Integrated ELA/Science Unit: Plant & Growth Development - The Plant Life Cycle

By Linda Karpowich
Introduction
TSL-518: Unit Selection Introduction

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Unit Information:

Title of Unit: Integrated ELA/Science: Plant Development

Grade level: Grade 2

Target Group: Mainstream Class with Integrated ELLs


Reading Materials:


Supporting Materials/Graphic organizers:

- Plant Life Cycle graphic organizer (lesson #1)
- Ask and Answer Questions graphic organizer (lesson #2)
- Ask and Answer Questions graphic organizer (lesson #3)

Goals of the Unit:

I want my students to know what a seed is and how it grows into a plant that makes new seeds.

I want my students to know the life cycle pattern of plants.

I want my students to know the academic vocabulary to describe the parts of a growing plant and how these help the plant develop and grow.

I want my students to know how to ask and answer questions during reading to understand key details about how plants grow.
Lesson 1
Linda Karpowich  
TSL518: Lesson 1-Content/Language Objectives

**Plant Growth & Development:**
**Focus Question:** Why are plants able to grow, develop and reproduce?

## Lesson 1: Plant Life Cycles

<table>
<thead>
<tr>
<th>Content Objectives</th>
<th>Language Objectives</th>
</tr>
</thead>
</table>
| 1. After watching a video, students will orally describe the phases of the plant life cycle and describe by writing and illustrating the phases of the plant life cycle. | 1a. Students will work with a small group to orally describe the parts of the plant life cycle using sequence words to show sequential order.  
1b. Students will work with a small group to describe the parts of the plant life cycle in writing using sequence words to show sequential order. |

## Performance Indicators:

<table>
<thead>
<tr>
<th>Domain-Topic</th>
<th>Level 5</th>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orally: describe using sequence words</strong></td>
<td>Working in small group, students will use sequence words to orally describe the parts of the plant life cycle in complete sentences.</td>
<td>Working in small groups, students will use sequence words to orally describe the parts of the plant life cycle in short sentences/phrases.</td>
<td>Working in small groups, students will use sequence words to orally describe the parts of a plant life cycle in short phrases using transition words on index cards.</td>
<td>Working in small groups, students will use sequence words to orally describe the parts of a plant life cycle by using sequence words and matching picture vocabulary words on sentence strips to point and repeat after teacher.</td>
<td>Working in small groups, students will orally describe the parts of plant life cycle by using sequence words and matching picture vocabulary words.</td>
</tr>
<tr>
<td><strong>Written: describe using sequence words</strong></td>
<td>Working in small group, students will use sequence words to write/illustrate the parts of the plant life cycle in complete sentences.</td>
<td>Working in small groups, students will use sequence words to write/illustrate the parts of the plant life cycle in short sentences/phrases.</td>
<td>Working in small groups, students will use sequence words as sentence starters and word bank to write/illustrate the parts of a plant life cycle using sequence words starters and phrase bank with pictures.</td>
<td>Working in small groups, students will write/illustrate parts of a plant life cycle by matching sequence words and picture vocabulary words.</td>
<td>Working in small groups, students will write/illustrate parts of a plant life cycle by matching sequence words and picture vocabulary words.</td>
</tr>
</tbody>
</table>
### Functional Language Chart:

<table>
<thead>
<tr>
<th>Function</th>
<th>Situation</th>
<th>Expressions</th>
<th>Word/Phrases</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe</td>
<td>In sequential order phases of a plant life cycle</td>
<td>• <strong>1</strong>, <strong>2</strong></td>
<td>1. first, next, then, finally</td>
<td>• Sequence words</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.</td>
<td>• Capital letters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• A seed is placed under ground in soil. It needs water.</td>
<td>• Punctuation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The outer hard shell breaks open. The roots and a baby plant begin to grow.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The leaves and small buds grow on the stem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• The flower grows and are pollinated so that new seeds can grow.</td>
<td></td>
</tr>
</tbody>
</table>
Bold = modified from original lesson

Focus Question: How do plants grow, change and reproduce?

Materials/Resources:  www.youtube.com video: Life Cycle of Plants:  https://www.youtube.com/watch?v=8VfWVbrZTw0 (1min36secs), Vocabulary Chart (Appendix H), Plant Life Cycle Diagram (Appendix I); Video Listening Guides (Appendix J.3-J.1), Sequence word cards (Appendix K); Sequence words with Sentence Frames (Appendix L- L.1) Graphic Organizers (Appendix M.3-M.1)

Setting the Purpose: (5minutes)

• Invite students to ask what happens when they grow? Did they always look like they do now? What were they like at first, then what happened to them. Will they always look the same? Encouraging them to describe how they started as babies, then learn to crawl/walk, then become big kids and eventually they become adults and maybe someday have their own children. And that there are steps or phases to growing up. Ask them if something similar happens to plants? Why? Connecting that plants also grow in a way that helps it to grow and survive and create new flowers.
• Read and discuss the content and language objectives posted on the board for the lesson.
• Review the Plant Life Cycle vocabulary words they should expect to notice in the video (Appendix H)
• Introduce the video they will be watching today to learn about the life cycle of plants
• Explain how to use the Listening Guides while watching the video to help them focus on the important information they will need to hear later be able to orally describe and write to describe the phases of a plant life cycle.
• Pass out Listening Guides as appropriate:
  Level 4/3- Listening Guide (Appendix J.3)
  Level 2 – Listening Guide (Appendix J.2)
  Level 1- Listening Guide (Appendix J.1)

• Engage students by presenting the video Life Cycle of Plants:  https://www.youtube.com/watch?v=8VfWVbrZTw0

• Stop at key points as necessary to discuss and explain the phases of how a plant grows.
• After watching the video, talk about the life cycle of the plant and have the students discuss what they’ve learned.
• Chart their answers.
Model/Demonstrate:
- Present the Plant Life Cycle diagram (Appendix H) and think about the diagram. How does this diagram help us to understand the life cycle of a plant? Discuss the descriptions that are happening.
- Ask students is there a pattern or special order that these things happen? What comes first? Show students index cards with First, Next, Then and Finally (Appendix K).
- Have students Turn and Talk to discuss where they think the card Label Card First should be placed by the diagram and why. Add the label cards and a description of what happens during that phase around the diagram for students to see.
- Prompt students to identify What happens next? Where should the Label card Then be placed? Having them orally continue to describe these steps in order through the last phase. Place the Label Card in the appropriate place around the diagram and write sentences to describe what happens during that phase.
- Go back to the diagram and have students help to create gestures that they can use to remember what happens in each phase of the life cycle. Have groups of students lead the group in following the gestures to describe the phases.

Guided Practice:
- Discuss the importance of using transition words to describe the phases of plant life. Have students Turn & Talk to decide why they think it’s important to use the transition words? Referring to the complete diagram with the transition words and descriptions on the board model how to orally describe the phases of the plant life cycle. Then have a small group of kids model how to orally describe the phases. Remind students to use gestures to remember phases.
- Then model using the graphic organizer and how to illustrate one part of the cycle complete a sentence after each of the transition words to describe the matching part.

Independent Work (Work on Writing Station):
- Explain in small groups of 2-3 students will first practice orally describing the plant life cycle to each other Remind students to use gestures as they take turns describing steps.
- Level 3: will use label cards with transition words as a guide to orally describe plant life cycle.(Appendix K)
- Level 2: will use label cards and sentence strips as a guide to orally describe plant life cycle.(Appendix L)
- Level 1: will point to and repeat the transition words and vocabulary picture words to orally describe plant life cycle. (Appendix L.1)
- Then in their groups students will use their graphic organizer to illustrate/write to describe the stages of plant life cycle.
- **Level 5/4:** Complete graphic organizer (Appendix J.4, original from Lesson)
- **Level 3:** Complete graphic organizer (Appendix J.3)
- **Level 2:** complete graphic organizer (Appendix J.2)
- **Level 1:** in a teacher-guided group, complete graphic organizer (Appendix J.1)

**Closure/Share:**
- Have students share their diagrams reviewing the parts of the plant life cycle with sequence words. Have the whole calls describe phases using gestures.
Listen to the video.
When you hear the phrase/sentence below put a check on the line after the sentence.

1. Seeds grow under the ground or soil. The seeds need water.

2. The outer shell opens. A baby plant and roots grow.

3. Leaves and buds grow on the stem.

4. Flowers grow and pollinate so new seeds can grow.
Listen to the video.
When you hear the phrase/sentence below put a check on the line after the sentence.

