Changing Weather; Changing Activities
This unit reviews the basic concepts of weather, as well as how weather relates to life skills applications such as planning activities to do and choosing clothing to wear.

Lesson	Activities	Description
1	Leveled Book	*What Should Pam Wear?*
2	• Read and Answer	Lesson 1 Comprehension
3	Chapter 1 • Read and Answer	What Is Weather? Comprehension Questions
4	Life Skills Application 1	Weather Affects Our Daily Lives
5	Chapter 2 • Read and Answer	What Is a Meteorologist? Comprehension Questions
6	Life Skills Application 2	Be a Meteorologist
7	Chapter 3 • Read and Answer	Measuring the Weather Comprehension Questions
8	Life Skills Application 3	Check the Temperature
9	Chapter 4 • Read and Answer	Watching the Weather Comprehension Questions
10	Life Skills Application 4	Check the Weather First
11	Chapter 5 • Read and Answer	Warm Weather Storms Comprehension Questions
12	Life Skills Application 5	Cleaning Up Dust
13	Chapter 6 • Read and Answer	Cold Weather Storms Comprehension Questions
14	Life Skills Application 6	Storm Safety
15	Vocabulary Quiz Game	How's the Weather?
16	Edit It	All About Weather
17	Real-World Writing	Weather Journal
18	Topic Paragraph	Newsletter and Activity Report
19	Math Story Problems	Weather Shelter
20	Measure It!	Thunderstorm Pie
21	Read This Chart	Record Rainfall
22	Money	Severe Weather Kit
23	Schedules and Times	Monthly Activities
24	Geometry	Weather Report
25	Algebra	Charting the Weather
26	Related Content	Trading Cards
27	Related Content	Oral Report
28	Science Experiment	A Thunderstorm Is Coming
29	History Timeline	It's Cold Out There!
30	Journal Writing	Monthly Topics

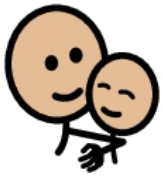
Standards Connection High School Content

Instructional Targets	
STANDARDS Connection	Science Standards for Earth and Space Science • Explore scientific ways to measure, predict and report weather conditions.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will identify tools and methods that scientists use to measure and predict weather.	• Students will apply weather report information to daily activities.	• Students will identify weather conditions and temperatures related to the day or season.

What Should We Wear? Weather is a very important part of our daily lives. We monitor the weather in order to decide what clothes we will wear. In the first book of this unit, students read about Pam and how she uses temperature to help her decide what to wear to school. In subsequent lessons, students practice using weather to make clothing choices in both made-up scenarios and real-life applications. As students practice this important skill for daily living, observe students' clothing choices and discuss examples of good choices.

What Can We Do? We also monitor the weather in order to plan activities. In Lessons 9 and 10, students learn about activities associated with certain types of weather, and they examine weather conditions that make it unsafe to do certain activities. Having a planned activity ruined by the weather is often disappointing. Talk with students about how to handle these emotions and work together to brainstorm appropriate activities for days when students are stuck inside due to inclement weather.



How Do We Stay Safe? In this unit, students learn that weather conditions often have both good and bad outcomes. Knowing how to stay safe when weather turns bad is an important life skill. In Lessons 10 – 14 of this unit, students learn about various types of storms, as well as how to prepare for and stay safe during the storms. As you work through these lessons, review with students the storm safety procedures for your school or community and, if possible, allow time for students to practice the procedures.

How Do We Learn About Weather? This unit's Chapter Book introduces students to weather reports. As you read about these tools, provide students with opportunities to experience different types of reports (e.g., online, radio, television, newspaper). Talk with students about the work that goes on behind the scenes to make a weather report, including the role a meteorologist plays. Consider arranging a visit to a television station's weather room or arrange for a local meteorologist to come speak to students.

n2y library

The n2y Library has several books that may build understanding of the concepts presented in this unit.

- *Weather* (Levels A, B, and C) introduces the connection between the type of weather and what we wear.
- *Prepare for the Weather* (Level C) builds on students' knowledge about how weather changes with the seasons.
- *Seasons Are Changing* (Level C) looks at the cycle of seasons and the type of weather associated with each.
- *Rainy Day* (Level E) describes how the weather affects the activities we do.
- *Heat and Light from the Sun* (Level H/I) provides an overview of how the Sun gives us seasons and also day and night.
- *Temperature* (Level H/I) identifies the relationship between temperature measurements and the weather type.
- *Simon Hears Thunder* (Level H/I) presents the sounds and visual aspects of weather.
- *Weatherperson* (Level H/I) presents how the weatherperson can help us know what kind of weather we will have.

Lesson 1

Instructional Targets

Reading Standards for Literature

- *Range and Level of Text Complexity:* Experience grade level and age-appropriate literature materials, including poems, biographies, chapter books, fiction and nonfiction works, that are adapted to student reading level.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Leveled Book: *What Should Pam Wear?*

Lesson 1 provides a simple book in three distinct reading levels. Early readers may engage in the same content when selecting the appropriate level based on individual abilities, needs or reading goals. This Leveled Book is presented in three leveled formats: Level D, Level B and Level aa (captioned). Read the highest level aloud to all students. Then select the level appropriate for each student for guided and independent reading. The content of the Leveled Book focuses on choosing clothing based on the temperature. When they have finished the book, students should be able to describe how a thermometer can help them decide what clothes to wear.

- Introduce the story by talking about clothing choices. Ask, "How do you decide what to wear to school each day?""
- On the first reading, do a picture walk. Note pictures of Pam and discuss her actions. Emphasize that Pam is trying to decide what to wear to school. Ask, "What two clothing items is Pam trying to decide between?"
- Read the story aloud to model fluency. After reading the story, ask questions about how Pam chose what to wear to school.
- As a group, reread the story with pauses for key words to encourage participation. Encourage choral reading of the repeated line. Provide students with supports for page turning and interaction while they are reading.
- During independent or paired reading, focus on individual student reading abilities with text or supported-text versions. It is likely that students may read different levels for different purposes each day when building reading skills.
- Support student reading using text to speech and the communication board.
- Follow up reading with discussion on using a thermometer to determine temperature. Ask, "How does Pam's mom know what the temperature is outside? What does Pam's mom say the temperature is?" Use the temperature guide from ULS Core Materials, Lesson 2.3 to review the descriptive words for various temperature ranges.

Word-recognition cards for this lesson support high-frequency words within the unit reading materials.

List 1: *about, like, you, how, or, very*
List 2: *cold, hot, tell, look, think, read*
List 3: *warm, mean, clothes, today, water, should*

Standards Connection

- Students with reading challenges may acquire more information from text when it is read aloud. The connection lesson explores alternative ways to "read" by using the text-to-speech version of this story and the PowerPoint® show.

Additional ideas for word study instruction are provided in the ULS Instructional Guides: Word Study. For some students, the "learning to read" process continues in the higher grades. Word wall activities are included in this guide.

Comprehension questions from Leveled Books are based on the highest level in the series. Read the highest level aloud to help students at all levels gain meaning.

Pre- and post-assessments are available through Monthly Checkpoints.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read literature forms, including chapter books, biographies, poems, fiction and nonfiction works that have been adapted to student reading level.	• Students will read supported and shared literature forms, including chapter books, biographies, poems, fiction and nonfiction works that have been adapted to student reading level.	• Students will actively participate in supported reading of literature forms, including chapter books, biographies, poems, fiction and nonfiction works that have been adapted to student ability level.

Resources and Materials	Additional Resources
Leveled Book: *What Should Pam Wear?* Communication board Standards Connection Lesson 1	Supporting materials for this lesson can be found in ULS Core Materials, Lesson 2.3. Additional ideas for word study instruction are provided in the ULS Instructional Guides: Word Study.

Standards Connection Lesson 1

Instructional Targets	
	Reading Standards for Literature • *Integration of Knowledge and Ideas:* Compare and contrast various ways to read, listen and view stories and drama. Identify personal preferences. Reading Standards for Speaking and Listening • *Comprehension and Collaboration:* Initiate and participate in grade and age-appropriate discussion on diverse topics to express an opinion, share ideas and information, and ask and respond to questions relevant to the topic.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will describe similarities and differences between reading a story and experiencing a multimedia version of that story. • Students will share information and opinions, ask and answer questions and make comments during a group discussion.	• Students will identify similarities and differences between features of reading a story and experiencing a multimedia version of that story. • Students will use picture supports to share information and opinions, ask and answer questions and make comments during group discussions.	• When presented with illustrations of a character or an event from one story, students will select a matching character or event from a similar story. • Students will participate in conversational exchanges using communication technology and picture supports.

Tell students to use the book features and pictures to discuss, locate and answer these questions.

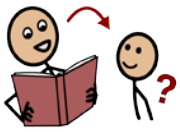
What is the **title** of this story?
From the title, what do you think this story will be about?

Who is the **author** of this story?

Who is the **illustrator** of this story?

Explore different ways to read, listen and view text. Lesson 1 provides the story in print format, in a text-to-speech version and as a PowerPoint® show. How do students prefer to acquire information from text? Exploring and discussing these options may lead to a lifetime extension of ways that students can gain information.

