

## Cabbage Program Lesson Plan Template: **Caring for Cabbages 101**

Select one of the following topics: before planting, planting process  
caring for your plant, harvest time.

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<p><b>Materials:</b></p> <ul style="list-style-type: none"><li>- 6 Pieces of Poster board (2 extra needed if a projector is not available for the “Pack Your Own Survival Kit Activity”)</li><li>- Expo Markers</li><li>- Student Drawing Utensils (Markers, Colored Pencils, Crayons, Pens, Pencils- whatever is available.)</li><li>- Loose-leaf paper or Notebook (whichever item is normally used in class time)</li><li>- Book: <i>We are the Gardeners</i></li></ul>	<p><b>References:</b> <b>(Used for Teacher Preparation and Student Research)</b></p> <ul style="list-style-type: none"><li>- <i>Bonnie Plants Cabbage Program Website</i> (<a href="https://bonniecabbageprogram.com/start-growing/growing-and-caring-for-your-cabbage/">https://bonniecabbageprogram.com/start-growing/growing-and-caring-for-your-cabbage/</a>)</li><li>- <i>Johnny’s Selected Seeds</i> “Cabbage – Key Growing Information” (<a href="https://www.johnnyseeds.com/growers-library/vegetables/cabbage/cabbage-key-growing-information.html">https://www.johnnyseeds.com/growers-library/vegetables/cabbage/cabbage-key-growing-information.html</a>)</li><li>- <i>Ohioline</i> “Growing Cabbage in the Home Garden” (<a href="https://ohioline.osu.edu/factsheet/hyg-1611">https://ohioline.osu.edu/factsheet/hyg-1611</a>)</li><li>- <i>University of Minnesota Extension</i> “Growing cabbage in home gardens” (<a href="https://extension.umn.edu/vegetables/growing-cabbage#summer-planting-188061">https://extension.umn.edu/vegetables/growing-cabbage#summer-planting-188061</a>)</li></ul> <p><b>(Teacher Use Only)</b></p> <ul style="list-style-type: none"><li>- <i>We are the Gardeners Book</i></li></ul> <p>If this book is not accessible, stream a read aloud digitally. (<a href="https://www.youtube.com/watch?v=HHz6MDmAlv4">https://www.youtube.com/watch?v=HHz6MDmAlv4</a>)</p>
<p><b>Vocabulary:</b></p> <p><u>Academic:</u></p> <ul style="list-style-type: none"><li>- <b>Examine:</b> inspect (someone or something) in detail to determine their nature or condition; investigate thoroughly.</li><li>- <b>Research:</b> the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.</li><li>- <b>Relate:</b> make or show a connection between.</li><li>- <b>Collaborate:</b> work jointly on an activity, especially to produce or create something.</li><li>- <b>Explain:</b> make (an idea, situation, or problem) clear to someone by describing it in more detail or revealing relevant facts or ideas.</li></ul> <p><u>Content:</u></p> <ul style="list-style-type: none"><li>- <b>Garden:</b> a small piece of ground used to grow vegetables, fruit, herbs, or flowers.</li><li>- <b>Survive:</b> continue to live or exist.</li><li>- <b>Hydrated:</b> to supply with ample fluid or moisture.</li><li>- <b>Soil:</b> the upper layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.</li><li>- <b>Weather:</b> the state of the atmosphere at a place and time as regards heat, dryness, sunshine, wind, rain, etc.</li></ul>	<p><b>Literacy Connection:</b></p> <p><b>Speaking:</b> Students take part in class discussions as they activate prior background knowledge, collaborate with peers to complete a group project, and present their research findings to the class.</p> <p><b>Writing:</b> Students are asked to record research ideas, create a poster with text and illustrations to display their findings, and record their final conclusions on the “Cabbage Care Checklist” exit ticket.</p> <p><b>Listening:</b> Students are expected to listen to the teacher and their peers during discussion and presentation times, and students will also be asked to utilize their listening skills as the teacher reads <i>We are the Gardeners</i> aloud.</p> <p><b>Reading:</b> Students will be asked to read a variety of resources as they complete their own research, and they will be able to read each other’s displays through the “garden gallery” walk.</p>

## Assessment

**Formative-** A formative assessment can be done informally through the instructor's observation and involvement in students' discussion and research. The instructor can also assess students' growing understanding by evaluating their research ideas and notes.

**Summative-** This assessment can be completed through both the students' research posters as well as the "Cabbage Care Checklist" exit ticket they will submit at the end of class.

## Technology:

- Chromebooks/laptops (general computer access is needed for students to complete their own research. If not available, this can be supplemented through paper copies of nonfiction text.)

- If access to a hard copy of *We are the Gardeners* is not available, a projector or Smartboard can be used to stream a read aloud of the book. (This resource is linked below in the lesson plan.)