- Seeds grow in soil.
- The baby plant grows. The roots grow.
- The stem grows. Leaves grow.
- Flowers grow.
- Flowers make new seeds.
Plant Life Cycle Video: Listening Guide

Listen. Check.

• Seeds grow.

• Roots grow.

• Stem grows.

• Leaves grow.

• Flowers grow.

• New seeds grow.
First,  Next,

Then,  Finally,
Sequence Words and Sentence strips (can cut):
Level 2

First,

Next,

Then.

Finally.

1. A seed is planted in the soil.


3. The stem grows leaves.

4. Flowers make new seeds.
Sequence Words and Sentence strips (can cut):
Level 2

1. First.
2. Next.
3. Then.
4. Finally.

1. Seed grows.
2. Baby plant grows.
3. Flowers grow.
4. Flowers make new seeds.
Appendix M.4: Level 5/4

Draw pictures for the plant’s life cycle. Complete the sentences below.

A Plant's Life Cycle

First  
Next  
Then  
Finally  

First 

Next 

Then 

Finally
Draw pictures for the plant’s life cycle. Complete the sentences below.

A Plant’s Life Cycle

First  
Next  
Then  
Finally

Phrase bank:
- Seeds grow under the soil.
- A baby plant and roots grow.
- Leaves and buds grow on the stem.
- Flowers grow so new seeds can grow.
Appendix M.2: Level 2

Draw pictures for the plant's life cycle. Complete the sentences below.

A Plant's Life Cycle

First  
Next  
Then  
Finally

Phrase bank:
- Seeds grow in soil.  - The roots grow.
- The stem grows leaves and flowers.
- The flower grows new seeds.
In reviewing my lesson I have made the following modifications to Stamford Public Schools Grade 2 Curriculum lessons for the Integrated ELA/Science Unit Plant & Growth Development to accommodate EL students.

This lesson was originally lesson 3. I decided to make this lesson 1 so that students will have experienced the ideas of the plant life cycle. Therefore, when guided to read a text that discussed the plant life cycle they will be more prepared to ask and answer question within the text. This change is particularly helpful for EL students. It will allow them to familiarize themselves with the concept and make personal connections to the concept prior to reading.

Under Setting the Purpose, I began the lesson by asking the students to identify how they grow and change. Then I related this to plants and how they grow (page 3). This example help the students to build background knowledge related to themselves to help develop understanding of the concept.

Content and Language objectives were added and used to help build expectation of the goals students are expected to accomplish during the lesson (page 3). Content and Language objectives are valuable in setting the stage for ELs to understand what and how they will be expected to apply the skills being taught.

I added 3 varied leveled listening guides to support the students while listening to the video being presented. The listening guide provides ELs support in processing the language in the video by focusing and marking the language they’ve heard in the video. During the video I also made note to stop at key points and discuss the information. This allows EL process and keep better focus on the content in the video (page 3).

I used Sequence index cards when modeling/demonstrating how to orally describe the Plant Life Cycle in sequential order. This provides the students to visually connect using sequence words when describing something that follows a pattern. Students also did a Turn&Talk to describe their understanding of using sequence words as I asked them higher order thinking questions in using the words with the concepts (page 4).

During the modeling (page 4), I also had students create gestures that they could use to help them recall the phases of the plant life cycle. This is a strategy that is helpful for ELs with kinesthetic modality that reinforces the concepts they are learning. These gestures were also used throughout the lesson during: Guided Practice, p.4, Independent Work (Group work) p.4, and the Closing (p.5).

Finally, I added them orally practicing the skill in small groups of 2-3 students and each group was provided with modified manipulatives to orally support them to successful apply the language to describe the plant life cycle (page 4) and modified graphic organizer to support their language levels in writing as. This support allows ELs to be successful in utilizing the language structures that are expected within the goals of the lesson.
Linda Karpowich
TSL518: Lesson 2: Asking and Answering questions

**Plant Growth & Development: Focus Question: How do plants grow and change?**
Lesson 2: Asking and Answering questions: Plant Life Cycles, pages 4-9

<table>
<thead>
<tr>
<th>Content Objectives</th>
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<tr>
<td>1. After reading a text, students will construct questions and respond with answers by using key vocabulary and details from the text to demonstrate understanding of how a seed changes and grows into a plant.</td>
<td>1a. Students will work with a partner to construct, write and orally take turns asking who, what, when, where, why type questions.</td>
</tr>
<tr>
<td>1b. Students will work with a partner to write and orally take turns to answer who, what, when, where, why type questions by using key vocabulary and details from the text.</td>
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<tr>
<td>Oral and Writing-</td>
<td>Working with a partner, write and orally ask 4-5 wh-questions using key details from the text with a word bank of wh- words.</td>
<td>Working with a partner, write and orally ask 4 wh-questions using key details from the text while referring to a word bank of wh- words and sentence starters.</td>
<td>Working with a partner, write and ask 3 wh-questions using sentence frames and a word/phrase bank.</td>
<td>Working with a partner, write and ask 2 wh-questions using sentence frames and a word/phrase bank.</td>
<td>Referring to modified text, Circle 2 wh-questions from a list for the partner to read and the Level 1 student to repeat asking the question and copy the sentences chosen.</td>
</tr>
<tr>
<td>Constructing and asking</td>
<td></td>
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</tr>
<tr>
<td>Oral and Writing-</td>
<td>Working with a partner, write and orally answer the 4-5 wh-questions asked using key details from the text in complete sentences</td>
<td>Working with a partner, write and orally answer the 4 wh-questions asked using key details from the text in short phrases/sentences.</td>
<td>Working with a partner, write and answer 3 wh-questions asked using sentence frames and a word/phrase bank.</td>
<td>Working with a partner, write and answer the questions asked using sentence frames from a word/phrase bank.</td>
<td>Circle and copy the answers to the questions asked from a list of pictures/words. And orally repeat the word/sentence as needed with support from partner/teacher.</td>
</tr>
<tr>
<td>Answering questions</td>
<td></td>
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</table>
| Construct and ask | Questions about the text, Plant Life Cycles    | - How does a _1_ grow?  
- Where does a _1_ grow?  
- What does a _1_ need to grow? | 1. plant, seed, root, shoot | • Use of wh-questions.  
• Use of Capital letters uppercase.  
• Punctuation-question marks.  
• Present tense |
| Respond           | With answers from the text, Plant Life Cycles  | HOW questions:  
- A _1_ grows when _2_.  
WHERE questions:  
- A _1_ grows _3_.  
WHAT questions:  
- A _1_ needs _4_ to grow. | 1. plant, seed, root, shoot  
2. a new shoot sprouts from a seed, the hard case around the seed breaks open; the first leaves begin to open  
3. in soil, down into the soil, up  
4. water, sunlight, soil | • Sentence structure.  
• Use of Capital letters.  
• Punctuation-periods.  
• Present Tense |
**Bold = modified from original lesson**

**Focus Question:** How do plants grow and change?

**Materials/Resources:** Plant Life Cycles, pages 4-9; Vocabulary Word Chart (Appendix A); Asking Questions anchor chart identifying 5-wh question words (Appendix B); HOW, WHERE, WHAT question word index cards (Appendix C); Modified Text (Appendices D.3, D.2, D.1) graphic organizers (Appendix E.5, E.4, E.3, E.2, E.1)

**Setting the Purpose:** (5 minutes)

- **Present Realia:** Show students some seeds and a live plant. Remind them that last week we learned about seeds and the parts of a seed. Show them the plant and ask them why they think I have a plant today? Ask them what to share they know about plants.
- Read and review the above student-friendly focus question written on the board making sure the students understand all parts of the question. **Refer to the Content and Language objectives for the day,** pointing to the words and referring to picture clues to insure students understand the lesson goals for the day. Rephrase the objectives interpreting key words to support students in understanding both content and language goals.
- Show the cover of the book and a few pages of the text Plant Life Cycles to the class. Continue to activate prior knowledge by pointing out some of the illustrations and key words from the text while asking students to identify what they see.
- **Remind/review with students the vocabulary words posted on the word wall (Appendix A) which they learned during science and we will be reading in today’s text.** Use gestures and images used in yesterday’s lesson to activate students in recalling the words. Invite students to choose 1-2 words they learned yesterday and think about what they mean. Then ask them to Turn & Talk to a partner to describe at least 1 of the words to each other and/or use in a sentence. Encourage partners to refer to the images and use the gestures we used when learning the words. Remind partners to choose different words to describe when discussing. Share out the vocabulary encouraging students to use gestures and posted visuals to describe the words. *(Vocabulary Flip book created during yesterday’s science lesson)*.