Read by myself.



Read to me.

Listen on the computer.

How are these ways of reading the same? Different?

about	**like**
you	**how**
or	**very**
cold	**hot**
tell	**look**

think	**read**
warm	**mean**
clothes	**today**
water	**should**

Instructional Targets

Reading Standards for Literature

- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Read and Answer: *What Should Pam Wear?*

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

After reading *What Should Pam Wear?,* use the following comprehension activity. Students may respond to questions both orally and in writing. Choose the most appropriate format on the basis of each student's skills and needs. Level 3 is text-only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.

Build vocabulary knowledge of the identified words. Picture support cards are provided for reading recognition. Use the words in additional sentences for meaning. Make connections between vocabulary and each student's experiences.

sweater cool wear thermometer hot

1. Pam must choose what to _____. (wear)
2. Pam looks outside at the _____. (thermometer)
3. The thermometer tells how _____ or cold it is. (hot)
4. 50 degrees is ____. (cool)
5. Pam wears her blue _____. (sweater)


Standards Connection

- Use the format of this connection to build retelling and summarizing skills. Build communication skills by using the augmentative supports needed for each student.

Comprehension questions from Leveled Books are based on the highest level in the series. Read the highest level aloud to help students at all levels gain meaning.

Pre- and post-assessments are available through Monthly Checkpoints.


Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read questions about a story and write, speak or select an answer.	• Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Comprehension questions Fill-in cards Standards Connection Lesson 2	

Standards Connection Lesson 2

Instructional Targets	
	Reading Standards for Literature • *Key Ideas and Details:* Summarize the main theme of a text and support it by citing details and a sequence of events. Standards for Speaking and Listening • *Presentation of Knowledge and Ideas:* Present information in an organized manner appropriate to a task, an audience or a situation. Standards for Language • *Knowledge of Language:* Demonstrate conventions of language to communicate effectively when speaking or writing in varied contexts.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will summarize a story, including the main idea, events and key details. • Students will communicate on a topic specific to the purpose and audience. • Students will apply conventions of language to generate sentences specific to the purpose when speaking or writing.	• Students will use picture supports to retell key details and events from a story. • Students will communicate on a topic specific to the purpose and audience, using picture supports. • Students will use conventions of language to generate a simple sentence when speaking or writing.	• Students will retell key details and events from a story through an active participation response (e.g., voice output device, eye gaze choice board). • Students will communicate basic information on a topic or experience using communication technology and picture supports. • Students will use language to share an idea with others.

Story retell and summarization are means of building communication skills. Use the comprehension questions and the communication board to arrange sentences or pictures to support retelling. Retelling involves the reader's ability to recount information, usually organized around characters and setting. When summarizing, the reader condenses major ideas and some details to an abbreviated form. Use the pictures from these Leveled Books to develop communication skills through retelling and summarizing.

Main idea: What is the message in this story?

Arrange pictures or words to begin sentences.

	Who  or	**What** 	**Action** 
			
			
			

Use the book, comprehension questions and pictures to help you tell about this story.

Instructional Targets

Reading Standards for Informational Text

- *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Chapter 1: What Is Weather?

The title of the Chapter Book is *Weather.* The first chapter, What Is Weather?, explains weather and what causes changes in the weather. Students learn about various types of weather, as well as the role the Sun plays in creating Earth's weather.

- Chapter books present a "reading to learn" experience. Therefore, students may read independently, in a shared reading experience or books may be read to them. Present students with one chapter at a time for reading and comprehension instruction.
- After each page is read, ask the discussion question that appears in italics at the bottom of the page. Focus on pictures to reinforce understanding. Repeated readings are encouraged.
- Suggested Reading Levels for this chapter include Levels J/K, presented in a text format, and F/G, presented in both text and symbol-supported formats.

Read and Answer

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

- Select the level of comprehension questions appropriate for each student. Comprehension questions are also in three formats. Level 3 is text only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.
- Build comprehension and vocabulary through discussions.

Standards Connection

- These standards connection lessons are designed to build summarizing skills and are applicable to all chapters. Using the first standards connection form, determine whether this book is a work of fiction or nonfiction. Select the additional standards connection lesson based on whether the chapter is a fictional format that has a story line or an informational text that includes facts and historical events.

The first two sets of comprehension questions are derived from the lower levels of text. An advanced level of mixed questions is provided in text-only format.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will independently read questions about a story and write, speak or select an answer.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level. • Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Chapter 1: What Is Weather? Communication board Comprehension questions (multiple-choice and fill-in); Advanced questions Fill-in cards Standards Connection Lessons 3, 5, 7, 9, 11, 13	

Lesson 3, Chapter 1: Answer Key

Fill-In

clouds Sun changes Weather clothes

1. _____ is what the sky outside is like. (Weather)
2. The weather _____ every day. (changes)
3. The _____ makes the weather change. (Sun)
4. The _____ make rain and snow. (clouds)
5. The weather helps us choose _____. (clothes)

Multiple-Choice

1. What is this chapter about? (coat, weather, wind)
2. What makes the weather change? (day, night, Sun)
3. Where do rain and snow come from? (snow, clouds, umbrella)
4. What does the weather help us choose? (clothes, food, hairstyle)
5. What is important to know about this chapter?
   - Rain and snow are pretty.
   - Weather helps us make choices.
   - The Sun is bright.

Fill-In Advanced

Use the Chapter Book to help you fill in the blank.

1. _____ is what the air and sky are like outside. (Weather)
2. The _____ causes changes in the weather. (Sun)
3. Heat from the Sun _____ the air. (warms)
4. _____ are full of warm water. (Clouds)
5. Rain, wind and _____ are weather. (snow)

Multiple-Choice Advanced

These questions may have more than one correct answer.

6. Which one is a type of weather? (hot, cold, wind)
7. What happens when warm air and cool air move around?
   (the Sun bakes cookies, the clouds throw a party,
   the weather changes)
8. What does heat from the Sun warm? (air, water, clouds)
9. What weather comes from clouds?
   - wind
   - rain
   - snow
10. What can weather help us choose?
    - what clothes to wear
    - what to have for breakfast
    - what things to do

Standards Connection Lessons 3, 5, 7, 9, 11, 13

Instructional Targets	
	Reading Standards for Literature and Informational Text • *Integration of Knowledge and Ideas:* Compare and contrast different genres; identify personal preferences. • *Craft and Structure:* Use structures of a text (paragraphs, chapters, etc.) to locate information as it supports the purpose of a text.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will describe a series of events as these develop through chapters of a book or scenes of a play. • Students will experience different literature genres having various themes.	• Students will locate a chapter of a book or scene of a play. • Students will identify two stories or books of the same genre.	• Students will identify a picture representing an event from a chapter or scene. • Students will select a book or story of personal preference.

Tell students to use the book features and pictures to discuss, locate and answer these questions.

What is the title of this chapter?

Use the table of contents to find the first page of the chapter.

What do you think this chapter will be about?

This is a Chapter Book. What kind of Chapter Book is this?

Fiction Nonfiction

Fiction works tell a story that is made up in the writer's imagination. Fiction stories are not true.
Nonfiction works tell facts about a topic. Nonfiction stories are true.

What is the chapter topic?

Biography History Science Health

Compare this book to the Chapter Book from last month.

Standards Connection Lessons 3, 5, 7, 9, 11, 13

Instructional Targets	
	Reading Standards for Informational Text • *Key Ideas and Details:* Summarize the central idea and specific supporting details of a text. Standards for Speaking and Listening • *Presentation of Knowledge and Ideas:* Present information in an organized manner appropriate to a task, an audience or a situation. Standards for Language • *Knowledge of Language:* Demonstrate conventions of language to communicate effectively when speaking or writing in varied contexts.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will summarize a story, including the main idea and events. • Students will communicate on a topic specific to the purpose and audience. • Students will apply conventions of language to generate sentences specific to the purpose when speaking or writing.	• Students will use picture supports to retell key details and events from a story. • Students will communicate on a topic specific to the purpose and audience, using picture supports. • Students will use conventions of language to generate a simple sentence when speaking or writing.	• Students will retell key details from a story through an active participation response (e.g., voice output device, eye gaze choice board). • Students will communicate basic information on a topic or experience using communication technology and picture supports. • Students will use language to share an idea with others.

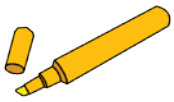
Informational text has a purpose. That purpose may be to learn facts, organize a schedule or follow a recipe. The following activity will build skills for identifying key information from various sources.

Main idea: What is the message in this story?

Key details:

Key details:

What is important to know?



Highlight key words you learned.

Circle key pictures that will help you remember.

Instructional Targets

Standards for Language

- *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing.

Personal Life

- *Problem Solving:* Apply problem-solving skills to issues relate to daily living situations.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Life Skills Application 1: Weather Affects Our Daily Lives

Introduce this activity after students have read Chapter 1. In Chapter 1, students learn that weather is what the sky and air are like outside. In this lesson, students will explore how weather affects their daily lives.

