## PROJECT CALENDAR

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<td><strong>PROJECT WEEK ONE</strong></td>
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<td>During the investigation, Ss should journal about their experiences and the information they are learning. They will use these entries and posts to make a digital portfolio or chapter book about gardening. Prior to the investigation, you will need to communicate with them about the purpose of their writing (reflection, assessment, and to share with an audience) and how they could publish it (Kidblog, iMovie, <a href="http://www.flipsnack.com">www.flipsnack.com</a>, <a href="http://www.smore.com">www.smore.com</a>, etc.). The publication methods will depend on your available resources and what is manageable for you. You may even choose to have the class contribute to one group publication by selecting photojournalists each day. For Ss who are overwhelmed by writing, allow them to record their thoughts on Audioboo (iPhone app), Vocaroo, or using the video feature on any device. These recordings can all be uploaded to Kidblog.</td>
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<td><strong>Morning Work (MW):</strong> Collect weather data on the Weather Data Collection Sheet (throughout investigation) Read Aloud: Pocketful of Goobers (begin World Flood* to build vocabulary) Independent Study: Plant Menu (To keep Students (Ss) on track, one item will be due each week) Pre-Assessment (Group): Picture sort Plant Pictures/Justify reasoning as a group Pre-Assessment (Student): Edible Plant Parts, Ss explain how they sorted plant parts (Edurecreations, blog, or worksheet) Pose Driving Question: How have new technologies in farming and weather prediction impacted the way we grow food today? Journal: Ss brainstorm possible impacts. Backchannel: How did your group sort the photos? Why? <a href="http://www.todaysmeet.com">www.todaysmeet.com</a></td>
<td>MW: Collect weather data Read Aloud: Pocketful of Goobers (Word Flood) Allow student groups to share how they grouped the photos, and give Ss time to have a discussion about their choices. Take notes about what Ss already know and their misconceptions. Post the driving question again. Create a wonder wall using Padlet (web) or Popplet (iPad) for Ss to record what they wonder about plants, gardening, farming, and weather.</td>
<td>MW: Collect weather data Read Aloud: Pocketful of Goobers (Word Flood) Pose driving question. Ask Ss to brainstorm what they will need to know for this investigation. How will the contributions of Ben Franklin and G.W. Carver aide us in this investigation? Make anchor chart for investigation:  - Driving Question  - Schema (What do you already know?) (Use Padlet or Popplet)  - Skills needed for project  - Resources to use  - Audience Blog, Journal, or Backchannel: How will this information guide the planning for our school garden?</td>
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<td>Read Aloud: Pocketful of Goobers (Word Flood) *Conference with Ss about interview questions, and allow Ss to peer edit. Picture sort of Agricultural Images of farming taking place in the past and in the present. Allow student pairs to sort first, and then share their thinking. Then, sort and discuss the pictures as a class. Connect via Skype with an experienced farmer. The farmer will discuss how farming has changed over the past century. What new technologies have impacted his or her practices?</td>
<td>MW: Review weather calendar with Ss. Discuss the number of cloudy, sunny, windy, rainy, etc. days this week. Ask, “How is this information helpful to us? What decisions do you make each day based on the weather” (clothing, activities, etc.)? Create a class tally chart based on the data.</td>
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<td>Blog, Journal, or Backchannel: How will this information guide the planning for our school garden? Homework or Writing: Ss develop questions to ask the park ranger on Friday. Discuss with Ss the difference between open-ended questions and yes/no questions. Include that open-ended questions are more valuable for research since they lead to new information about a topic. Also, discuss the structure of an asking sentence.</td>
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*A Word Flood is simply an anchor chart of words from a text that Ss find interesting, do not know the meaning of, or are important to the study.
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| **PROJECT WEEK TWO**

Hold writing conferences daily to support Ss with informational writing. Reading group selections should incorporate nonfiction texts so that Ss can review nonfiction text features, and differentiate between quality resources and resources that do not support the content. Display a variety of resources that extend student knowledge of the types of gardens (rooftop, barrel, indoor, outdoor, flower bed, etc.). When you can, use primary resources as well, such as *Farmer's Almanac* (online version available) and *Carver's Bulletins*. Ss will work on plant menus during guided reading groups.

**MW:** Weather Calendar  
**Read Aloud:** *Pocketful of Goobers* (Word Flood)

Introduce the regions of Georgia and review the types of landforms that can be found in each area.