<table>
<thead>
<tr>
<th>Tier 2</th>
<th>Tier 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patterns, grow, leaves, life cycle, nature, germination</td>
<td>Plant, seed, root, shoot, sprouts, hard case, breaks open, soil, sunlight</td>
</tr>
</tbody>
</table>
*Note Tier 2 words will be words discussed while reading. Tier 3 are words they will be expected to use during lesson and are located on the vocabulary chart/flip chart.

**Model Targeted Standards:**  (5-10 minutes)

RI2.1 Ask and answer such questions as who, what, when, where, why and how to demonstrate understanding of key details in a text.

- Teacher says “Today we are going to read a new text to ask and answer who, what, when, where, why and how questions. This is a way to help you focus on key details during your reading and to think back through important information so that you can share what you learned about how plants grows and change.” (point and refer to focus question).

- Review the difference between asking a question and making a statement by reviewing examples of a statement and a question. First teacher: Provide example of question (putting pointer finger to head as if thinking of a question). Then, provide an example of a statement (putting 2 open hands together to describe a statement tells). Write each of these on the board to discuss how we know whether these sentences are questions or statements. Then, say aloud some statement and question sentences and have students use the hand gestures to describe if they think it is a statement or question. Clarify any misunderstandings/ask students to share their thinking.

- Refer to Asking Questions anchor chart (Appendix B; also in original lesson plan) to remind students of when and how we use the key question words to begin a question.

- Prompt the class that today we are going to read a part of this book and then ask questions and answer them to help us focus our understanding on what we have learned about how plants begin to grow.

- Read aloud pages 4-9 of *Plant Life Cycles* stopping to discuss key vocabulary/ideas and the plant life cycle patterns.

- After reading the text, explain that they will share their understanding of what they read today by asking questions and answering the question using key details and information from the text. Use a **Think Aloud to model** how you would ask a question and answer it by using key details and information you learned from the text, *Plant Life Cycles*. After reading this part of the text, I would first want to understand what this book is teaching me so far. Explain that you noticed the word germination is an interesting new word you learned. Post the “WHAT” question word index card. Explain that one question I want to ask is “What is germination?” Continue to explain I could find the answer by looking at the page in the book that has the word germination. Show the page, read the sentence and identify the answer. Elicit responses from students to help write the response. Then explain so my answer would be: “Germination is when a seed starts to grow”. Remind students about using capital letters and punctuation to write complete sentences.
Guided Practice: (10 minutes)

- Tell students today they will re-read the text and practice asking and answering different questions that begin with What, Where and How.
- Display the 3 question words on the board. Explain that they will work together with their partner asking and then answering questions using information from the book they read. Remind students they should notice the pictures, captions and labels to help create a question. Point out the captions and labels on pages 6-9.
- Reread page 6, noticing the caption attached to the picture. The first sentence says: “Seeds are made inside flowers. This first sentence tells us about seeds. Let’s think about a question we can ask about seeds. Post the Where index card on the board (Appendix C; also in original lesson plan). Ask students, “What is a WHERE question we could be asked looking at this sentence?” Direct students to work with their partner to decide the WHERE question about seeds using key words from that sentence. Regroup and have a student share the question that could be asked. Work together/model how to record the question in Question section of the Ask and Answer graphic organizer. Then have students work with their partners again to allow the other partner to answer the question using key words from the sentence. Regroup and have another set of partners share the answer. Work together/model how to record the answer in the Answer section on the Ask and Answer graphic organizer.

Independent Practice: (15 minutes)

- In the Read to Someone station (partner reading), students will re-read the text provided (modified as noted below) them and work with their partners on asking and answering questions about the text.
- Level 5: partner read Plant Life Cycles, p.4-9. Complete Ask and Answer Questions graphic organizer (Appendix E.5)
- Level 4: partner read Plant Life Cycles, p.4-9(Appendix D.3). Complete Ask and Answer Questions graphic organizer (Appendix E.4)
- Levels 4 and 5 can be paired as partners
- Level 3: partner read modified text, Plant Life Cycles, p.4-9 (Appendix D.3). Complete modified Ask and Answer Graphic Organizer (Appendix E.3)
- Level 2: partner read modified text, plc, p 4-9 (Appendix D.2). Complete modified Ask and Answer Graphic Organizer (Appendix E.1)
*Levels 2 and 3 can be paired as partners

- Level 1: (In a teacher-lead guided reading group) partner read modified text, p-4-9 (Appendix D.1). Complete modified Ask and Answer Graphic Organizer (Appendix E.1)

**Closure:** (4 minutes)
- Have partners who worked together asking and answering questions share 1 question and answer they recorded on their graphic organizers with the class.
Appendix A

VOCABULARY CHART: Plant Life Cycles, pages 4-9:

- New plant = a shoot
- a shoot
- plant life cycle
- seeds
- soil
- plant
- hard case of seed breaks open
- roots
- leaves open
- leaves
- sunlight
- water
Appendix B:

To the Asking Questions anchor chart and how we use the key questions:

**Asking Questions**
- We ask questions to help us understand.
- We ask before, during, and after we read a text.

**Answering Questions**
- We use the text to find our answers.

**Question Words**
- who
- when
- why
- what
- where
- how

Appendix C:

Life Cycle on the board (Appendix A4-A5)
New Plants

There are many different kinds of plants. But most of them grow in the same way. Most new plants have a life cycle that starts with a seed.

Seeds are made in flowers. This tree has white flowers.
New plants **sprout** from seeds. Some plants grow very quickly. Other plants grow slowly. Trees are plants that can take many years to grow to their full size.
Growing Seeds

Most seeds grow in soil. They start to grow into plants under the soil. When a seed starts to grow, this is called germination.
First, the hard case around the seed breaks open. Then, a root grows down into the soil. A first shoot grows up and the plant's first leaves begin to open.

A seed needs lots of water and sunlight to make it grow.
New Plants

A plant life cycle starts with a seed.

Seeds are made in flowers. This tree has white flowers.
New plants sprout from seeds.
A new plant is a shoot.
A shoot sprouts from seeds.

These seeds will grow into huge horse chestnut trees.
Growing Seeds

Seeds grow in soil.

Seeds grow into plants under soil.

shoot = new plant

seed

root
When a Seed Grows:
1. The hard case on the seed breaks open.
2. A root grows down in the soil.
3. A shoot grows up.
4. The plant leaves begin to open.

A seed needs lots of water and sunlight to make it grow.
New Plants

A plant life cycle starts with a seed.

Seeds are made in flowers. This tree has white flowers.
These seeds will grow into huge horse chestnut trees.

A **shoot** sprouts from **seeds**.

A **new plant** is a **shoot**.
Growing Seeds

Seeds grow in soil.

Seeds grow into plants under soil.

shoot = new plant
When a Seed Grows:

1. The seed breaks open.

2. A root grows down in the soil.

3. A shoot grows up.

4. The plant leaves open.
## Asking questions?
### Finding answers.

<table>
<thead>
<tr>
<th>Question?</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner:</td>
<td></td>
</tr>
<tr>
<td>1. How does</td>
<td></td>
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<tr>
<td>Partner:</td>
<td></td>
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<tr>
<td>2. Where does</td>
<td></td>
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<td>Partner:</td>
<td></td>
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<tr>
<td>3. What does</td>
<td></td>
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<tr>
<td>Partner:</td>
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<tr>
<td>4.</td>
<td></td>
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<tr>
<td>Partner:</td>
<td></td>
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<tr>
<td>5.</td>
<td></td>
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</tbody>
</table>

**Question Word Starters:**
- Where?
- What?
- How?
# Asking questions?

## Finding answers.

<table>
<thead>
<tr>
<th>Question?</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner:</td>
<td>Partner:</td>
</tr>
<tr>
<td>1. How does ____________________________</td>
<td>1. ____________________________</td>
</tr>
<tr>
<td>Partner:</td>
<td>Partner:</td>
</tr>
<tr>
<td>2. Where does ____________________________</td>
<td>2. ____________________________</td>
</tr>
<tr>
<td>Partner:</td>
<td>Partner:</td>
</tr>
<tr>
<td>3. What does ____________________________</td>
<td>3. ____________________________</td>
</tr>
<tr>
<td>Partner:</td>
<td>Partner:</td>
</tr>
<tr>
<td>4. ____________________________</td>
<td>4. ____________________________</td>
</tr>
</tbody>
</table>

### Question Word Starters:
- Where does
- What does
- How does
Asking questions?  
Finding answers.

Question?