- Have students recall the different types of weather they learned about in Chapter 1 (e.g., hot, cold, rain, wind, snow). Ask, "What do you like about hot weather? What don't you like about hot weather? What do you like about rainy weather? What don't you like about rainy weather?" As students respond, emphasize that weather often has both good and bad outcomes.
- Display and read aloud the weather chart. Then work together to match and sort the weather outcome cards into the appropriate spaces on the chart.
- As each weather outcome is added to the chart, discuss how it might impact students' lives.

Extension: Gather information on local weather reports/conditions. Identify positive and negative outcomes.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will use unit topic words in conversation. • Students will recognize and apply a problem solving process that result in a solution to a life situation.	• Students will point to pictures of key vocabulary from unit topics as part of a discussion. • Students will identify and select appropriate solutions to a life situation problem.	• Students will make a selection to indicate a picture of key vocabulary within a unit topic. • Students will select an option within a daily living situation or scenario.

Resources and Materials	Additional Resources
Weather chart Weather outcome cards	

Grade Band: High School
Unit Target: Earth and Space Science
Unit Topic: Changing Weather; Changing Activities

Unit 3

Lesson 5

Instructional Targets

Reading Standards for Informational Text

- *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Chapter 2: What Is a Meteorologist?

The title of the Chapter Book is *Weather.* The second chapter, What Is a Meteorologist?, introduces meteorologists as people who study the weather and make weather forecasts. This chapter also explains weather reports and where to find them.

- Chapter books present a "reading to learn" experience. Therefore, students may read independently, in a shared reading experience or books may be read to them. Present students with one chapter at a time for reading and comprehension instruction.
- After each page is read, ask the discussion question that appears in italics at the bottom of the page. Focus on pictures to reinforce understanding. Repeated readings are encouraged.
- Suggested Reading Levels for this chapter include Levels J/K, presented in a text format, and F/G, presented in both text and symbol-supported formats.

Read and Answer

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

- Select the level of comprehension questions appropriate to each student. Comprehension questions are also in three formats. Level 3 is text only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.
- Build comprehension and vocabulary through discussions.

Standards Connection

- These standards connection lessons are designed to build summarizing skills and are applicable to all chapters. Using the first standards connection form, determine whether this book is a work of fiction or nonfiction. Select the additional standards connection lesson based on whether the chapter is a fictional format that has a story line or an informational text that includes facts and historical events.

The first two sets of comprehension questions are derived from the lower levels of text. An advanced level of mixed questions is provided in text-only format.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will independently read questions about a story and write, speak or select an answer.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level. • Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Chapter 2: What Is a Meteorologist? Communication board Comprehension questions (multiple-choice and fill-in); Advanced questions Fill-in cards Standards Connection Lessons 3, 5, 7, 9, 11, 13	

Lesson 5, Chapter 2: Answer Key

Fill-In

meteorologist tools weather air weather report

1. A _____ looks at the weather. (meteorologist)
2. A meteorologist makes a _____. (weather report)
3. A meteorologist measures the _____. (air)
4. Meteorologists use _____. (tools)
5. Tools help meteorologists learn about the _____. (weather)

Multiple-Choice

1. What is this chapter about? (meteorologists, teachers, cars)
2. What does a meteorologist look at? (books, TV, weather)
3. How do we learn about the weather?
   (weather report, book report, movie)
4. What does a meteorologist use to learn about weather?
   (book, tools, pencil)
5. What is important to know about this chapter?
   - Meteorologists live in space.
   - The weather is hot and cold.
   - Meteorologists help us learn about the weather.

Fill-In Advanced

Use the Chapter Book to help you fill in the blank.

1. A meteorologist studies the _____. (weather)
2. _____ come from a meteorologist. (Weather reports)
3. A meteorologist _____ the weather. (forecasts, predicts, studies)
4. A meteorologist predicts the weather by _____ the air. (measuring)
5. Another name for a meteorologist is a _____. (weatherperson)

Multiple-Choice Advanced

These questions may have more than one correct answer.

6. Where can we learn about the weather?
   (Internet, TV, newspaper)
7. What words describe weather? (warm, wet, happy)
8. Who makes a weather report?
   (president, meteorologist, teacher)
9. What does a meteorologist measure in the air?
   - temperature
   - water
   - flour
10. What do meteorologists use tools to do?
    - Study the weather.
    - Build a weather station.
    - Report the weather.

Instructional Targets
Standards for Language • *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing. Personal Life • *Communication:* Participate in conversations related to current events in the community and beyond.
Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan
Life Skills Application 2: Be a Meteorologist Introduce this activity after students have read Chapter 2. In Chapter 2, students learn about meteorologists and weather reports. In this lesson, students will practice using weather reports to gain weather information. • Record one or more weather segments from a local news program or locate recordings on a local news channel's website. Play the recordings for the class. After viewing, talk with students about the meteorologist and what he or she does. For example, ask, "What does the meteorologist tell about? What tools does he or she use to show the weather?" • Discuss the tools meteorologists use to report the weather to viewers, focusing on maps that show weather conditions in specific areas. Then use the materials provided with this lesson to create your own weather map for the United States. Begin by identifying the region in which your town or school is located. Have students choose the symbol/descriptive word that best represents the current weather conditions and place it on the map. Then identify cities in other regions and have students look up and record the weather conditions for those places. • Invite volunteers to use the completed map as a tool to report the current weather for the United States just like a TV meteorologist would. This activity could be completed during ULS Core Materials, Lesson 2.3 (Weather) or 3.0 (Meeting Time). Extension: Complete this activity for several days in a row. Then compare the maps to see if students can identify weather that is moving across the country. For example, the Midwest may have had rain on Monday. Then the rain may have moved to the Northeast on Tuesday or Wednesday.    Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use unit topic words in conversation. • Students will share information and opinions, ask and answer questions and make comments during a discussion or conversation.	• Students will point to pictures of key vocabulary from unit topics as part of a discussion. • Students will share information, ask and answer questions and make comments using picture supports during a discussion or conversation.	• Students will make a selection to indicate a picture of key vocabulary within a unit topic. • Students will participate in conversational exchanges using communication technology and picture supports.

Resources and Materials	Additional Resources
Weather map Weather symbols	Supporting materials for this lesson can be found in ULS Core Materials, Lesson 2.3 and 3.0.

Instructional Targets

Reading Standards for Informational Text

- *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Chapter 3: Measuring the Weather

The title of the Chapter Book is *Weather.* The third chapter, Measuring the Weather, explains how meteorologists study the weather. Students learn about measuring temperature, precipitation and wind. They also learn about the tools that can be used to measure these conditions.

- Chapter books present a "reading to learn" experience. Therefore, students may read independently, in a shared reading experience or books may be read to them. Present students with chapter at a time for reading and comprehension instruction.
- After each page is read, ask the discussion question that appears in italics at the bottom of the page. Focus on pictures to reinforce understanding. Repeated readings are encouraged.
- Suggested Reading Levels for this chapter include Levels J/K, presented in a text format, and F/G, presented in both text and symbol-supported formats.

Read and Answer

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

- Select the level of comprehension questions appropriate to each student. Comprehension questions are also in three formats. Level 3 is text only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.
- Build comprehension and vocabulary through discussions.

Standards Connection

- These standards connection lessons are designed to build summarizing skills and are applicable to all chapters. Using the first standards connection form, determine whether this book is a work of fiction or nonfiction. Select the additional standards connection lesson based on whether the chapter is a fictional format that has a story line or an informational text that includes facts and historical events.

The first two sets of comprehension questions are derived from the lower levels of text. An advanced level of mixed questions is provided in text-only format.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will independently read questions about a story and write, speak or select an answer.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level. • Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Chapter 3: Measuring the Weather Communication board Comprehension questions (multiple-choice and fill-in); Advanced questions Fill-in cards Standards Connection Lessons 3, 5, 7, 9, 11, 13	

Lesson 7, Chapter 3: Answer Key

Fill-In

Precipitation Wind temperature cold measure

1. A meteorologist can _____ the wind. (measure)
2. The _____ can be hot or cold. (temperature)
3. _____ may be rain or snow. (Precipitation)
4. _____ is moving air. (Wind)
5. The temperature is freezing _____ at 32 degrees. (cold)

Multiple-Choice

1. What is this chapter about?
   (talking about weather, measuring the weather, looking at rain)
2. What can be hot or cold? (temperature, wind, snow)
3. What are rain and snow? (wind, temperature, precipitation)
4. What is moving air? (water, wind, temperature)
5. What is important to know about this chapter?
   - A meteorologist can measure the weather.
   - Wind can move fast or slow.
   - Rain and snow are in the clouds.

Fill-In Advanced

Use the Chapter Book to help you fill in the blank.

1. _____ study the weather by measuring. (Meteorologists)
2. _____ is the measure of hot and cold. (Temperature)
3. Temperature is freezing at _____ degrees. (32)
4. The temperature is _____ at 80 degrees. (hot)
5. A _____ tells us degrees of hot and cold. (thermometer)

Multiple-Choice Advanced

These questions may have more than one correct answer.