Show Ss *Regions of Georgia Recording Sheet* and explain that they will research the information, create a QR Code, to make an interactive map, and teach the other Ss about the region. Next, have them vote on the region they would most like to research. Form differentiated groups based on the region they want to know more about.

**MW:** Weather Calendar  
**Read Aloud:** *Pocketful of Goobers* (Word Flood)

Ss will work in groups to research each region and record their data on the *Regions of Georgia Recording Sheet* (climate, landforms, plants, and location of Georgia). If using digital resources, find quality resources and make QR codes or post links to your class web page so that Ss can easily access these resources. If digital resources are not available, select books from your library ahead of time for Ss to use in the room. Pair up with an upper grades class (Book Buddies) if reading complex text is an issue.

**MW:** Weather Calendar  
**Read Aloud:** *Pocketful of Goobers* (Word Flood)

Continue research of Georgia regions, begin generating QR codes, and create map of Georgia.

**MW:** Weather Calendar  
**Read Aloud:** *Pocketful of Goobers* (Word Flood)

Student groups will teach the other Ss about the region of Georgia they researched. This is a good time to discuss presentation skills and appropriate ways of giving peer feedback.

**Homework:** Make a list of plants you would like to grow in our garden based on your research.

**MW:** Model for Ss how to create questions which require someone to answer using the data they collected. For example, “Based on the weather this week, what might the weather be like this weekend? What type of weather did we have the most of this week, rainy or sunny days?” Invite Ss to create questions related to the data.

Allow Ss to share the types of plants they want to grow in the garden. Based on their research, will they grow in the area? Take a vote on the plants you will actually grow.

**Blog, Journal, or Backchannel:** Can all plants survive in the same place?
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Ss will need prior knowledge of how to use measurement tools (standard or nonstandard) before engaging in this activity. Ss should be working on their flip books or documentaries. Begin collecting donations for the garden (mushroom compost, soil, plants, seeds, tools, etc.). You may need to help Ss understand the difference between spacing between plants and plant rows.

**MW: Weather Calendar**

Review the term “sustainable”. How can you determine if your garden is sustainable? How many plants would be needed for our class? Your family? (Use the list of plants that were voted on the previous day.)

Use the [Planning for a Sustainable Garden Recording Sheet](#) to record calculations.

*Note the connections Ss make during the activity. Do they notice repeated addition as multiplication? Are they using efficient strategies for addition?*

**MW: Weather Calendar**

As a class, determine what plants you will grow in your garden.

Ss will determine the how much space each plant will need in the garden. iPad apps such as Veggie Calendar and Veggie Calculator are a great resource for this activity. Ss will record this information on the [Plant Information Recording Sheet](#).

**Blog, Journal, or Backchannel:** Why is spacing important?

**MW: Weather Calendar**

Ss will continue to research how much space plants need. Once they finish collecting this formation, provide Ss a sheet of butcher paper that is the size of one garden space. Ss will use data and measurement tools to design a garden based on the information they found. Finally, Ss will present their plans to the class. When presenting, Ss should justify their reasoning for their placement of each plant (needs shade, full sunlight, vine plant, etc.).

**Blog, Journal, or Backchannel:** Why is spacing important?

**MW: Weather Calendar**

Take a field trip to a local community garden or farm to interview a master gardener or farmer. Encourage Ss to develop interview questions that lead to information about traditional and current farming practices, garden maintenance, and food preparation.

**Blog, Journal, or Backchannel:** Does growing a garden make you a producer or a consumer?

**Homework:** Write at least three interview questions for the Mystery Skype guests tomorrow. (For example, what landforms are in your area? What is the climate? What are popular foods?)

**MW: Weather Calendar**

Mystery Skype with a classroom from a food-growing school in another part of the country or world. [www.education.skype.com](http://www.education.skype.com)

**Blog, Journal, or Backchannel:** What did you learn today? Based on what you learned today, do we need to make any revisions to our plan?
**PROJECT WEEK FOUR**

It is extremely important that Ss engage in “Number Talks” to develop efficient strategies for addition. These strategies will serve them well with this week’s activities. Ss should continue to work on their flip book or documentaries. As always, include literature in reading groups that supports the topics discussed in other content areas.

