the Garden, by Janice Lobb

First Day in Grapes, by: L. King Perez

La Mariposa (English version), by Francisco Jimenez

### **Key Vocabulary**

Migrant workers- workers who travel to different places where they are employed for different jobs.

Culture- similar aspects that a group of people share.

Timeline- a representation of events in chronological order.

Chronological- putting things in order according to when they happened in time.

Communication- the interchange of thoughts, feelings, opinions, or information through speech, writing, or gestures

Community- a group of people who all live in the same area. They all share similar qualities.

Buyer- a person who purchases goods from a seller.

Seller- a person who exchanges goods with a buyer for profit.

Cooperation- working together to accomplish a common goal.

Empathy- being able to understand another's feelings, thoughts, and emotions.

### **Technology Connections**

The following website will lead to an online activity for students to use. This supplemental instruction is supported by ODE Technology standards for grades K-3. There is information for both teachers and students within the presentation.

HYPERLINK "http://www.personal.kent.edu/~kmaile/portfolio/Growing%20Season.ppt" <http://www.personal.kent.edu/~kmaile/portfolio/Growing%20Season.ppt>

Also, here is a helpful website for your students when they are growing their green onions. This website will give students information on how to effectively accomplish their goal:

HYPERLINK "http://www.urbanext.uiuc.edu/firstgarden/planning/dictionary/veggies/greenonions.html" <http://www.urbanext.uiuc.edu/firstgarden/planning/dictionary/veggies/greenonions.html>

## **Research Connections**

The Reggio Emilia approach is the approach that best fits the matter of this lesson plan. This approach attracts educators who are interested in the role of the classroom environment in children's learning; long-term curriculum projects that promote inquiry among teachers and children; partnerships with parents that include collaboration in the learning process; documentation for observation, research, assessment; and the hundred languages of children (New, 2003, p.2).

In this lesson plan children will be paired up with at least one partner. Working together in the classroom is a big part of learning in the Emilia approach. The student is viewed not as a target of instruction, but rather as having the active role of an apprentice, working alongside other in the discovery and construction of solutions to meaningful questions and problems (Hewett, 2001, p. 96).

## **General Tips**

Students should be able to pick their own partners.

If teachers are more familiar with another plant, they do not necessarily have to grow onions; they may research and grow another plant.

## **Attachments**

Rubric

Assessment Worksheet

Timeline worksheet

Reference Page

## Site Visit Summary

For our site visit, we (Amber Thomasson and Kristin Maile) went out to Hartville, OH for the migrant center open house. It was such an awesome experience. Gary Harwood and Dr. Morrison were there, along with many other important people, including some of the workers. When we first got there we were given a tour of the center by a woman who volunteers there. She took the time to talk with us and answer all of our questions. She was very informative and gave us a lot of input on how the migrant children's schooling works. After looking around and chatting, we were able to purchase the book "Growing Season" and have it signed by some of the workers and Gary himself, which I thought was awesome.

We saw the library they were working on for the children to use and the computers that the center used for instruction and helping the kids with their homework. We were also able to see some of the pictures Gary took of the families hanging on the wall. It was important for us to see the community to gain a better understanding of their lives. We want to transfer this experience of community and unification to the classroom for our lesson plan.

Once we were ready to leave the center Kristin and I drove around for a little bit to take in all of the surroundings and get a better sense of what the housing and fields were like. It was very neat to see the housing. What really amazed us were the black muck fields. We could not believe how dark the fields were; they almost looked like freshly paved blacktop. The perfect rows of crops were also amazing and very beautiful. All together we were very pleased with how our visit turned out, it was quite an amazing experience.



Please make sure that your timeline includes the day of the week, day of project, and the date

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## **Onion Timeline**

Week One

Content Standard	Skill Demonstrated	Possible Points
<b>Social Studies</b>	<i>History:</i> Place a series of events in chronological order on a timeline. Students turned in clear, concise timeline. Timeline must include drawings, dates, day of growth.	____/20
	<i>Economics:</i> Distinguish between goods and services and explain how people can be both buyers and sellers of goods and services. Explain ways that people may obtain good and services. Students completed worksheet provided by instructor in a group setting.	____/5
	<i>Social Studies Skills and Methods:</i> Communicate information in writing. Students must turn in any written material that they used in order to communicate with each other during their onion experiment.	____/10
<b>Science</b>	<i>Life Sciences:</i> Explain that animals, including people, need air, water, food, living space and shelter; plants need air, water and nutrients, living space and light to survive. Students completed worksheet provided by instructor in a group setting.	____/5
	<i>Scientific Inquiry:</i> Ask “How can I/we” questions Students must have participated in class discussions. After discussion, each group must produce at least one “How can I/we” question.	____/5
	<i>Scientific Inquiry:</i> Ask “How do you know” questions (not “why” questions) in appropriate situations and attempt to give reasonable answers when others ask questions. Students must have participated in class discussions. After discussion, each group must produce at least one “How do you know” question.	____/5
		____/50

Mr. Zeller grows onions on his farm. He then delivers them to a large grocery store where they are sold to consumers. Both Mr. Zeller and the grocery store are examples of what? (circle one)

Buyers                      Sellers

Circle **all** of the things that a living plant needs.

Air	Sunlight	Rocks
Water	Clouds	Soil

When you go to a store to purchase goods you are considered a:

Buyer                      Seller

In the space below write the "How" question and answer that your group came up with.

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