6. What is water that falls from the sky?
   (precipitation, temperature, rain gauge)
7. What are types of precipitation? (rain, wind, snow)
8. What do we call moving air? (precipitation, sun, wind)
9. How is precipitation measured?
   - Rain falls from the clouds.
   - A rain gauge tells the inches of rain.
   - A ruler tells the inches of snow.
10. How is wind measured?
    - A weather vane shows the direction of wind.
    - Wind is measured in miles per hour.
    - A wind gauge tells the speed of the wind.

Instructional Targets

Standards for Language

- *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing.

Personal Life

- *Problem Solving:* Apply problem-solving skills to issues related to daily living situations.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Life Skills Application 3: Check the Temperature

Introduce this activity after students have read Chapter 3. In Chapter 3, students learn that meteorologists use many tools to measure the weather. In this lesson, students will practice using a thermometer to check the temperature, comparing the temperature inside and outside.

- Display the thermometers and remind students that a thermometer can be used to check the temperature of the air.
- Place one thermometer inside and one thermometer outside. Wait at least 15 minutes and then have students check and record the temperature in each location on the provided temperature check form.
- Have students compare the temperatures. Ask, "Is it warmer inside or outside?" Record this information and then continue discussion by talking about what students might do with this information. Ask, "Do we need to do something inside? Should we open the windows? Should we close the windows? Do we need to turn the air conditioner on or off? What should we wear outside?" The temperature guide from ULS Core Materials, Lesson 2.3 may be used to help students make a decision on what to do. Students' answers should then be recorded in the temperature check form.

Extension: Repeat this activity for one to two weeks to have students compare temperature changes.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will use unit topic words in conversation. • Students will recognize and apply a problem solving process that results in a solution to a life situation.	• Students will point to pictures of key vocabulary from unit topics as part of a discussion. • Students will identify and select appropriate solutions to a life situation problem.	• Students will make a selection to indicate a picture of key vocabulary within a unit topic. • Students will select and option within a daily living situation or scenario.

Resources and Materials	Additional Resources
Temperature check form Picture/word cards	indoor thermometer outdoor thermometer Supporting materials for this lesson can be found in ULS Core Materials, Lesson 2.3.

Instructional Targets

Reading Standards for Informational Text

- *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Chapter 4: Watching the Weather

The title of the Chapter Book is *Weather.* The fourth chapter, Watching the Weather, explains why it is important to know about the weather. Students learn that knowing what the weather will be can help them plan and prepare.

- Chapter books present a "reading to learn" experience. Therefore, students may read independently, in a shared reading experience or books may be read to them. Present students with one chapter at a time for reading and comprehension instruction.
- After each page is read, ask the discussion question that appears in italics at the bottom of the page. Focus on pictures to reinforce understanding. Repeated readings are encouraged.
- Suggested Reading Levels for this chapter include Levels J/K, presented in a text format, and F/G, presented in both text and symbol-supported formats.

Read and Answer

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

- Select the level of comprehension questions appropriate to each student. Comprehension questions are also in three formats. Level 3 is text only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.
- Build comprehension and vocabulary through discussions.

Standards Connection

- These standards connection lessons are designed to build summarizing skills and are applicable to all chapters. Using the first standards connection form, determine whether this book is a work of fiction or nonfiction. Select the additional standards connection lesson based on whether the chapter is a fictional format that has a story line or an informational text that includes facts and historical events.

The first two sets of comprehension questions are derived from the lower levels of text. An advanced level of mixed questions is provided in text-only format.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will independently read questions about a story and write, speak or select an answer.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level. • Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Chapter 4: Watching the Weather Communication board Comprehension questions (multiple-choice and fill-in) Advanced questions Fill-in cards Standards Connection Lessons 3, 5, 7, 9, 11, 13	

Lesson 9, Chapter 4: Answer Key

Fill-In

swim weather ski clothes watch

1. Meteorologists _____ the weather. (watch)
2. We wear warm _____ in cold weather. (clothes)
3. We can _____ on a hot day. (swim)
4. We can _____ on a snowy day. (ski)
5. It is important to know about the _____. (weather)

Multiple-Choice

1. What is this chapter about?
   (watching the weather, playing outdoors, riding a bike)
2. What can we do on a hot day? (ski, swim, ice skate)
3. What can we do on a snowy day? (swim, ride a bike, ski)
4. What do we wear on a cold day?
   (warm clothes, swimsuit, light clothes)
5. What is important to know about this chapter?
   - The weather is on TV.
   - The weather is cold and snowy.
   - It is important to know about the weather.

Fill-In Advanced

Use the Chapter Book to help you fill in the blank.

1. It is important to _____ about the weather. (know)
2. Meteorologists _____ temperature, precipitation and wind.
   (measure)
3. We wear different _____ for different weather. (clothes)
4. Knowing what the weather will be can help us _____.
   (plan, prepare)
5. If a tornado is coming, we can go to a _____ place. (safe)

Multiple-Choice Advanced

These questions may have more than one correct answer.

6. Who watches the weather for us?
   (meteorologists, coaches, waiters)
7. What should we wear on a cold, snowy day?
   (warm clothes, light clothes, swimsuit)
8. What can we do on a rainy day?
   (go swimming, fly a kite, close the windows)
9. What can we do on a windy day?
   - skate on ice
   - fly a kite
   - play in the rain
10. What can we do on a cold day?
    - ice skate
    - have a picnic
    - stay inside

Instructional Targets

Standards for Language

- *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing.

Personal Life

- *Problem Solving:* Apply problem-solving skills to issues relate to daily living situations.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Life Skills Application 4: Check the Weather First

Introduce this activity after students have read Chapter 4. In Chapter 4, students learn how weather factors into everyday choices such as what to do and what to wear. In this lesson, students will match clothing and activities to different types of weather.

- This lesson provides various weather scenarios. Read or have students read a scenario aloud. Then discuss and have students answer the questions. Remind students to think about the weather when making their choices. Continue with the other scenarios.
- Some scenarios presented have students going out in weather that is not safe. Use these scenarios as an opportunity to talk with students about weather safety and the importance of checking the weather before going out. For an additional challenge, have students suggest what the characters should do given the weather conditions.

Extension: Using a format similar to the one used in this lesson, create scenarios for additional weather conditions and/or activities. Personalize the practice by creating scenarios that relate to current or common weather conditions in your area.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will use unit topic words in conversation. • Students will recognize and apply a problem solving process that results in a solution to a life situation.	• Students will point to pictures of key vocabulary from unit topics as part of a discussion. • Students will identify and select appropriate solutions to a life situation problem.	• Students will make a selection to indicate a picture of key vocabulary within a unit topic. • Students will select and option within a daily living situation or scenario.

Resources and Materials	Additional Resources
Weather scenarios Picture/word cards	

Lesson 11

Instructional Targets

Reading Standards for Informational Text

- *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Chapter 5: Warm Weather Storms

The title of the Chapter Book is *Weather.* The fifth chapter, Warm Weather Storms, describes storms that occur during warm weather, including thunderstorms, tornadoes and hurricanes.

- Chapter books present a "reading to learn" experience. Therefore, students may read independently, in a shared reading experience or books may be read to them. Present students with one chapter at a time for reading and comprehension instruction.
- After each page is read, ask the discussion question that appears in italics at the bottom of the page. Focus on pictures to reinforce understanding. Repeated readings are encouraged.
- Suggested Reading Levels for this chapter include Levels J/K, presented in a text format, and F/G, presented in both text and symbol-supported formats.

Read and Answer

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

- Select the level of comprehension questions appropriate to each student. Comprehension questions are also in three formats. Level 3 is text only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.
- Build comprehension and vocabulary through discussions.

Standards Connection

- These standards connection lessons are designed to build summarizing skills and are applicable to all chapters. Using the first standards connection form, determine whether this book is a work of fiction or nonfiction. Select the additional standards connection lesson based on whether the chapter is a fictional format that has a story line or an informational text that includes facts and historical events.

The first two sets of comprehension questions are derived from the lower levels of text. An advanced level of mixed questions is provided in text-only format.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will independently read questions about a story and write, speak or select an answer.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level. • Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Chapter 5: Warm Weather Storms Communication board Comprehension questions (multiple-choice and fill-in) Advanced questions Fill-in cards Standards Connection Lessons 3, 5, 7, 9, 11, 13	

Lesson 11, Chapter 5: Answer Key

Fill-In

dust storm tornado thunderstorm safe flood

1. A _____ has lightning and thunder. (thunderstorm)
2. A _____ has fast wind. (tornado)
3. A lot of rain can make a _____. (flood)
4. The wind can make a _____ in the desert. (dust storm)
5. Go to a _____ place. (safe)

Multiple-Choice

1. What is this chapter about? (storms, cars, houses)
2. Which storm has lightning and thunder?
   (rain, thunderstorm, dust storm)
3. Which storm has fast wind? (tornado, flood, Sun)
4. Which storm is in the desert? (hurricane, flood, dust storm)
5. What is important to know about this chapter?
   - Wear warm clothes in a storm.
   - Walk outside in a storm.
   - Go to a safe place in a storm.

Fill-In Advanced

Use the Chapter Book to help you fill in the blank.