Partner: ______________
1. How does a _______ grow?

Partner: ______________
2. Where does a _______ grow?

Partner: ______________
3. What does a _______ need to grow?

Answer:

Partner: ______________
1. A ______ grows when _______
   _________________________
   _________________________

Partner: ______________
2. A ______ grows _______
   _________________________
   _________________________

Partner: ______________
3. A ______ needs _______ to grow.
   _________________________
   _________________________

Questions word bank
plant, seed, root, shoot

Answers word/phrase bank

1: plant, seed, root, shoot, water, sunlight, sail, up

2:
  • a new shoot sprouts from a seed
  • the hard case around the seed breaks open
  • the first leaves begin to open
  • in soil
  • down into the soil
Asking questions?
Finding answers.

Questions?

1. How does a ________ grow?

2. Where does a ________ grow?

3. What does a ________ need to grow?

Answer:

1. A ________ grows when _________

2. A ________ grows _________

3. A ________ needs _________ to grow.

Questions Word Bank

plant, seed, root, shoot

Answers Word Bank

1: plant, seed, root, shoot

2:
- a new shoot sprouts from a seed
- the hard case around the seed breaks open
- the first leaves begin to open

3. in soil, down into the soil

4. water, sunlight, soil, up
Asking questions?
Finding answers.

Question Word Bank (1)
seed, root, shoot

Answer Word Bank (2)
soil, down, up out of soil, in soil

Questions?
1. Where does a grow?
2. Where does a grow?
3. Where does a grow?

Answers.
1. A grows in
2. A grows
3. A grows

Where does a grow?
A grows

Where does a grow?
A grows
Asking questions?
Finding answers.

Question Word Bank (1)
- seed
- plant

Answer Word Bank (2)
- water
- sun
- soil

Question?
1. What does a 🌿 need to grow?
2. What does a 🌿 need to grow?

Answer.
1. A 🌿 needs 🌿 and 🌿 to grow.
2. A 🌿 needs 🌿, 🌿, and 🌿 to grow.

Question?
1. What does a ______ need to grow?

Answer.
1. A _____ needs _____, _____, and _____.
In reviewing my lesson I have made the following modifications to Stamford Public Schools Grade 2 Curriculum lessons for the Integrated ELA/Science Unit: Plant & Growth Development to accommodate EL students.

I modified the Focus question from: Why are plants able to grow develop and reproduce? to: How do plants grow and change? (noted on page 32 of original lesson). This modification is in more child-friendly terminology allowing ELs to better understand the focus of the unit/topic.

I added content and language objectives to the lesson and explain them to the students (page 3) providing greater focus on what the content and language goals students are expected to achieve.

I added using realia at the beginning of the lesson by bringing in real seeds and a plant for students to see (page 3). This will provide students with a visual that will encourage students to share prior knowledge and make connections about the topic.

I modified the original vocabulary lesson (noted on page 33 of original lesson). I felt introducing the vocabulary within the lesson would be too much for ELs, so I will pre-teach the vocabulary the day before the lesson. During the previous days Science block students will make vocabulary flip books to help them focus on the vocabulary independent of the content. Then, during the lesson we will review the vocabulary words using a Turn & Talk. This will allow the students to orally practice and share their understanding with other students. I also adjusted the Tier 2 & 3 vocabulary words that the original lesson presented (original lesson page 33) so that the tier 3 words were taught in the vocabulary lesson the day before which were the words they are expected to use during the lesson.

Under modeling the targeted standard, the original lesson (page 33) instructs to explain the difference between a statement and a question. I modified this portion by adding a mini-activity for students to use hand gestures to identify whether a sentence I said orally was a question or a statement (page 4). By adding in this activity and using hand gestures, this allows students to better recall the difference between and question and statement and the teacher to clarify any misunderstandings.

When modeling asking and answering questions, I added a Think Aloud to help support the modeling of asking a question from the text and then answering the question (page 4).

During Guided Practice (page 5) I adjusted the way the students practiced the skill. Rather than finding and answering a question as one portion, I broke up this activity into two parts. I directed the whole group to look at a specific sentence on page 6 to discuss with their partner only the question we could ask by looking at that information rather than just coming up with any question in the book as the original lesson suggested. After completing the question portion, I then had them practice the answering the question portion to completion. I felt this paced the guided practice to insure all students understood how to ask and answer the questions using the graphic organizers to completion.

Modifications were made to the content of the text, Plant Life Cycles which was provided for the lesson. Three different levels were made by modifying the portions of the text to better support various language levels within the classroom (Appendix D.3-D.1; page 5-6).

Finally, the last modifications I made is to the graphic organizer provided for the lesson. In the original lesson (page 35). There was only 1 graphic organizer provided for the whole class. I modified the graphic organizer and replaced it with 5 different versions (Appendix E.5-E.1, lesson page 5-6) to accommodate each EL level within the class. This would allow all students to access the content as well as use the language according to their language abilities and be successful in reaching the goals of the lesson.
Lesson 3
Linda Karpowich  
TSL518: Lesson 3-Asking and Answering questions

**Plant Growth & Development: Focus Question: How does a plant grow and survive?**

Lesson 3: Plant Life Cycles, pages 10-21

<table>
<thead>
<tr>
<th>Content Objectives</th>
<th>Language Objectives</th>
</tr>
</thead>
</table>
| 1. After reading a text, students will construct questions and respond with answers by using key vocabulary and details from the text to demonstrate understanding of how the parts of a plant help it to survive. | 1a. Students will work with a partner taking turns to construct, write and orally ask who, what, when, where, why type questions.  
1b. Students will work with a partner taking turns to write and orally answer who, what, when, where, why type questions by using key vocabulary and details from the text. |

**Performance Indicators:**

<table>
<thead>
<tr>
<th>Domain-Topic</th>
<th>Level 5</th>
<th>Level 4</th>
<th>Level 3</th>
<th>Level 2</th>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral and Writing- Construting and asking questions</td>
<td>Working with a partner, write and orally ask 4-5 wh-questions using key details from the text with a word bank of wh-words.</td>
<td>Working with a partner, write and orally ask 4-5 wh-questions using key details from the text while referring to a word bank of wh-words and sentence starters.</td>
<td>Working with a partner, write and ask 3 wh-questions using sentence frames and a word/phrase bank.</td>
<td>Working with a partner, write and ask 2 wh-questions using sentence frames and a word/phrase bank.</td>
<td>Referring to modified text, circle 2 wh-questions from a list for the partner to read and the Level 1 student to repeat asking the question and copy the sentences chosen.</td>
</tr>
</tbody>
</table>

| Oral and Writing- Answering questions | Working with a partner, write and orally answer the 4-5 wh-questions asked using key details from the text in complete sentences. | Working with a partner, write and answer the 4-5 wh-questions asked using key details from the text in short phrases/sentences. | Working with a partner, write and answer 3 wh-questions asked using sentence frames and a word/phrase bank. | Working with a partner, write and answer the questions asked using sentence frames from a word/phrase bank. | Circle and copy the answers to the questions asked from a list of pictures/words. And orally repeat the word/sentence after the partner/teacher reads it. |
## Functional Language Chart:

