

DAY 7 Identifying Important Information			
Reading Strategy: Main Idea		Science Concept: Measuring and Mapping Caterpillars	
Reading TEKS: 2.6G	Figure 19: Reading/Comprehension Skills F	ELPS: Reading 2-12, 19 TAC 74.4(c)(4)	Science TEKS: 2.2 (A, D); 2.10
Materials for Reading Mini Lesson: Chart paper, markers, butterfly inquiry chart, butterfly text to model strategy			
Materials for Inquiry Circle Groups: Group inquiry charts, pencils, variety of nonfiction texts for each group, access to websites and online books			
Materials for Science Whole Group Lesson: Caterpillar Maps, Team Growth chart, glue stick or tape, marker pens, scissors, yarn			
Content Vocabulary: Tracking — The process of following something or someone.			
Science and Literacy Connection: When authors don't tell us what the main idea of the text is, we must determine the most important information. During an experiment, we need to figure out the most important information from our observations.			

For an expanded version of the Standards listed above, see page 5.

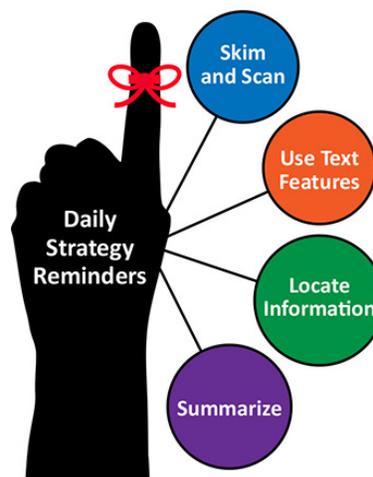
### Reading Mini-lesson — 15 minutes

#### OVERVIEW

When scientists are researching a topic, they must decide what is the most important part of what they read. When we do this, we are determining the main idea.

Explain the strategy below as follows.

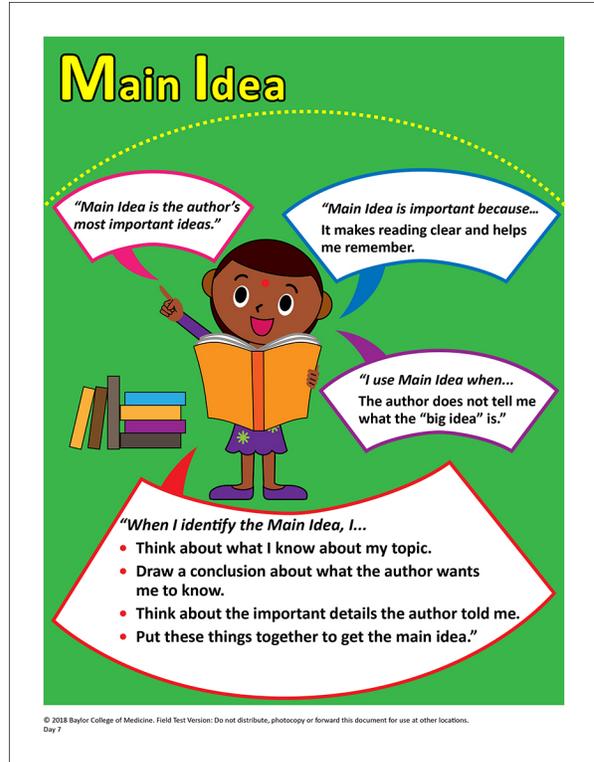
- **Tell what the strategy is (declarative knowledge)**
  - Say something like, "Today we will practice determining the main idea of a section as we read about butterflies. The main idea is the most important thing the author wants us to know about their topic. Getting the main idea is sometimes called 'getting the gist' of a piece."
- **Tell when and why to use the strategy (conditional knowledge)**
  - Say something like, "Sometimes authors tell us what their main idea. Usually they do that in the first or last sentence of a section. But, they don't always do that. Sometimes, they leave out the main idea and make us (as readers) work to extract it. As a strategic reader, I will do this after each paragraph or section in the text I am reading."
- **Tell how to employ the strategy (procedural knowledge)**
  - While you model the strategy, say something like, "The first thing I need to do is think about the topic (that's butterflies) and what I already know about the topic (butterflies)."



- Say something like, “Now, I will draw a conclusion about what the author wants me to know about the topic (butterflies)—that is, I’ll take what I already know about the topic (butterflies) and then I’ll combine that with the most important details the author is telling me.”
- Say something like, “Now, I have to put these things together to get the main idea. That is, I’ll try to think, ‘What would the author tell me was the most important idea from the reading if she were standing here next to me?’”
- Say something like, “I will put the main idea in my own words and record it on the inquiry chart.”

### Practice in text (print, video, or interview)

Post the anchor chart in your classroom so students can refer to it while in their inquiry circles. Encourage scientists to use the strategy during in their Inquiry Circles.



## Inquiry Circle Groups — 30 minutes

### OVERVIEW

Scientists work in teams when conducting research and experiments. Each day of this unit, students will work in inquiry circle groups while embodying the role of a scientist. They will do so by taking on roles of scientists in research by speaking like a scientist, reading like a scientist, and writing like a scientist.