## Procedures:

Detail specific steps and questions that will guide your instruction. Bold all scripting. Highlight any academic questions. Put brackets around behaviors or actions.

Rationale: Before students are asked to care for their own cabbage plant, it is important to establish the conditions and tools that this plant will need to survive. This lesson plan seeks to engage the students with the concept of survival, explore what a plant requires to survive, explain how these previously established needs of plants can be met, elaborate on how these survival tools and conditions specifically apply to the cabbage plant, and evaluate how they will create this environment for their own plant through the *Bonnie Plants Cabbage Program*. This lesson plan is meant to be the first of a long series for this program.

## Engage- (7 Minutes)

**"Today, we are going to be talking about some skills and tools that we rely on every day: SURVIVAL skills. What does it mean to survive?"** [Clarify with the definition for survival if students are unsure: "continue to live and exist". You can draw a comparison between this meaning and the meaning of the word "live".] **Now that we're sure of what survival means, let's think about how we achieve it. As a class, we are going to pack our own survival kit or a collection of things that we as humans need to SURVIVE."**

[Project the backpack image on the classroom's whiteboard shown in the "instructional materials" section below. If that technology is unavailable, the backpack can be drawn or printed on a poster board, and the activity can be completed on this paper.]

**"I can get us kicked off. When I think of something that I couldn't live without, I immediately think of water. I know I need to stay hydrated to live a healthy and happy life, so I am going to write "water" in my survival kit". After brainstorming the tools and items you need to survive, what do YOU think we should include in our backpack?"**

[Continue to lead discussion as students brainstorm things to include. Guide the conversation to make sure that students consider things like food, air, sunlight among other items like "my family" or "my favorite book". During this conversation, make sure to push students to consider the question **"Why would our bodies need that specific tool to survive?"** This was modeled for students in the above example. (We need water to survive BECAUSE we need to stay hydrated.)]

**"It looks like our survival kit is FULL of things that we use every day to survive. Now that we have discovered what it means and what it takes to survive, let's stretch our brains a little bit and think about what it takes for other things to survive. Do we think an animal like a dog would take a lot of these things to survive? [Allow for student discussion] What about an insect like a ladybug? [Allow for student discussion]. Wow! These are all some great ideas. While we might eat different things and live in different places, a lot of our survival tool kits could look the same. NOW, as we move into today's scientific topic, let's think about what a PLANT would need to survive. Would its needs be similar to ours? Would its survival tool kit be different than our own? I want you to hold onto these questions and keep brainstorming your answers as we dive into the book *We are the Gardeners* by Joanna Gaines. This book is about a family who wants to create their very own garden in their own backyard, but they face some questions and set backs along the way. We'll have to read more about their story to find out for ourselves what it takes to build a successful garden, the place where plants live. While we read, I want you to specifically look out for an answer to this question: **What tools and items does a PLANT need to survive?** We will discuss our answers as a class when we are done reading."**

[These questions will be projected in the classroom through the use of this lesson's visual aid. This visual aid presentation is provided below.]

## **Explore (13 Minutes)**

[Read *We are the Gardeners* aloud to the class. If you are unable to access a paper copy, there are multiple read aloud recordings posted on YouTube. Access one example through the linked video in the above “references” section. Intersperse comprehension questions as you read such as “What happened to the plant when it was given too much water? Why do you think it was important for them to find a “sunny spot” for their garden?]

**“What a great story! Our book’s family was determined to make their own garden, and I am so glad they were successful in the end. Now that we have learned a little bit more about plants and what they need to survive, let’s fill out our second survival kit: “Our Plant Survival Kit.” Let’s think back to the beginning of the story. When the family was first taking care of their fern, what did they need to be sure was poured into their plant, ESPECIALLY in the correct amount?”**

[Project the backpack image linked below as previously done with the class “survival kit” on the whiteboard. If that technology is unavailable, the backpack can be drawn or printed on a poster board, and the activity can be completed on this paper.]

[Continue to guide student discussion through the book as children name things they noticed. Students can add in any of their ideas to the survival kit, but make sure to always ask them to consider the question “Why do you think a plant would need that specific tool to survive?” so that they can support their ideas. Throughout this conversation, try to lead students to consider a plant’s need for soil, water, sunlight, food and protection. This can be done by recalling the events of the text.]