1. A _____ has clouds shaped like funnels. (tornado)
2. A _____ has thunder and lightning. (thunderstorm)
3. A _____ storm starts over the ocean. (tropical)
4. A tropical storm can become a _____. (hurricane)
5. A _____ makes it hard to see in the desert. (dust storm)

Multiple-Choice Advanced

These questions may have more than one correct answer.

6. What are some warm weather storms?
   (blizzard, thunderstorm, tornado)
7. What can cause a flood? (heavy rain, light wind, thunder)
8. What is in a dust storm? (sand, dust, wind)
9. What does a tornado watch mean?
   - There might be a tornado coming.
   - We should watch for a tornado.
   - A tornado has been seen.
10. What does a tornado warning mean?
    - A tornado has been seen.
    - Go to a safe place.
    - Stay outside.

Lesson 12

Instructional Targets
Standards for Language • *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing. Daily Living • *Home Living:* Maintain basic home cleaning routines and organization. Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan
Life Skills Application 5: Cleaning Up Dust Introduce this activity after students have read Chapter 5. In Chapter 5, students read about dust storms. In this lesson, students will review how to keep the classroom, as well as their homes, free from dust. • Talk with students about dust, explaining that small particles of dust float through the air at all times, even when there is not a dust storm. Point out how these particles settle on furniture and other surfaces, showing an example if one is available. Then discuss why it is important to keep the places where we live, work and play free from dust: besides not looking clean, dust can make us sneeze, make it hard for us to breath or cause other health issues. • Working together, make a checklist of places/items that need to be dusted frequently. Checklists may be created for home and/or school. • Review the steps from ULS Core Materials, Lesson 9.6 (Dust), and then have students practice dusting places/items from the checklist. As an item is dusted, have students check it off the list. • If necessary, sprinkle a visible material, such as baking soda, on objects to allow students to see the "dust." As students practice dusting, remind them to check their work. Explain that if they can see white, the object is not clean.    Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use unit topic words in conversation. • Students will independently following a multi-step sequence of directions to complete a daily living task.	• Students will point to pictures of key vocabulary from unit topics as part of a discussion. • Students will follow directions to complete a daily living task, using picture or physical supports to do so.	• Students will make a selection to indicate a picture of key vocabulary within a unit topic. • Students will use a consistent response to indicate choices during a daily living task.

Resources and Materials	Additional Resources
Dusting checklist Picture/word cards: *desks, tables, chairs, bookshelves, books, doors, window sills, lamps, lampshades, picture frames, dressers, TV stands, ceiling fans, vases*	ULS Core Materials, Lesson 9.6 Optional: Baking soda

Instructional Targets

Reading Standards for Informational Text

- *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
- *Key Ideas and Details:* Answer questions and use support from text to explain the main ideas, details and inferences of a story.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Chapter 6: Cold Weather Storms

The title of the Chapter Book is *Weather.* The sixth chapter, Cold Weather Storms, describes storms that occur during cold weather, including blizzards and ice storms.

- Chapter books present a "reading to learn" experience. Therefore, students may read independently, in a shared reading experience or books may be read to them. Present students with one chapter at a time for reading and comprehension instruction.
- After each page is read, ask the discussion question that appears in italics at the bottom of the page. Focus on pictures to reinforce understanding. Repeated readings are encouraged.
- Suggested Reading Levels for this chapter include Levels J/K, presented in a text format, and F/G, presented in both text and symbol-supported formats.

Read and Answer

Comprehension activities extend beyond "checking" what students remember from reading. During instruction, students learn to refer to the book, using both illustrations and text to locate answers to questions. Students recognize types of responses appropriate to *who*, *what* and *where* formats. Question responses may also provide students with a foundation for story retell. Activities should be repeated throughout the unit to increase students' skills in multiple areas of comprehension.

- Select the level of comprehension questions appropriate to each student. Comprehension questions are also in three formats. Level 3 is text only. Level 2 is symbol-supported. Level 1 is written in sentence strip format, allowing students to select from multiple choices or one errorless picture choice.
- Build comprehension and vocabulary through discussions.

Standards Connection

- These standards connection lessons are designed to build summarizing skills and are applicable to all chapters. Using the first standards connection form, determine whether this book is a work of fiction or nonfiction. Select the additional standards connection lesson based on whether the chapter is a fictional format that has a story line or an informational text that includes facts and historical events.

The first two sets of comprehension questions are derived from the lower levels of text. An advanced level of mixed questions is provided in text-only format.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will independently read questions about a story and write, speak or select an answer.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level. • Students will point to or select a picture from a choice of three in response to a question about a story.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level. • Students will respond to a question by choosing a single option or errorless picture.

Resources and Materials	Additional Resources
Chapter 6: Cold Weather Storms Communication board Comprehension questions (multiple-choice and fill-in) Advanced questions Fill-in cards Standards Connection Lessons 3, 5, 7, 9, 11, 13	

Lesson 13, Chapter 6: Answer Key

Fill-In

blizzard inside coat ice storm cold

1. Some storms come in _____ weather. (cold)
2. A _____ has a lot of snow. (blizzard)
3. An _____ makes the roads slippery. (ice storm)
4. Wear a warm _____ and hat. (coat)
5. Stay _____ during the storm. (inside)

Multiple-Choice

1. What is this chapter about? (cold weather storms, tornadoes, rain)
2. What do we call a storm with a lot of snow?
   (flood, hurricane, blizzard)
3. What storm makes roads slippery?
   (thunderstorm, dust storm, ice storm)
4. What should we wear on a cold day? (coat, shorts, swimsuit)
5. What is important to know about this chapter?
   - Wear your raincoat.
   - Be careful in cold weather storms.
   - Play in the snow.

Fill-In Advanced

Use the Chapter Book to help you fill in the blank.

1. A _____ weather storm can be dangerous. (cold)
2. A _____ has a lot of snow. (blizzard)
3. Stay _____ during a blizzard. (inside, safe, warm)
4. Ice storms put _____ on roads and trees. (ice)
5. Ice makes roads _____. (slippery, dangerous)

Multiple-Choice Advanced

These questions may have more than one correct answer.

6. What are some cold weather storms?
   (hurricanes, ice storms, blizzards)
7. What should we wear on a cold day? (warm coat, boots, hat)
8. What does a blizzard have?
   (lots of snow, strong wind, heavy rain)

9. Who can warn us that a cold weather storm is coming?
   - meteorologist
   - snowman
   - bus driver

10. How can we stay safe in cold weather storms?
    - Wear warm clothes.
    - Stay inside.
    - Listen to weather reports.

Lesson 14

Instructional Targets
Standards for Language • *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing. Personal Life • *Problem Solving:* Apply problem-solving skills to issues relate to daily living situations.
Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan
Life Skills Application 6: Storm Safety Introduce this activity after students have read Chapter 6. In Chapters 5 and 6, students learned about different types of storms. In this lesson, students will create a poster or safety manual that shows how to stay safe in a particular storm. • Review the storms discussed in Chapters 5 and 6, identifying storms that are common in your area. Then choose or have students choose a storm for further study. • Using your school or community safety plans, discuss and practice safety procedures for the chosen storm. Depending on the type of storm, there may be preparations that need to be made (e.g., boarding up windows for a hurricane, stocking up on groceries and batteries for a blizzard). • Work together or have individual students create a poster or safety manual showing what to do to stay safe in the chosen storm. A writing template is provided. Students may select word or picture/word cards to complete the template. Words may also be written in the spaces provided. To complete the templates, attach photographs showing students in locations appropriate to the storm, practicing safety procedures (e.g., standing in line, crouching in tornado position). • Once writing is complete, staple the template pages together to create a poster or safety manual and invite students to display and share their work. Extension: Repeat the activity focusing on a different storm.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use unit topic words in conversation. • Students will recognize and apply a problem solving process that result in a solution to a life situation.	• Students will point to pictures of key vocabulary from unit topics as part of a discussion. • Students will identify and select appropriate solutions to a life situation problem.	• Students will make a selection to indicate a picture of key vocabulary within a unit topic. • Students will select an option within a daily living situation or scenario.

Resources and Materials	Additional Resources
Storm safety poster/manual template Picture/word cards and word cards	

Instructional Targets

Reading Standards for Literature

- *Craft and Structure:* Use context clues and illustrations to determine meaning of words and phrases in a text, including figurative and connotative meanings.

Standards for Language

- *Vocabulary Acquisition and Use:* Use words acquired through academic and domain-specific sources when speaking and writing.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Vocabulary Quiz Game: How's the Weather?

Vocabulary refers to the words we must know to communicate effectively. In general, vocabulary can be described as oral vocabulary or reading vocabulary. Oral vocabulary refers to words that we use in speaking or recognize in listening. Reading vocabulary refers to words we recognize or use in print. Vocabulary plays an important part in learning to read. Readers use the words they have heard to make sense of the words they see in print.

Build Word Meaning

- Select a word or a picture. Name it. Write it. Use the word or have students use the word in a sentence.
- Present words or pictures on a chart or whiteboard. Describe each word for students to identify.
- Select a word to describe by acting it out.
- Identify words using the category wheel. Have students determine if the word is a person, a place, a thing, an action or a descriptor.
- Assist students in finding the words in text materials from this unit. Have students describe what each word means on the basis of the text content.
- Use definition cards to provide students with additional practice in word meaning of vocabulary from the unit topic.