<table>
<thead>
<tr>
<th>Function</th>
<th>Situation</th>
<th>Expressions</th>
<th>Word/Phrases</th>
<th>Grammar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct and ask</td>
<td>Questions about the text, Plant Life Cycles</td>
<td>• How does the <em>1</em> help a plant survive?  &lt;br&gt; • Where does the <em>1</em> grow on a plant?  &lt;br&gt; • What job does a <em>1</em> do to help a survive?</td>
<td>1. root, root hair, leaf, stem, flower, pollen, seed?</td>
<td>• Use of wh-questions.  &lt;br&gt; • Punctuation-question marks.  &lt;br&gt; • Use of Capital letters uppercase.  &lt;br&gt; • Present tense</td>
</tr>
<tr>
<td>Respond</td>
<td>With answers from the text, Plant Life Cycles</td>
<td>How answers:  &lt;br&gt; • The <em>1</em> helps a plant survive because it <em>2</em>.  &lt;br&gt; Where answers:  &lt;br&gt; • The <em>1</em> grows <em>3</em>.  &lt;br&gt; What answers:  &lt;br&gt; • The <em>1</em> helps a plant survive because it <em>2</em>.</td>
<td>1. root, (root)hair, leaf, stem, flower, seed, pollen  &lt;br&gt; 2. holds the plant in place, soaks up water and nutrients from the soil, makes food for the plant, collects sunlight, mixes gas and air with water to make food, grows to support the flower, carries water and food around the plant, makes the seeds that grow into plants, makes a powdery dust called pollen, joins with part of a new flower to make a seed, will grow into a new plant  &lt;br&gt; 3. at the bottom of the stem, through the soil; at the end of each root, grows out of the stem, up to the sunlight; at the end of their stem; along their stem, inside the flower</td>
<td>• Sentence structure.  &lt;br&gt; • Use of Capital letters.  &lt;br&gt; • Punctuation-periods.  &lt;br&gt; • Present Tense</td>
</tr>
</tbody>
</table>
**Bold = modified from original lesson**

Focus Question: **How does a plant survive?**

**Materials/Resources:** *Plant Life Cycles,* pages 10-21; Vocabulary Word Chart (Appendix A.2); Asking Questions anchor chart identifying 5-wh question words (Appendix B); HOW, WHERE, WHAT question word index cards (Appendix C); Modified Text (Appendices F.3, F.2, F.1) graphic organizers (Appendix G.5, G.4, G.3, G.2, G.1)

**Setting the Purpose:** (5minutes)

- **Present Realia:** Show students the seeds and live plant from yesterday’s lesson. Remind them how yesterday we started to look at how a plant grows and changes. Present a new larger flowering plant with roots exposed today. Ask them to think how is the new plant from yesterday going to survive so that it continues to grow to look like the larger flowering plant?
- **Read and review the above student-friendly focus question written on the board making sure the students understand all parts of the question. Refer to the Content and Language objectives for the day, pointing to the words and referring to picture clues to insure students understand the lesson goals for the day. Rephrase the objectives interpreting key words to support students in understanding both content and language goals.
- **Preview a few pages of the text Plant Life Cycles** (p.10-21) with the class. Continue to activate prior knowledge by pointing out some of the illustrations and key words from the text while asking students to identify what they notice in the pictures. Remind/review with students the vocabulary words posted on the word wall (Appendix A.2) which they have been learning during science and we will be reading in today’s text. Use gestures and images used in yesterday’s lesson to activate students in recalling the words. Invite students to choose 1-2 words they learned yesterday and think about what they mean. Then ask them to Turn & Talk to a partner to describe 1 of the words without telling which word they are describing. Then the other partner has to guess the word they are describing. Encourage partners to refer to the images (without pointing) and use the gestures we used when learning what the words mean. Remind partners to choose different words to describe when discussing. Share out the vocabulary by having partners pick one of their words and share how their description and the class can collectively decide which word it matches. (Vocabulary Flip book created during yesterday’s science lesson can be added along with previous vocab words to make personal word wall.)
<table>
<thead>
<tr>
<th>Tier 2</th>
<th>Tier 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunlight, sugary, tubes, photosynthesis, gas, bud, petal</td>
<td>Stem, root, (root) hair, leaf, flower, pollen, nutrients</td>
</tr>
</tbody>
</table>

*Note Tier 2 words will be words discussed while reading. Tier 3 are words they will be expected to use during lesson and are located on the vocabulary chart.

**Model Targeted Standards:** (5-10 minutes)
RI2.1 Ask and answer such questions as who, what, when, where, why and how to demonstrate understanding of key details in a text.

- Teacher says “Today we are going to read the next part of the text *Plant Life Cycles* to ask and answer who, what, when, where, why and how questions. Remind them that asking and answering questions is a strategy that can help you understand what you are reading and to think back through important information so that you can share what you learned about how plants grow and change.” (point and refer to focus question).
- Review the difference between asking a question and making a statement by reviewing examples of a statement and a question. First teacher: Provide example of question (putting pointer finger to head as if thinking of a question). Then, provide an example of a statement (putting 2 open hands together to describe a statement tells). Say aloud some statement and question sentences and have students use the hand gestures to describe if they think it is a statement or question. Clarify any misunderstandings.
- Refer to Asking Questions anchor chart (Appendix B; also in original lesson plan) to remind students of when and how we use the key question words to begin a question.
- Prompt the class that today we are going to read a part of this book and then ask questions and answer them to help us focus our understanding on what we have learned about what a plant does to survive.
- Read aloud pages 10-21 of *Plant Life Cycles* stopping to discuss key vocabulary/ideas and the plant life cycle patterns.
- After reading the text, explain that they will continue to share their understanding of what they read today by asking questions and answering the question using key details and information from the text. Use a **Think Aloud to model** how you would ask a question and answer it by using key details and information you learned from the text, *Plant Life Cycles*. After reading this next part of the book, I want to understand what the rest of this book is teaching about how the plant parts help the plant to grow and survive. I noticed in the chapter section called *Inside the Flower* tells about how the flower helps new
seeds to grow. I might ask my partner, “Where do new seeds grow?” Then I would let me partner look through the text and answer, “New seeds grow inside the flower.” Show the page, read the sentence and identify the answer.

Guided Practice: (10 minutes)
• Tell students today they will re-read the rest of text and practice asking and answering different questions that begin with What, Where and How.
• Point to the 3 question words posted on the board from yesterday. Explain that they will work together with their partner asking and then answering questions using information from the book they read. Remind students they should notice the pictures, captions and labels to help create a question. Point out the captions and labels throughout the pages.
• Reread page 20, noticing the bold word in the text. What plant topic is this section telling us about? Elicit students to say it’s about roots. Post the What index card on the board (Appendix C; also in original lesson plan). Ask students to think, “What is a WHERE question we could ask looking at this sentence?” Direct students to Turn & Talk to discuss questions about roots that could be asked in for this section of the book. Regroup and have a student share the ir questions. Work together/model how to record the question in Question section of the Ask and Answer graphic organizer. Then have students work with their partners again to allow the other partner to answer the question using key words from the sentence. Regroup and have another set of partners share the answer. Work together/model to how to record the answer in the Answer section on the Ask and Answer graphic organizer.

Independent Practice: (15 minutes)
• In the Read to Someone station (partner reading), students will re-read the text provided (modified as noted below) them and work with their partners on asking and answering questions about the text.
• Level 5: partner read Plant Life Cycles, p.4-9. Complete Ask and Answer Questions graphic organizer (Appendix E.5; same as lesson 2)
• Level 4: partner read Plant Life Cycles, p.4-9(Appendix F.3). Complete Ask and Answer Questions graphic organizer (Appendix E.4; same as lesson 2)
  *Levels 4 and 5 can be paired at partners
• Level 3: partner read modified text, Plant Life Cycles, p.4-9 (Appendix F.3). Complete modified Ask and Answer Graphic Organizer (Appendix G.3)
- Level 2: partner read modified text, plc, p4-9 (Appendix F.2). Complete modified Ask and Answer Graphic Organizer (Appendix G.2)
  *Levels 2 and 3 can be paired as partners
- Level 1: (In a teacher-lead guided reading group) partner read modified text, p-4-9 (Appendix F.1). Complete modified Ask and Answer Graphic Organizer (Appendix G.1)

  **Closure:** (4 minutes)
- Have partners who worked together asking and answering questions share 1 question and answer they recorded on their graphic organizers with the class.
VOCABULARY CHART: Plant Life Cycles, pages 10-21:

- **root**
- **hairs**
- **stem**
- **flower**
- **pollen**
- **nutrients**
- **soaks up**
- **hold the plant in place to stay**
Rambling Roots

A plant’s roots grow at the bottom of its stem. They are usually hidden under the soil. The roots hold the plant in place so that it does not blow over.

Some plants have thin, thread-like roots.
Trees have huge roots. You can see part of their roots above the ground.