### PROCEDURE

#### Before Inquiry Circle Groups — 5 minutes

1. Say something like, “It is time to get into our inquiry circle groups. You will be with the same research team as yesterday.”
2. Say something like, “When we research organisms, we will practice our roles as scientists. We will do this because scientists have a special way in which they observe the world, read scientific texts, and write reports. There is no better way to learn about science than to become a scientist!”

#### During Inquiry Circle Groups — 20 minutes

1. Say something like, “We have anchor charts to help guide your thinking. Do not forget to use them while in groups.” Refer to “Language of a Scientist” anchor chart and the daily anchor chart. Remind students that they can use all the reading strategies taught, not just the one for that day.
2. Say something like, “My role is to help guide the inquiry circle groups, but I expect you to work as a scientific team to solve your problems together.”

3. Say something like, “Do not forget to answer your research questions and record it on the inquiry chart. It is important to record your sources on the inquiry chart as you complete it.” Be sure to explicitly explain how students should use the chart.
4. While groups are working together, walk around the room to facilitate as needed.

#### **After Inquiry Circle Groups — 5 minutes**

1. Say something like, “As we are concluding our inquiry circle groups for today, each group will have a chance to share what they accomplished and learned.”
2. Say something like, “The Lab Director should lead the discussion with their inquiry circle group about today’s results. For example, what did you learn about your organism? Which reading strategies did you use? What problems did you encounter? How did you resolve those problems?”
3. Say something like, “The Data Scientist will now share with the entire class either something the group learned about their organism, which reading strategy(ies) were used, or how the group solved a problem.”

### **Science Whole Group Lesson — 30 minutes**

#### **OVERVIEW**

In the previous day’s activity, students learned to plot the approximate position of the caterpillars within their habitat chambers. In today’s activity, students will continue their plotting skills by marking the positions of the caterpillars again. They also will continue measuring the length of the caterpillars.

#### **BACKGROUND INFORMATION**

As the days progress, students should begin to see that caterpillars migrate toward food and moisture and begin making correlations between that movement and the caterpillar’s growth.

#### **SAFETY**

Remind student teams daily to be gentle with the growth habitats when they handle them to prevent disturbing the larvae.

Please follow all district and school science laboratory safety procedures. It is good laboratory practice to have students wash hands before and after any laboratory activity. Clean work areas with disinfectant.

#### **MATERIALS**

##### **Per Team of Students**

- Caterpillar Maps
- Team growth chart
- Glue stick or tape
- Marker pens
- Scissors
- Yarn

## DAILY OBSERVATIONS

Give students time to observe their organisms (whether they are in the larvae, pupa, or adult stage), take measurements of the larvae (if applicable), and record their observations in their science notebooks. Facilitate group discussions by asking questions like, “What did you notice? What has changed since the last time you observed your organisms?”

## PROCEDURE

### **Engage**

1. Gather the class and explain that today they will practice plotting the movement of the caterpillars again. Tell them that they will do this every day until they see the chrysalis appear.
2. Remind them to be careful in their measurements so that the larvae are not disturbed.

### **Explore**

3. Students will track the larvae movement and record results on their student sheet.
4. Students will measure their caterpillars using the bits of yarn and record/glue on their team graph.

### **Explain**

5. As students track and measure their caterpillars, move between groups and ask them to share their observations with you. Did they notice any changes from yesterday’s caterpillar movements? Is there anything different in their habitat? (silk nests?) Are the caterpillars’ measurements changing? If so, how?
6. Allow time for each team to report their observations to the class.

### **Evaluate**

7. Are students demonstrating progressive skill in measurements and observations? Are they using new science vocabulary in their explanations?

## EXPANDED STANDARDS

**Reading TEKS:** 2.6G Comprehension skills: listening, speaking, reading, writing, and thinking using multiple texts. The student uses metacognitive skills to both develop and deepen comprehension of increasingly complex texts. The student is expected to: (G) evaluate details read to determine key ideas.

**Figure 19:** Reading/Comprehension Skills. Students use a flexible range of metacognitive reading skills in both assigned and independent reading to understand an author's message. Students will continue to apply earlier standards with greater depth in increasingly more complex texts as they become self-directed, critical readers. The student is expected to: (E) retell important events in stories in logical order; and (F) make connections to own experiences, to ideas in other texts, and to the larger community and discuss textual evidence.

**ELPS:** Student Expectations for Reading 2-12, 19 TAC 74.4(c)(4) The student is expected to:(I) demonstrate English comprehension and expand reading skills by employing basic reading skills such as demonstrating understanding of supporting ideas and details in text and graphic sources, summarizing text, and distinguishing main ideas from details commensurate with content area needs.

**Science TEKS:** 2.2 Scientific investigation and reasoning. The student develops abilities necessary to do scientific inquiry in classroom and outdoor investigations. The student is expected to:

- (A) ask questions about organisms, objects, and events during observations and investigations;
- (D) record and organize data using pictures, numbers, and words

2.10 The student knows that organisms resemble their parents and have structures and processes that help them survive in their environments.