The content for this quiz game focuses on weather, weather reporting and measurement, storms, and clothes and activities for different types of weather.

- Create a quiz game board using the answers listed in the lesson (similar to the *Jeopardy*® game).
- Cover each of the answers on the quiz board with a money amount.
- When students select a space, they will answer in the form of a question (e.g., What is a tool a farmer uses to plow a field?)
- One at a time, each student will take a turn and select a category and money amount card to respond to (no buzz-in for answering). If the question is answered correctly, that student gets the card with a money amount.
- Continue until all cards are gone or a predetermined time period has ended.
- Students will count and add the total amount on their money cards. The player with the highest total wins the game.

The quiz cards may be enlarged for a large classroom board. The answer sheet may be used to support communication.

Standards Connection

- The standards connection activities build on skills that encourage students to use reference materials to extend word meaning from unit vocabulary.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will determine literal and figurative meanings of a word as it is used in a text. • Students will match a unit topic word to a definition. • Students will use unit topic words in conversation.	• Students will point to pictures or words to match words with same meanings in text. • Students will point to pictures of key vocabulary from unit topics as part of a discussion.	• Students will identify a named picture related to the unit topic from a single option or errorless choice. • Students will make a selection to indicate a picture of key vocabulary within a unit topic.

Resources and Materials	Additional Resources
Quiz game board and answer key Money amount cover cards Picture/word answer cards "What is" answer board Word definition cards Standards Connection Lesson 15	Additional ideas for vocabulary instruction are provided in the ULS Instructional Guides: Vocabulary. Additional supporting pictures may be downloaded from SymbolStix Online, which is available free to all Unique subscriber by clicking on the SymbolStix button at: n2y.com

Standards Connection Lesson 15

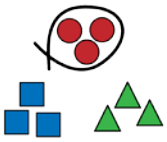
Instructional Targets	
	Standards for Language: • *Vocabulary Acquisition and Use:* Use context clues, word structures or reference materials to determine the meaning of unknown words.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will match a unit topic word to a definition. • Students will use reference materials, such as a glossary, or a dictionary, to determine the meaning of an unknown word. • Students will identify the meaning of words with multiple meanings and recognize figurative language.	• Students will point to pictures or words to match a description within a text passage. • Students will match words and pictures with similar meanings. • Students will point to pictures of key vocabulary from unit topics as part of a discussion.	• Students will identify a named picture related to the unit topic from a single option or errorless choice. • Students will make a selection to indicate a picture of a word with a meaning similar to that of another word (errorless choice).

Making Meaning with Words

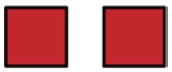
What is the word?	What is the definition?
	
Add a picture.	**Write or tell a sentence.**
	

Words in groups (For example, cars and trucks are both vehicles.)



_____ and _____ are both _____z__.

Words about the same: (For example, truck and semi)



_____ and _____ are about the same.

Refer to this site for an online dictionary and thesaurus: www.wordcentral.com/home.html

Instructional Targets

Standards for Language

- *Conventions of Standard English:* Apply conventions of grammar when speaking or writing. Apply correct capitalization, punctuation and spelling in sentences.

Standards for Writing

- *Production and Distribution of Writing:* With some guidance and support, plan, edit and revise writing with a focus on the purpose of the document.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Edit It: All About Weather

Editing is the process of examining a piece of writing to be sure that it conforms to the conventions and purposes of standard English grammar, usage and punctuation. In this lesson, students will learn the conventions of capitalization, punctuation and spelling in the context of unit topics. Students will also listen to the grammatical form of sentences in the examples. Some students may be able to locate and correct errors independently. Others will participate in this process by observing modeling done by the teacher. Talk through the process of editing as a learning strategy. Rules are written at the top of each document as the focus of the lesson instruction.

Document 1: A Book Report

- Read and discuss the rules at the top of the page. Read or have a student read the book report. Students will locate and revise words that require capitalization and periods needed to end a sentence.

Document 2: Current Events

- Read and discuss the rules at the top of the page. Read or have a student read the current events report. Students will locate and revise words that require capitalization and periods needed to end a sentence. Arrange the sentences in order.

Document 3: A Letter

- Read and discuss the rules at the top of the page. Read or have a student read the letter. Revisions for capitalization, periods and commas should be located. Additionally, misspelled words should be corrected.

Document 4: A Report With Facts

- Read and discuss the rules at the top of the page. Read or have a student read the facts report. Revisions for capitalization, punctuation (including periods, commas or question marks) and misspelled words should be located.

Document 5: An Opinion

- Read and discuss the rules at the top of the page. Read or have a student read the opinion report. Revisions for capitalization, punctuation (including periods, commas or question marks) and misspelled words should be located.

These documents may also be used for whole-class instruction using a projector.

Standards Connection

- Extend this activity by having students create one of the listed documents. Follow the steps of the writing process to model writing, and have each student create a rough draft. Tell students to find and correct any punctuation, capitalization or spelling errors before they write a final draft.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will demonstrate conventions of grammar in spoken and written sentence forms. • Students will demonstrate conventions of written language, including appropriate capitalization, ending punctuation and common spelling. • Students will plan, edit and revise writing to strengthen written sentences.	• Students will create simple sentence forms in a grammatically correct order when speaking or writing. • Students will identify beginning capital letters and ending punctuation in a written sentence. • Students will spell familiar words with letter-sound matches. • With support, students will use pictures and text to plan, edit and revise a written sentence idea.	• With picture supports, students will combine two or more words during a shared writing or speaking activity. • Students will locate capital letters and ending punctuation in a sentence. • Given errorless choices of pictures, students will make a selection of pictures to plan, edit and revise a sentence idea.

Resources and Materials	Additional Resources
Five documents for editing Standards Connection Lesson 16	Additional supporting pictures may be downloaded from SymbolStix Online, which is available free to all Unique subscriber by clicking on the SymbolStix button at: n2y.com Additional ideas for writing instruction are provided in the ULS Instructional Guides: Writing.

Standards Connection Lesson 16

Instructional Targets	
	Standards for Writing • *Text Types and Purposes:* Generate paragraphs to analyze a topic, including supporting facts and evidence. OR Generate informative paragraphs, including a topic sentence, supporting facts or details and a concluding sentence. OR Generate narrative paragraphs, including a logical sequence of events, descriptive details and a reflective conclusion.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will create one or more paragraphs, expressing an analysis of a topic or text with supporting reasons and clear evidence. OR • Students will create one or more paragraphs, including a topic sentence with supporting facts, details and a concluding sentence. OR • Students will create one or more paragraphs containing narrative elements, including a sequence of events and a reflective conclusion.	• Students will select pictures with text to express an opinion with supporting reasons. OR • Students will select pictures with text to create a written document of factual sentences on a topic. OR • Students will select pictures with text to create a logical sequence of events that tell a story.	• Given errorless choices of pictures, students will make a selection of pictures to communicate an opinion. OR • Given errorless choices of pictures, students will make a selection to communicate facts on a given topic. OR • Given an errorless choice of pictures, students will make a selection to tell a story sequence.

During **writing time**, students experience opportunities to see writing modeled, to explore the writing process and to be guided on ways to bring writing into a conventional form. Select one of the writing types in the lesson. Create a model and support students in writing their own story.

Day 1 Modeling

Discuss the topic. Model and talk through the writing process: brainstorming words and ideas and drawing a picture to illustrate what the story is about, writing sentences on a whiteboard or poster paper, reviewing for revisions (capitals, periods, sentence order, spelling) and finally, sharing the written document by reading it aloud.

Day 2 Brainstorming

Students will begin with the topic modeled for them on Day 1; however, students will generate their own ideas on the brainstorming prewriting chart. If necessary, add pictures for students. Some students may dictate words or ideas, and others will write ideas. When ideas have been added, students will draw a picture next to the topic to show what the story is about. Encourage students to write and draw, but support their work with picture choices as necessary. Some students may need to draw first to generate the vocabulary for this planning process.

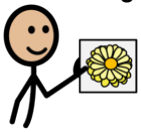
Day 3 Writing

Students will take the ideas from their prewriting chart and generate sentences or word combinations. Refer to the words from the word wall and encourage students to use these words in their writing. Support students in generating this written document through typical or adapted processes: using a keyboard for typing, dictating with support while viewing the writing of sentences, pointing to pictures, etc.

Day 4 Reviewing and Revising

In a teacher conference setting, each student will review his or her document for capitalization at the beginning of sentences and names, for a period at the end of each sentence, for grammatical order of words in each sentence and for spelling. This one-on-one instructional time offers an individual level of support to each student's written work.

Day 5 Sharing



Each student will have a turn to share his or her writing by reading aloud, by using a voice output device or by showing the document to classmates.

Instructional Targets

Standards for Language

- *Knowledge of Language:* Demonstrate conventions of language to communicate effectively when speaking or writing in varied contexts.

Standards for Speaking and Listening

- *Comprehension and Collaboration:* Identify information from multiple sources that contribute to making a decision.