## **Explain (~20 Minutes)**

**“Wow! With this survival kit, a plant would be totally prepared to live a happy and healthy life. With this new knowledge, I think we are prepared for our next step: growing our OWN plants. As a class, we are all going to be starting our own cabbage garden. We are ALL going to become gardeners! Each student will take home their own plant, and over the next nine weeks, it will turn into a beautiful and delicious cabbage plant. These plants will be provided to us by the “Bonnie Plants Cabbage Program”, and they will help us along in our gardening journey. The “Bonnie Plants Cabbage Program” has helped students start their own gardens across the nation: how cool is it that we get to take part in something so big?”**

**“Even though we have a slight idea about what it takes to keep a plant alive, cabbages are very special and have specific needs. As a class, we need to research what we need to provide a good home for our cabbages. In small groups, you will all research ONE thing that we decided a plant needs in order to live a happy and healthy life, and I want you to specifically look at how this need applies to a cabbage. What is a cabbage’s idea weather? How much water does a cabbage need? These are the kinds of questions we need to be asking as we complete our research.**

[Divide students into six groups. These students should be organized with mixed ability levels present in all groups. It is recommended that these groups are preassigned and given topics beforehand for ease during the lesson. The available topics are: weather, water, soil, food, sun, and care/protection. Provide students with one poster board per group and allow them to use their own writing and drawing supplies to fill out the poster. Students will either need access to Chromebooks or laptops. If those tools are not available, students can be provided with paper copies of non-fiction resources about plants and cabbages. This lesson plan will be formulated around the hope that students will have their own computer access.]

[Depending on the season in which the instructor plans to utilize this lesson, the teacher will need to clarify this planting season with the “weather” group. Cabbages can be planted in the spring or fall, so the weather will slightly vary based on when the teacher begins the Bonnie Plants Cabbage Program.]

**“In order to complete our research, I have a few different websites for you to access.”** [These links can be posted in a class-wide communication tool such as Google Classroom, Canvas, Edmodo, etc. These websites are linked in the resources section above.] **“These websites hold lots of information about the needs of cabbages. On your poster, I want you to include these three things.”**

- 1. TOPIC: Your Topic (What does a cabbage need in regard to soil, water, food, care/protection, weather, and sun?)**
- 2. WHAT DOES IT MEAN?: How does your topic connect to the needs of a cabbage?**
- 3. HOW WILL YOU RESPOND? How will you make sure that this need of your cabbage is taken care of?**

**“As you are researching, take notes and write down your ideas on a piece of loose-leaf paper. In order to get your poster board, I will review these notes with your group to be sure you are on the right track. Once your research has been approved, I will give your group a piece of poster board, and you can begin to create your display! When we are finished, we will create a “garden gallery” that displays all of our work. I will give you more directions about that last step later on. Are there any questions before we begin? [Pause for any needed clarifications.] Alright gardeners let’s get to work!”**

[Instructor will walk around the room as students begin their research. When the instructor reviews the students' notes for approval, ensure that they have answered the three parts listed above fully so that their display can be accurate and informative.]

## **Elaborate (10 Minutes)**

[As students are finishing up their posters, the instructor can begin to hang the posters along the walls of the classroom to create a "gallery walk". As the instructor displays these posters, students can begin to clean up their workspace.]

**"I am so proud of your research and hard work, gardeners. As a class, we've created a "garden gallery" that displays our growing understanding of what a cabbage plant needs. For the next three minutes, I want you to walk around the classroom silently and pay a visit to each group's project. As you are examining these displays, I want you to keep in mind the three parts of your research."**

1. **TOPIC: Your Topic (What does a cabbage need in regard to soil, water, food, care/protection, weather, and sun?)**
2. **WHAT DOES IT MEAN?: How does your topic connect to the needs of a cabbage?**
3. **HOW WILL YOU RESPOND? How will you make sure that this need of your cabbage is taken care of?**

**"As you walk, you are more than welcome to take notes in your notebook. You can show me you are finished viewing our class's "garden gallery" by returning to your seat and sitting quietly."**

[Students take three minutes to walk around the gallery.]

**"Didn't your classmates do such an incredible job creating our gallery? Let's reflect on what you learned. I am going to need one speaker from each research group to volunteer and share one thing you learned about your topic and the needs of cabbages."**

[Allow students to share their new understandings.]

**"Now, let's switch it up a little bit. I need one person to share per poster about one new thing you learned, BUT, I need you to share about a poster that was not made by your group."**

[Allow students to share their new understandings.]

## **Evaluate (5 Minutes)**

**"We have learned SO much today in preparation for our very own cabbage gardens, and we want to be sure we hold onto all of this new information. We are going to complete a "Cabbage Care Checklist" that I need you to hand in before we can officially bring this activity to a close."**

[This sheet will be displayed on the visual aid slide show as the instructor moves through it. The instructor should utilize this visual aid while providing instructions to aid student understanding. This visual aid is provided in the "instructional materials" section below.]