As the roots grow, they get longer and spread out through the soil. There are tiny hairs at the end of each root. These hairs soak up water and nutrients from the soil.
Leaves and Food

Plants need food to live and grow. Animals must find food to eat, but plants can make their own. Plants make their food in their leaves. This is called photosynthesis.

Plant leaves open to face the Sun. Plants use sunlight to make their food.
A plant's leaves collect sunlight. They use it to mix gas from the air with water from the soil. Inside the leaves, the gas and water are turned into sugary food for the plant.

A plant makes food from sunlight and water.

Water taken up by roots.
Strong Stems

A plant's leaves grow out of its **stem**. Some stems grow tall and strong. Other stems grow along the ground or curl around other plants for support.

The stem holds the plant's leaves up to the sunlight.
There are lots of tiny tubes inside the stem. Some tubes carry water from the roots to the leaves. Other tubes carry food from the leaves all around the plant.

Tree trunks are stems that have grown very thick.
Blooming Flowers

Some plants grow flowers at the end of their stems. Other plants have flowers all along their stems. Flowers make seeds that grow into plants.

Many trees and plants grow their flowers in the spring.
Rambling Roots

Roots grow at the bottom of the stem.
Roots grow under the soil.
The roots hold the plant in place.

Some plants have thin, thread-like roots.
The hairs soak up nutrients from the soil.
Leaves and Food

Plants need food to live and grow.
Plants make their food in their leaves.
Leaves collect sunlight. The sunlight helps make food inside the leaves.

A plant makes food from sunlight and water.

Water taken up by roots.
Strong Stems

A plant's leaves grow from the stem.
Stems grow to support the flower.

The stem holds the plant's leaves up to the sunlight.
There are tiny tubes inside the stem.
The tubes carry water and food for the plant.
Some plants grow flowers at the end of the stem.

Flowers make seeds that grow into plants.
Rambling Roots

Roots grow under the stem.

Roots help the plant stay in soil.

Some plants have thin, thread-like roots.
Trees have huge roots. You can see part of their roots above the ground.

Roots grow tiny hairs.

The hairs soak up water.
Leaves and Food

Plants need **food**.

Plants make **food in the leaves**.

Plant leaves open to face the Sun. Plants use sunlight to make their food.
The leaves make food from water and sunlight.

A plant makes food from sunlight and water.

Water taken up by roots.
Strong Stems

Leaves grow on the stem.

Stems help the flower stay up.

The stem holds the plant’s leaves up to the sunlight.
Stems give the plant food and water.

Tree trunks are stems that have grown very thick.
Blooming Flowers

Flowers grow on top of the stem.

Flowers make seeds.

Many trees and plants grow their flowers in the spring.
### Asking questions?
Finding answers.

<table>
<thead>
<tr>
<th>Question?</th>
<th>Answer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How does</td>
<td></td>
</tr>
<tr>
<td>Partner:</td>
<td></td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>2. Where does</td>
<td></td>
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<tr>
<td>Partner:</td>
<td></td>
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<td></td>
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<td>3. What does</td>
<td></td>
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<td>Partner:</td>
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<td>Partner:</td>
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</table>

**Question Word Starters:**
- Where?
- What?
- How?
### Asking questions? Finding answers.

**Question?**

<table>
<thead>
<tr>
<th>Partner:</th>
<th>Question</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>How does</td>
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<thead>
<tr>
<th>Partner:</th>
<th>Question</th>
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<tbody>
<tr>
<td>2.</td>
<td>Where does</td>
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<td></td>
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<thead>
<tr>
<th>Partner:</th>
<th>Question</th>
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<tbody>
<tr>
<td>3.</td>
<td>What does</td>
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<td></td>
<td></td>
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</table>

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<thead>
<tr>
<th>Partner:</th>
<th>Question</th>
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<tbody>
<tr>
<td>4.</td>
<td></td>
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</table>

**Answer.**

<table>
<thead>
<tr>
<th>Partner:</th>
<th>Answer</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Partner:</th>
<th>Answer</th>
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<tbody>
<tr>
<td>2.</td>
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<thead>
<tr>
<th>Partner:</th>
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<td>3.</td>
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<table>
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<tr>
<th>Partner:</th>
<th>Answer</th>
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<tbody>
<tr>
<td>4.</td>
<td></td>
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</tbody>
</table>
Asking questions? Finding answers.

Question?

Partner: __________
1. How does the _____ help a plant to survive?

Partner: __________
2. Where does the _____ grow on a plant?

Partner: __________
3. What job does a _____ do to help a plant survive?

Answer.

Partner A: __________
1. The _____ helps a plant survive because it __________.

Partner B: __________
2. A _____ grows __________.

Partner C: __________
3. The _____ helps a plant to survive because it __________.

Questions word bank

root, hair, leaf, stem, flower, pollen, seed

Answers word/phrase bank

1: root, hair, leaf, stem, flower, pollen, seed

2: holds the plant in place; soaks up water and nutrients, makes food for the plant; carries water around the plant, makes the seeds, makes a powdery dust called pollen, will grow into a new plant

3: at the bottom of the stem, through the soil, on the root, grows out of the stem, up to the sunlight, at the end of the stem, inside the flower
### Asking questions?
#### Finding answers.

**Question?**

<table>
<thead>
<tr>
<th>Question</th>
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</tr>
</thead>
</table>
| 1. What is the _____ help a plant to survive? | 1. The _____ helps a plant survive because it _____.
| 2. Where does the _____ grow on a plant? | 2. A _____ grows _____.
| 3. What job does a _____ do to help a plant survive? | 3. The _____ helps a plant to survive because it _____.

**Questions word bank**
- root
- hair
- leaf
- stem
- flower
- pollen
- seed

**Answers word/phrase bank**
- 1: root, hair, leaf, stem, flower, pollen, seed
- 2: soaks up water, makes nutrients, carries water, makes seeds, makes pollen, a new plant
- 3. under soil, on the root, on the stem, in the flower
Asking questions?  
Finding answers.

Question Word Bank (1)

Answer Word Bank (2)

Questions?
1. What does a root do?
2. What does a leaf do?
3. What does a stem do?
4. What does a flower do?

Answers.
1. A root makes water
2. A leaf makes food
3. A stem moves
4. A flower makes seeds
Asking questions?
Finding answers.

Question Word Bank (1)
- root
- leaf
- stem
- flower

Question?
Where does a _______ grow?
1. Where does a _______ grow?
2. Where does a _______ grow?
3. Where does a _______ grow?
4. Where does a _______ grow?

Answer Word Bank (2)
- in soil
- on a stem
- over
- roots
- stem

Answer?
1. A _______ grows
2. A _______ grows
3. A _______ grows
4. A _______ grows

Where does a _______ grow?
A _______ grows on _______.
1 1 2
Narrative:

In reviewing my lesson I have made the following modifications to Stamford Public Schools Grade 2 Curriculum lessons for the Integrated ELA/Science Unit: Plant & Growth Development to accommodate EL students.

I added content and language objectives to the lesson and explain them to the students (page 3) providing greater focus on what the content and language goals students are expected to achieve.

I added using realia at the beginning of the lesson by bringing in a grown plant for students to see (page 3). This will provide students with a visual that will encourage students to share prior knowledge and make connections about the topic.

I modified the original vocabulary lesson (p. 48 of original lesson). I felt introducing the vocabulary within the lesson would be too much for ELs, so I will pre-teach the vocabulary before the lesson. Students will make vocabulary flip books to learn vocabulary. During the lesson we will review the vocabulary words using a Turn & Talk allowing students to orally practice and share their understanding with other students.

Under modeling the targeted standard, the original lesson (page 48) instructs to explain the difference between a statement and a question. I modified this portion by adding a mini-activity for students to use hand gestures to identify whether a sentence I said orally was a question or a statement (page 4). By adding in this activity and using hand gestures, this allows students to better recall the difference between and question and statement and the teacher to clarify any misunderstandings.

When modeling asking and answering questions, I added a Think Aloud to help support the modeling of asking a question from the text and then answering the question (page 4).

During Guided Practice (page 5) I adjusted the way the students practiced the skill. Rather than finding and answering a question as one portion, I broke up this activity into two parts. I directed the whole group to look at a page 20 to discuss with their partner only the question we could ask by looking at that information rather than just coming up with any question in the book as the original lesson suggested. After completing the question portion, I then had them practice the answering the question portion to completion. I felt this paced the guided practice to insure all students understood how to ask and answer the questions using the graphic organizers to completion.