Standards for Writing

- *Range of Writing:* Participate routinely in supported writing activities, using conventional formats.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Real-World Writing: Weather Journal

When writing in real-world documents, it is often necessary to use resources to make a decision on what information is provided (e.g., what date and time on an invitation, what references to put on an application). In this activity, consider ways to enable students to seek information from a variety of resources that will contribute to this writing task.

- In this lesson, students will keep a daily weather journal. This activity could be completed during ULS Core Materials, Lesson 2.3 (Weather) or 3.0 (Meeting Time).
- Picture and text versions are provided.
- Discuss the methods that students can use to fill out information: careful handwriting, copying from a calendar or weather report, dictating or using a communication device.
- Follow up each journal writing session by having students share their entries. Discuss the weather and how it influenced students' clothing and activities. At the end of each week, talk with students about which days were warmer and which days were cooler.

Standards Connection

- Students must be especially accurate when writing notes, letters and invitations, filling out job applications or creating other real-world documents. Emphasize the importance of precise sentence structure and the correct use of capital letters, punctuation and spelling. Have students use the review guide to check and revise their work.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will apply conventions of language to generate sentences specific to the purpose when speaking or writing. • Students will gain information from two or more sources to reach a personal decision. • Students will write routinely for a range of discipline-specific tasks, purposes and audiences.	• Students will use conventions of language to generate a simple sentence when speaking or writing. • Students will gather and compare information from two sources. • Students will participate routinely in supported writing activities for a range of discipline-specific tasks, purposes and audiences.	• Students will use language to share an idea with others. • Students will make a choice when presented with two informational choices. • Students will actively participate in shared writing and communication activities for a range of discipline-specific tasks, purposes and audiences.

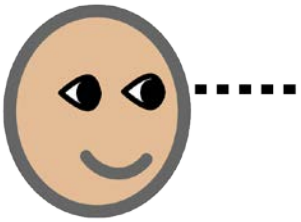
Resources and Materials	Additional Resources
Weather journal forms (text-only and symbol-supported) Picture/word cards Standards Connection Lesson 17	Supporting materials for this lesson can be found in ULS Core Materials, Lesson 2.3 and 3.0. Additional supporting pictures may be downloaded from SymbolStix Online, which is available free to all Unique subscriber by clicking on the SymbolStix button at: n2y.com

Standards Connection Lesson 17

Instructional Targets	
	Standards for Writing • *Production and Distribution of Writing:* With some guidance and support, plan, edit and revise writing with a focus on the purpose of the document. Standards for Language • *Conventions of Standard English:* Apply conventions of grammar when speaking or writing. Apply correct capitalization, punctuation and spelling in sentences.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will plan, edit and revise writing to strengthen written sentences. • Students will demonstrate conventions of grammar in spoken and written sentence forms. • Students will demonstrate conventions of written language, including appropriate capitalization, ending punctuation and common spelling.	• With support, students will use pictures and text to plan, edit and revise a written sentence idea. • Students will create simple sentence forms in a grammatically-correct order when speaking or writing. • Students will identify beginning capital letters and ending punctuation in a written sentence. • Students will spell familiar words with letter-sound matches.	• Given errorless choices of pictures, students will make a selection of pictures to plan, edit and revise a sentence idea. • Students will combine two or more words with picture support during a shared writing or speaking activity. • Students will locate capital letters and ending punctuation in a sentence.

A shared checklist is a way to review and revise writing. In the writing conference, guide students to review a written text and revise it as needed.



- ☐ Do I have a **capital letter**
  - at the beginning of the sentence?
  - for names of people and places?
- ☐ Do I have punctuation at the end of the sentence?
  - **period**
  - **question mark**
  - **exclamation point**
- ☐ Does my sentence make sense when I say it out loud?
- ☐ Are there any spelling words to check?

Instructional Targets

Standards for Writing

- *Text Types and Purposes:* Generate informative paragraphs, including a topic sentence, supporting facts or details and a concluding sentence.

Standards for Language

- *Conventions of Standard English:* Apply conventions of grammar when speaking or writing. Apply correct capitalization, punctuation and spelling in sentences.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Topic Paragraph: Newsletter and Activity Report

The topic paragraph activity is a starting point for creating a class newsletter that will report to family and friends what the students have learned in this unit. Each student will contribute a single paragraph to the newsletter.

- As a group, generate topics from the unit and put these on a web. Topics may include information gathered from chapter reading or learned by engaging in an activity that accompanied the chapters. When the web has been generated, each student will select a topic on which to focus his or her paragraph.
- Assign the planning process and outline what is appropriate to each student. Planning processes and corresponding outlines are available for three levels of ability. Level A (symbol-supported) only includes interactive participation. The outlines include these steps:
    1. Name of the Activity: Create a title for the paragraph.
    2. The Big Idea: Choose one topic sentence.
    3. Parts of the Activity: Sequence the steps of the activity.
    4. Reaction: Say what you think about this activity.
    5. Paragraph: Put the sentences together.
- Students may complete this exercise by writing notes, using pictures or dictating. Many pictures from the unit lessons may be used in this activity.
- Individualize the writing process. Writing, typing, copying, dictating or using pictures are acceptable formats that can be used for the topic paragraph. Use your own resources to develop this material in a newsletter format.
- Have students share the newsletter at home and in school.

Standards Connection

- Have students review and revise their completed work. Use the guide in Lesson 17 for this purpose.
- You may wish to extend this activity by assigning oral presentations or having students add multimedia components.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will create one or more paragraphs, including a topic sentence with supporting facts, details and a concluding sentence. • Students will demonstrate conventions of grammar in spoken and written sentence forms. • Students will demonstrate conventions of written language, including appropriate capitalization, ending punctuation and common spelling.	• Students will select pictures with text to create a written text containing relevant facts to support a stated topic. • Students will create simple sentence forms in a grammatically correct order when speaking or writing. • Students will identify beginning capital letters and ending punctuation in a written sentence. • Students will spell familiar words with letter-sound matches.	• Given errorless choices of pictures, students will make a selection to communicate facts on a given topic. • With picture supports, students will combine two or more words during a shared writing or speaking activity. • Students will locate capital letters and ending punctuation in a sentence.

Resources and Materials	Additional Resources
Topic paragraph planner Standards Connection Lesson 18	Additional supporting pictures may be downloaded from SymbolStix Online, which is available free to all Unique subscriber by clicking on the SymbolStix button at: n2y.com

Standards Connection Lesson 18

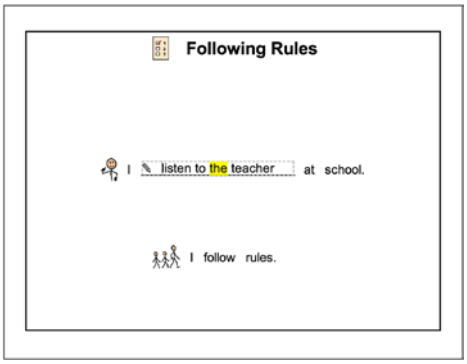
Instructional Targets	
	Standards of Speaking and Listening • *Presentation and Knowledge of Ideas:* Present information in an organized manner appropriate to a task, an audience or a situation. Integrate media to enhance a presentation. Adapt communication using formal or informal language to communicate effectively in a variety of contexts and tasks.

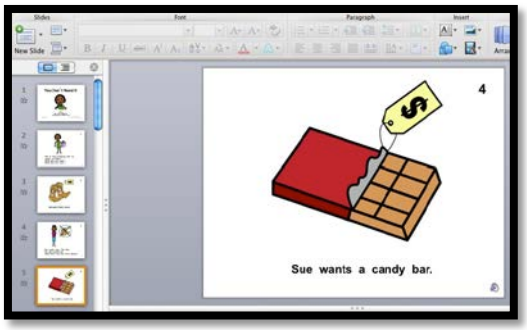
Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will communicate on a topic specific to the purpose and audience. • Students will select and use multimedia components to enhance a presentation. • Students will communicate using formal or informal language specific to the task/topic.	• Students will communicate on a topic specific to the purpose and audience, using picture supports. • With support, students will add multimedia components to a presentation. • Students will effectively communicate in a variety of contexts and tasks.	• Students will communicate basic information on a topic or experience, using communication technology and picture supports. • Students will participate in creating multimedia components to support a presentation. • Students will communicate by using supported modes of expression.

Use the newsletter reports as a springboard for oral reports to the class. This activity will extend the writing process and build oral communication. Consider ways to make the presentation interactive by using multimedia tools.

Expand the topic by finding digital pictures. Many pictures are available on SymbolStix® Online. These pictures may also be used in other digital projects. Encourage students to insert pictures into a Storybook template (located on SymbolStix® Online), a Microsoft® Word document, a Microsoft PowerPoint® slide show, or another format that allows for text entry. Generate sentences to go with these pictures. Students may combine all created pages to make a new book.

Can you make sentences talk? Have students use text boxes (indicated by the pencil icon) to enter words, phrases or sentences about a topic. Students can then listen to the generated text using the Unique Learning system's text-to-speech feature by clicking the "Speak" button at the top of the page. Encourage students to make edits and additions after listening to the generated text.