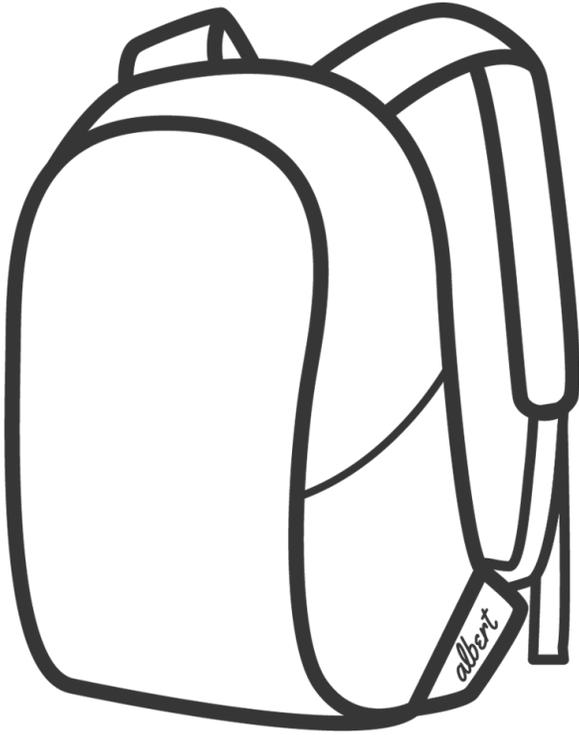
**"These sheets will have six lines. Each line has a picture beside it. These pictures match up with the six topics we just learned about: weather, water, soil, food, sun, and care/protection. On each line, I want you to write down ONE SENTENCE that explains what that need of the cabbage is. Then, write ONE SENTENCE which explains how you will make sure that that specific need of the cabbage is met. Once you are done, come drop off your checklist at my desk. When we get our plants, I will give you this checklist to take home so that you will be fully prepared to be a caring and knowledgeable gardener. As you are working on your sheet, feel free to use our "gallery garden" as a tool."**

[For students who may need extra support, this checklist can be accommodated by providing sentence prompts such as "My cabbage needs" or "My cabbage will need".]

[Throughout this entire lesson, the instructor will be displaying a visual aid presentation. This visual aid will be there to display directions and to support students who made need accommodations. This presentation is included below.]

**Attach instructional materials and examples used during lesson.**

**Survival Kit Image:** (Also included on the visual aid slideshow.)



**Cabbage Care Checklist:**

***Cabbage Care Checklist***

Each picture stands for a specific need of your cabbage.  
On each line below, write down ONE SENTENCE that explains what that need of the cabbage is. Then, write ONE SENTENCE that explains how you will make sure that that specific need of the cabbage is met.



1. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



2. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



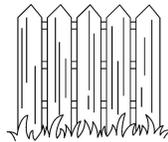
3. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



4. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



5. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



6. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Visual Aid Slides

*Welcome to class,  
scientists!*

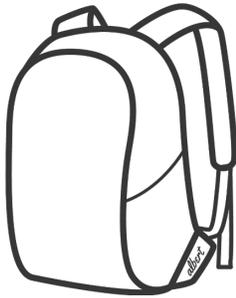
*Let's get ready to work!*

1.

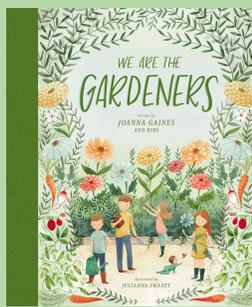
*What does it mean to  
survive?*

*Brainstorm and then raise your hand  
when you decide on a definition.*

2.



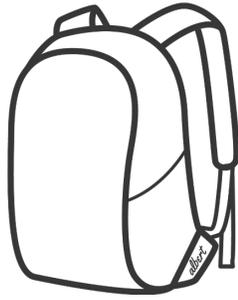
3.



4.

*What tools and items does a  
PLANT need to survive?*

5.



6.

## Bonnie Cabbage Plant Program



7.

Links for Research:  
Go to assignment on Google Classroom!



8.

### "Garden Gallery" GROUPS:

GROUP 1 WEATHER	GROUP 2 SOIL	GROUP 3 FOOD	GROUP 4 SUN	GROUP 5 WATER	GROUP 5 CARE/ PROTECTION
1.	1.	1.	1.	1.	1.
2.	2.	2.	2.	2.	2.
3.	3.	3.	3.	3.	3.
4.	4.	4.	4.	4.	4.

9.

1. TOPIC

2. WHAT DOES IT MEAN?

(How does your topic connect to the needs of a cabbage?)

3. HOW WILL YOU RESPOND?

(How will you make sure that this need of your cabbage is taken care of?)

10.

## "Garden Gallery" Walk



11.

Let's discuss!  
What did you learn?



12.

### Cabbage Care Checklist

Read the directions for a specific kind of your cabbage.  
On each day before, write down ONE SENSATION that explains what that kind of the  
cabbage is. Then, write ONE ACTION that explains how you will make sure that that  
specific kind of the cabbage is easy.



13.