Modifications were made to the content of the text, Plant Life Cycles which was provided for the lesson. Three different levels were made by modifying the portions of the text to better support various language levels within the classroom (Appendix F.3-F.1; page 5-6).

Finally, the last modification I made was to the graphic organizers. In the original lesson (page 50). There was only 1 graphic organizer provided for the whole class. I modified the graphic organizer and replaced it with 5 different versions (Appendix E.5 & E.4 from Lesson 2 ad G.3-G1 on lesson page 5-6) to accommodate each EL level within the class. This would allow all students to access the content as well as use the language according to their language abilities and be successful in reaching the goals of the lesson.
Checklists
Unit: Plant Life Cycle

Grammar and Function Checklist

<table>
<thead>
<tr>
<th>Grammar</th>
<th>Lesson</th>
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<tbody>
<tr>
<td>Sequence words</td>
<td>1</td>
</tr>
<tr>
<td>Capitalization of sentences</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Punctuation</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Use of wh-question words</td>
<td>1,2</td>
</tr>
<tr>
<td>Present tense</td>
<td>2,3</td>
</tr>
<tr>
<td>Sentence structure</td>
<td>2,3</td>
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</table>

<table>
<thead>
<tr>
<th>Function</th>
<th>Lesson</th>
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</thead>
<tbody>
<tr>
<td>Describe</td>
<td>1</td>
</tr>
<tr>
<td>Ask questions</td>
<td>2,3</td>
</tr>
<tr>
<td>Respond to questions</td>
<td>2,3</td>
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</tbody>
</table>
Write the page numbers and any other identifying features to identify those parts of your lessons that employ the following strategies.

<table>
<thead>
<tr>
<th>SHEIELERED STRATEGIES</th>
<th>Lesson 1</th>
<th>Lesson 2</th>
<th>Lesson 3</th>
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<tbody>
<tr>
<td>I. Contextualize Lesson</td>
<td></td>
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<tr>
<td>I. A. Build and Activate Background Knowledge</td>
<td>3</td>
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<tr>
<td>I.B. Develop Vocabulary</td>
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<tr>
<td>I. C. Use extensive Visuals, Realia, Manipulatives, &amp; Gestures</td>
<td>3,4,5</td>
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<td>3</td>
</tr>
<tr>
<td>I. D. Model (Instructions, Processes)</td>
<td>3,4</td>
<td>4,5</td>
<td>4,5</td>
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<tr>
<td>I. E. Create Opportunities To Negotiate Meaning</td>
<td>3,4,5</td>
<td>4,5</td>
<td>4,5</td>
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<tr>
<td>II. Make Text Comprehensible</td>
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<td></td>
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<tr>
<td>II.A. Intentional Use of Graphic Organizers</td>
<td>4,5</td>
<td>5</td>
<td>5</td>
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<tr>
<td>II.B. Modify Written Text</td>
<td></td>
<td>5</td>
<td>5</td>
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<tr>
<td>II.C. Amplify Number of Activities per Text</td>
<td>3,4</td>
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<tr>
<td>III. Make Talk Comprehensible</td>
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<td>III.A. Pace Teacher’s Speech</td>
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<td>III.B. Use of Listening Guides</td>
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<td>III.C. Use of Word Walls</td>
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<td>III.D. Frame Main Ideas</td>
<td>3</td>
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<td>III.E.. Check for Understanding</td>
<td>3,4,5</td>
<td>4,5</td>
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<tr>
<td>IV. Change Traditional Classroom Talk</td>
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<tr>
<td>IV.A. Use Teacher Question and Response Strategies</td>
<td>3,4</td>
<td>4,5</td>
<td>4,5</td>
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<tr>
<td>IV.B. Practice Instructional Conversations</td>
<td>4,5</td>
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<tr>
<td>V. Engage at Appropriate Language Proficiency Levels</td>
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<tr>
<td>V.A. Vary Question Techniques based on Student’s Language Proficiency level— in conversations, activities, and assessments</td>
<td>4</td>
<td>5</td>
<td>5</td>
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<tr>
<td>VI. Give Students Voice</td>
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<td>VI. A. Challenge students to produce extended academic talk</td>
<td>4</td>
<td>5</td>
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<td>VI. B. Model Language for Oral and Written Production</td>
<td>4</td>
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<tr>
<td>VI. C Use Group/Pr. Work to Elicit Student Talk; Students as Researchers</td>
<td>4,5</td>
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<td>VI. D. Respond to Student’s Voice – Writing and Error Correction</td>
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**Alignment to CCSS**

**Targeted Standard(s):** RI.2.1, RI.2.2, L.2.4

**Supporting Standard(s):** SL.2.2, SL.2.4

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**Original Lesson #1 (5pgs)**

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**Read Aloud**

*Plant Life Cycles* by Anita Ganeri [610L] (Pages 4-9)

**Time:** (40-45 mins)

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This book answers the questions: How do plants get their food? Why do plants need stems? What is a bulb? Plant life cycles are patterns. Students will hear the book read and learn how seeds grow into plants and make more seeds, which grow into new plants.

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**Focus Questions:** Why are plants able to grow, develop and reproduce?

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**Part 1: Setting the purpose**

**a) Introduce the text (3 mins)**

- Write the above student-friendly focus questions on the board, read the question, making sure the students understand all parts of the questions.
- Show the cover of the book *Plant Life Cycles* to the class.
- Ask students what they think the topic will be after seeing the title and a few pages from the book.
- Take a picture walk pointing out some of the illustrations and key words from the text.
Teacher says “Before we dive into this book there are some important words that we need to know.”

b) Preview vocabulary: (5 mins)

- Identify unfamiliar and challenging words from the text and preview the terms with the class.
  Use the following steps:
  1. Explain the meaning with student-friendly definition
  2. Provide examples of how it is used
  3. Ask students to repeat the words three times
  4. Engage students in activities to develop mastery (for example Splat, Vocabulary Deck, etc.)
  5. Vocabulary links:
     Teaching Academic Vocabulary:

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<thead>
<tr>
<th>Tier Two</th>
<th>Tier Three</th>
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<tbody>
<tr>
<td>Patterns</td>
<td>Life cycle</td>
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<td>Grow</td>
<td>Nature</td>
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<td>Leaves</td>
<td>Seed</td>
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<td></td>
<td>Sprout</td>
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<td>Germination</td>
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</tbody>
</table>

Model Targeted Standard: (5 mins)

RI.2.1 Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in a text.

- Teacher says “Today we are going to read and answer who, what, where, when, why and how questions. This is a way to help you focus on key details during your reading and to think back through important information. You will learn about how a seed grows.
- Review the difference between asking a question and making a statement.
Note: Teacher should read the entire section of the book first and determine where stops may occur for Think-Aloud.

- Teacher should refer to the Asking Questions anchor chart (Appendix A3)
- Remind students of when and how we use the key question words.

- Read pages 4-9 of Plant Life Cycle
- Post a question word on the board (Appendix A4-A5)

- Answer one question (What?) using the text Plant Life Cycles. For example, ask, “What” is the book teaching us so far? Answer aloud, “This book is teaching us about how seeds grow.”

Strategies for Varied Learners

- Students can present information with illustrations, comic strips, or other visual representation.
- Use Semantic Webbing and graphic organizers
- For Extended Learning:
  - Focus on developing higher level comprehension skills, along with higher level questioning
  - Provide opportunities for book discussions
  - Critical reading & creative reading
- Incorporate technology
Part 2: Guided Practice (5 mins)

- Tell students that in this section of the book we will ask and answer different questions.
- Remind students of the definitions for asking and answering questions.
- Display 3 questions words (what, where, how). Explain to students that they will work together to answer questions using the information from the book, Plant Life Cycles.
- If needed, reread pages 4-9 from Plant Life Cycles then ask students to look at the 3 question words on the board.
- Ask students to take turns with their partner asking a question about the text that was just read. For example, a student may ask what is germination. The partner should answer. Germination is when a seed starts to grow.
- When you have completed reading the section, work together to fill in one section of the Ask and Answer Recording Sheet (Appendix A6)

- Ask a student to share one of their questions. Model how to fill in the Recording Sheet for What, Where, or How.
- Then ask another student to answer the question. Model how to fill in the answer.