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<td>Tour the garden space with Ss and examine the soil. Student groups will conduct a soil test using the jar method: <a href="http://www.ehow.com/how_4463725_test-soil-texture.html">http://www.ehow.com/how_4463725_test-soil-texture.html</a></td>
<td>Ss will share and discuss their observations of the soil. What do we need to make our soil ideal for gardening? Discuss layers of the soil with student. Be sure to discuss worms, microbes, organic matter, and decomposers.</td>
<td>Invite a local expert to discuss vermiculture with Ss. (Potential experts are: <a href="http://www.gawigglers.com/">http://www.gawigglers.com/</a> or <a href="http://www.herronfarms.webs.com">http://www.herronfarms.webs.com</a>) <strong>Blog, Journal, or Backchannel</strong> What did you learn today? How do worms contribute to the earth? Based on classroom discussions and research, Ss should prepare a list of questions to ask the vermiculture expert tomorrow.</td>
<td>Prepare the soil in the garden area. You can invite parents and community members to help Ss prepare the soil for the plants as well. Ss begin to determine the costs associated with the garden by completing the Garden Materials Recording Sheet with a partner.</td>
<td><strong>MW: Weather Calendar</strong> <strong>Gardening Day!</strong> Invite parents and community members to help Ss plant the garden. Ss should refer to the data they have collected and use measurement tools to properly space the plants. <strong>Blog, Journal, or Backchannel</strong> What did you enjoy most about today? How can you use this experience in other ways? (For example, plant a home garden, grow your own healthy food) <em>Plant Menus are due!</em></td>
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Ss should be familiar with a variety of measurement tools that serve purposes other than measuring length, such as a thermometer, rain gauge. They should also be familiar with the units each tool measures. Georgia CCGPS Frameworks are an excellent resource for lessons in measurement. Be sure to discuss where Ss can find information about weather. Ss should also begin finalizing their flip books or documentaries. Every day, Ss should collect weather data. In addition, Ss should measure plant growth weekly or every other week.

**Monday**

MW: Weather Calendar

Review measurement tools for weather, how to read them, and how to record on the weather recording sheet.

Discuss the **Plant Growth Chart**. What units will you use to measure? Why? Will you use the same unit each day? Why? Will you measure all plants? One of each plant? Why?

Allow Ss to choose various standard and nonstandard units to measure the plants. Once they select a tool, invite them to share their thinking about tool. Encourage other Ss to offer feedback to Ss about the tool regarding its appropriateness (for example, how easy or difficult the tool might be to use outside).

**Blog, Journal, or Backchannel:** Reflect on the measurement tools you chose to measure your plants.

**Tuesday**

MW: Weather Calendar

Review the conversation about measuring tools from the previous day. Invite Ss to select the tool they will use to measure the plants. Ask Ss to decide what method they will use to keep track of plant growth. For example, will you measure the same plant each time? Also discuss how often you will measure the plants (daily, weekly, twice a month?).

**Blog, Journal, or Backchannel:** Develop a plan for recording the progress of plant growth. How will this information be helpful to us as we make decisions for our garden?

**Wednesday**

MW: Weather Calendar

Review the conversation from the previous day, and allow Ss to share their journal entries. Take note of Ss’ conversations. Are Ss applying what have learned during the investigation to make decisions and justify their reasoning?

Review the **Plant Growth Chart** with Ss. What will they do when the plants grow taller than the measuring tool they have selected? Discuss. (They will note on the recording sheet a change in units.)

Take Ss to the garden to measure the plants. Take notes on how Ss are measuring the plants. Are they using the tools to get an accurate measurement? Are they using the tools appropriately? Can they accurately justify the tool they selected?

*Continue to measure plants based on the schedule you and your Ss arrange.

**Thursday**

MW: Weather Calendar

Skype with the World War Two (WWII) Museum in New Orleans to discuss Victory Gardens. What purpose did Victory Gardens serve? Do we have Victory Gardens today? How did people maintain the gardens during WWII? Do we use the same practices today?

**Blog, Journal, or Backchannel:** How do current farming practices differ from the practices used during WWII? What is something new you learned from the Skype session?

**Friday**

MW: Discuss the data Ss collected the last few weeks. Ask Ss to determine how the information will be helpful to them as gardeners. Have Ss create a tally chart of the weather that occurred the week after planting. Model for Ss how to create garden-related questions that would require someone to answer using that someone would need to use their data chart. For example, do our plants need to be watered before the weekend? Are the plants in the garden getting enough sun?

Also encourage questions that require Ss to integrate the measurement data and plant information gathered during research. For example, are our plants getting the right amount of sun each day? Since the kale has not grown much over the last month, what might be the problem? Our plants have grown significantly in the last few weeks. What might be causing the growth spurt? Continue this practice throughout the life of the garden.

Ss will present their documentaries or flip books about their experience in the investigation. Assess their presentations using the K-2 Presentation Rubric.