Note: Also model comprehension skills your students may need.
Independent Practice (15 min)

- Students will reread pages 4-9 of *Plant Life Cycles* at the Read to Someone literacy station.
- One partner picks a question word and asks a question related to the text. The other partner uses the book to find the answer to the question.
- Students can use the Recording Sheets to write their questions and answers about *Plant Life Cycles*.

Closure (2-3 min)

- Have students who worked at the Read to Someone literacy station share their Recording Sheets with the class. Continue this closure for a couple of days until most students have shared.

NOTE: Being able to ask and answer questions about a text gives students a structure that helps them organize, explain, and remember what they have read. Think aloud as you model this skill for students so that they get a sense of how an adult asks questions before during and after reading text.

If students have difficulty with asking and answering questions, read other books aloud and provide choices for asking and answering questions.
**Reading**

**TARGETED STANDARD/S:** RI.2.1, RI.2.2, L.2.4
**SUPPORTING STANDARD/S:** SL.2.2, SL.2.4

**Plant Life Cycles** by Anita Ganeri [610L] (Pages 10-19)

**Focus Question:** *What does a plant need in order for life functions to occur?*

**Part 1: Setting the purpose**

**a. Introduce the text (3 mins)**

- Write the above student-friendly focus questions on the board, read the question, making sure the students understand all parts of the questions.
- Show the cover of the book *Plant Life Cycle* to the class.
- Ask students what they think the topic will be after seeing the title and a few pages from the book.
- Take a picture walk pointing out some of the illustrations and key words from the text.
- Teacher says, “Before we dive into this book there are some important words that we need to know.”

**Strategies for Varied Learners**

- Use CDs, cassettes and videotapes with books and articles.
- Allowing students to see the text and illustrations in the book will assist them in their reading comprehension.
- Clearly define and show visuals of the words.
b. Preview vocabulary: (5 mins)
- Identify unfamiliar and challenging words from the text and preview the terms with the class.
- Use the following steps:
  - Explain the meaning with student-friendly definition
  - Provide examples of how it is used
  - Ask students to repeat the words three times
  - Engage students in activities to develop mastery (for example Splat, Vocabulary Deck, etc.)
- Vocabulary links:
  Games: http://www.teach-this.com/esl-games/vocabulary-games
  Teaching Academic Vocabulary:

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<thead>
<tr>
<th>Tier Two</th>
<th>Tier Three</th>
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<tbody>
<tr>
<td>Stem</td>
<td>Rambling Roots</td>
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<tr>
<td>Sunlight</td>
<td>Nutrients</td>
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<td>Sugary</td>
<td>Photosynthesis</td>
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<td>Tubes</td>
<td>Gas</td>
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<td>Bud</td>
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<td></td>
<td>Petal</td>
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<td></td>
<td>Pollen</td>
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</table>

Model Targeted Standard: (5 mins)
RI.2.1 Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in a text.
- Teacher says “Today we are going to read and answer who, what, where, when, why and how questions. This is a way to help you focus on key details during your reading and to think back through important information.
- Review the difference between asking a question and making a statement.
Note: Teacher should read the entire section of the book first and determine where stops may occur for Think-Aloud.

- Teacher should refer to the Asking Questions anchor chart (Appendix A3)
- Remind students of when and how we use the key question words.

- Read pages 10-19 of Plant Life Cycle
- Post a question word on the board (Appendix A4-A5)

- Answer one question (What?) using the text Plant Life Cycles. For example, ask, “What” is the book teaching us so far? Answer aloud, “This book is teaching us about how seeds grow.”
Part 2: Guided Practice (5 mins)

- Tell students that in this section of the book we will ask and answer different questions.
- Remind students of the definitions or asking and answering questions.
- Display 3 question words (what, where, how). Explain to students that they will work together to answer questions using the information from the book, Plant Life Cycles.
- If needed, reread pages 10-19 from Plant Life Cycles then ask students to look at the 3 question words on the board.
- Ask students to take turns with their partner asking a question about the text that was just read. For example, a student may ask What is a stem? The partner could answer. "A stem holds the plant’s leaves up to the sunlight." (page 14)
- When you have completed reading the section, work together to fill in one section of the Ask and Answer Recording Sheet (Appendix A6)

![Ask and Answer Recording Sheet](image)

- Ask a student to share one of their questions. Model how to fill in the Recording Sheet for What, Where, or How.
- Then ask another student to answer the question. Model how to fill in the answer.
Note: Also model comprehension skills your students may need.

Independent Practice (15mins)

- Students will reread pages 4-9 of Plant Life Cycles at the Read to Someone literacy station.
- One partner picks a question word and asks a question related to the text. The other partner uses the book to find the answer to the question.
- Students can use the Recording Sheets to write their questions and answers about Plant Life Cycles.

Closure (2-3 mins)

- Have students who worked at the Read to Someone literacy station share their Recording Sheets with the class. Continue this closure for a couple of days until most students have shared.

NOTE: Being able to ask and answer questions about a text gives students a structure that helps them organize, explain, and remember what they have read. Think aloud as you model this skill for students so that they get a sense of how an adult ask questions before during and after reading text.

If students have difficulty with asking and answering questions, read other books aloud and provide choices for asking and answering questions.
Writing for Understanding

**Plant Life Cycle**

**Engage: (5 mins)**
- Show students Life Cycle of Plants – YouTube video
- Click on Hyperlinked picture below

- Discuss the stages of the plant life. Ask students why do they think plants need water to grow?
- After you have talked about the life cycle of a plant, ask them to tell you what they’ve learned. Chart all of their answers.
- Show the plant life cycle chart and read the descriptions of each part. *(Appendix B9)*

**NOTE:** It is recommended that students keep their writing in a folder. They will be using all of their writing activities as part of a culminating activity: The Foldable Flower Booklet *(Appendix A)*

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**Strategies for Varied Learners**
- Specifically model good writing at the students’ level.
- Spend more time in the pre-writing stage.
- Use a prompt for writing, such as a quote, word from vocabulary list, a text etc.
- Develop topic orally first with small group of students.
- Use graphic organizers to have students organize their thinking before writing.
- Use complete sentences rather than phrases when using notes to write.
- When editing, teacher will need to meet frequently for writing conferences because struggling students may have a more difficult time finding their own mistakes.
- Encourage the student to use the classroom resources (Word wall, KLEWS chart, etc.)
Demonstration/Model:  \( \text{(5 mins)} \)

- Teacher says today we are going to draw and label the Plant's Life Cycle.

- Review the Plant's Life Cycle graphic (Appendix B13)
- Model how to draw and label ONE part of the cycle and complete the matching sentence below.
- For Example,

Strategies for Varied Learners

Consider these scaffolds:
- Consider writing in their native language
- Use dictations
- Review writing prompts
- Give students sentence stems
- Encourage outlining
- Provide models from literature
- Try the four-square writing method
- Grade selectively

Visit website for more information:

- Depending on a student's writing ability, determine the necessary support during the writing process (i.e., providing an answer frame to support students in organizing their writing, modeling, showing models of strong and weak student work, providing descriptive feedback, etc.)

- For Enrichment, have student evaluate their own work before the teacher grades.
Independent Writing: **(10mins)**

- Explain to students that they will be completing the Plant’s Life Cycle diagram along with completing the sentences at the Work on Writing station.
- Provide the diagram and supply a word bank for students at the Work on Writing station. (Appendix B13)

**Closure/Share: ** **(3mins)**

Have students share their diagrams, and check to see that they labeled each part correctly. End with asking volunteers sharing a challenge they were having and how they solved the challenge.
New plants **sprout** from seeds. Some plants grow very quickly. Other plants grow slowly. Trees are plants that can take many years to grow to their full size.
Growing Seeds

Most **seeds** grow in soil. They start to grow into plants under the soil. When a seed starts to grow, this is called **germination**.
First, the hard case around the seed breaks open. Then, a root grows down into the soil. A first shoot grows up and the plant's first leaves begin to open.

A seed needs lots of water and sunlight to make it grow.
<table>
<thead>
<tr>
<th>Ask and Answer</th>
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<tbody>
<tr>
<td><strong>What:</strong></td>
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<td><strong>Why:</strong></td>
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</table>
Draw pictures for the plant’s life cycle. Complete the sentences below.

A Plant’s Life Cycle

First
Next
Then
Finally

First
Next
Then
Finally