Microsoft PowerPoint® is a presentation tool that has multimedia features. Add pictures and text to a slide, animate the pictures or text and even add recorded speech messages to the slide. Combine all slides to make a class report. Want to make the PowerPoint presentation accessible for switch users? Simply utilize a switch interface and switch.

Lesson 19

Instructional Targets

Math Standards for Algebra

- *Building Blocks to Algebra:* Understand and use +, - and = in problems. Solve addition and subtraction problems. Model and solve problems involving multiplication or division.
- *Seeing Structure in Expressions–Interpret the structure of expressions:* Represent a real-world situation with a numeric expression.
- *Seeing Structure in Expressions–Write expressions in equivalent forms to solve problems:* Solve multi-step problems that include a sequence of operations to reach a solution.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Math Story Problems: Weather Shelter

The early grades build the foundational skills needed for learning more complex mathematical concepts. These skills include number recognition and use of numbers in operations to solve problems. Many students continue to require practice in adding and subtracting to build an understanding of multiplication and division concepts. The math story problems present real-world scenarios in which early skills are put to use. Manipulative pictures allow teachers to create additional scenarios. The scenarios in this lesson involve helping a weather shelter by donating, collecting and organizing clothing for people in need.

- These scenarios may also provide early number recognition and counting.
- Although certain math concepts may appear complex to some students, the involvement in this math topic is important for all students. Teaching and Learning Guides are provided to build foundational skills, including how to add with carrying and how to subtract with borrowing.
- Appropriate activities should be based on student needs. Level 3 differentiated task activities are intended for students who can write numbers and solve problems with little or no support. Level 2 differentiated task activities may require additional support including manipulatives or teacher support. Although tracing lines are available, hand-over-hand assistance may be appropriate. For students using Level 1 activities, numbers and manipulatives are available to provide access and opportunities for practice of basic math skills. Voice output devices may be programmed to help students count pictures and manipulatives. Students may be given multiple choices or one errorless number choice.

Scenario cards are provided to address these skills.

- Addition (with or without carrying)
- Subtraction (with or without borrowing)
- Multiplication
- Division

Use of a calculator simplifies the process for some students.

- Create additional scenarios for further practice.
- Use Unique's math scenarios with other math methods, for example, Touch Math.

Standards Connection

- Teaching guides are provided to build foundational skills: How to use a calculator.
- Number comparisons may be drawn from this lesson's problem scenarios to determine greater than (>), less than (<) and equal to (=).

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will calculate addition and subtraction problems in the context of a real-world scenario. • Students will read, write and solve a math sentence. • Students will use a combination of operations to solve multi-step problems in the context of a real-world scenario. • Students will model multiplication and division with objects and numbers showing equal groups in the context of a real-world scenario.	• Students will model addition and subtraction of two sets of objects in the context of a real-world scenario. • Students will select pictures and numbers to model a math sentence. • Students will use operations and models to solve a two-step problem in the context of a real-world scenario. • Students will count equal number of objects in selected groups or an array.	• Students will count a set of objects in an addition or subtraction problem through an active participation response (e.g., voice output device, eye gaze choice board). • Students will select a number (errorless choice) within a math problem. • Students will select numbers and count within a two-step problem in the context of a real-world scenario. • Students will count a set of objects in a group through an active participation response (e.g., voice output device, eye gaze choice board).

Resources and Materials	Additional Resources
Math story problem scenarios Standards Connection Lesson 19	Number cards and symbol cards (+, – and =) are provided in the ULS Instructional Tools: Math Pack/Numbers. Additional ideas for math instruction are provided in the ULS Instructional Guides: Mathematics.

Standards Connection Lesson 19

Instructional Targets	
	Math Standards for Algebra • *Building Blocks to Algebra:* Recognize and compare numbers showing the symbols >, < or =.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will compare two numbers and use symbols to indicate >, < or =.	• Students will compare two groups of objects and determine which group is bigger, smaller or equal in amount.	• Students will count objects in a group through an active participation response (e.g., voice output device, eye gaze choice board).

Comparing numbers is a skill with many applications in daily life. We compare a number of objects to determine whether we have enough for a required activity. We determine sets of objects that have more, less or equal amounts. However, this skill is often difficult for students. Using the scenario problems from the lesson, compare numbers and objects. Some students may use both the mathematical terminology and the symbols: *greater than* (>), *less than* (<) and *equal to* (=). Other students may use only the terminology of *more, less* and *the same*.

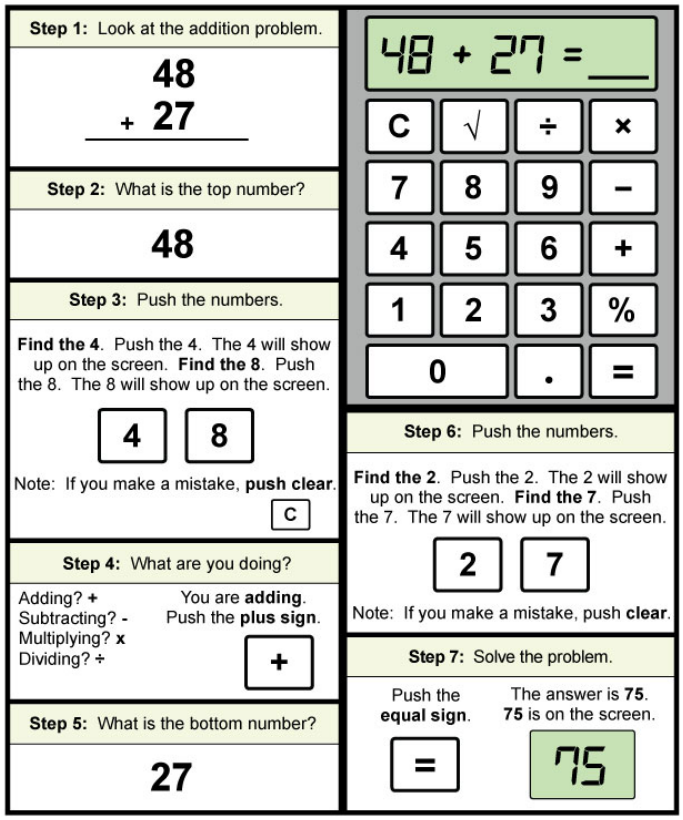
	> greater than more	
	< less than less	
	= equal to same	

Standards Connection Lesson 19

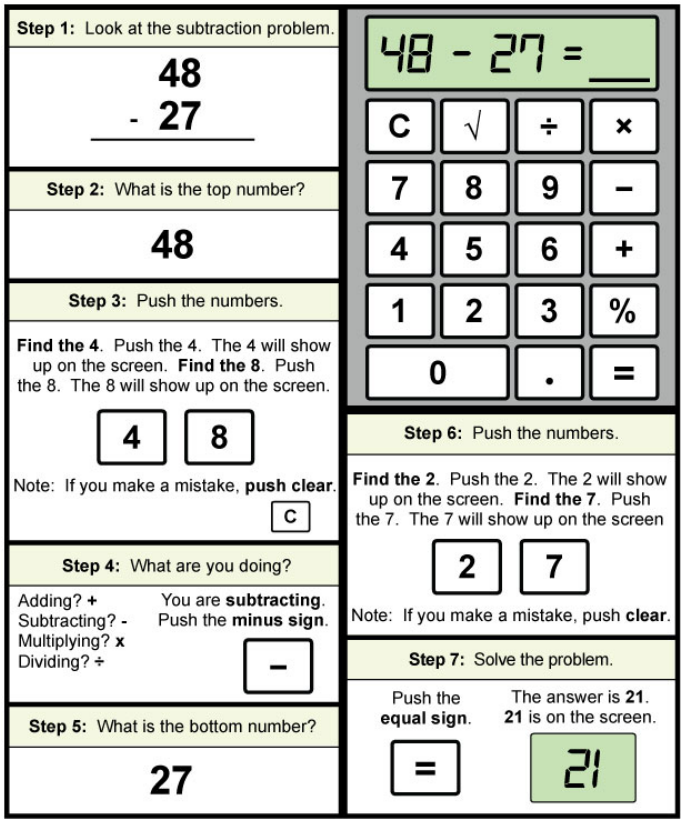
Instructional Targets	
	Math Standards for Algebra • *Building Blocks to Algebra:* Understand and use +, - and = in problems. Solve addition and subtraction problems.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will calculate addition and subtraction problems in the context of a real-world scenario.	• Students will model addition and subtraction of two sets of objects in the context of a real-world scenario.	• Students will count a set of objects in an addition or subtraction problem through an active participation response (e.g., voice output device, eye gaze choice board).

Teaching How to Use a Calculator – Addition



Teaching How to Use a Calculator – Subtraction



Step 1: Look at the addition problem.

$$\begin{array}{r} 48 \\ +\ 27 \\ \hline \end{array}$$

Step 2: What is the top number?

48

Step 3: Push the numbers.

Find the 4. Push the 4. The 4 will show up on the screen. **Find the 8**. Push the 8. The 8 will show up on the screen.

[4] [8]

Note: If you make a mistake, **push clear**.

[C]

Step 4: What are you doing?

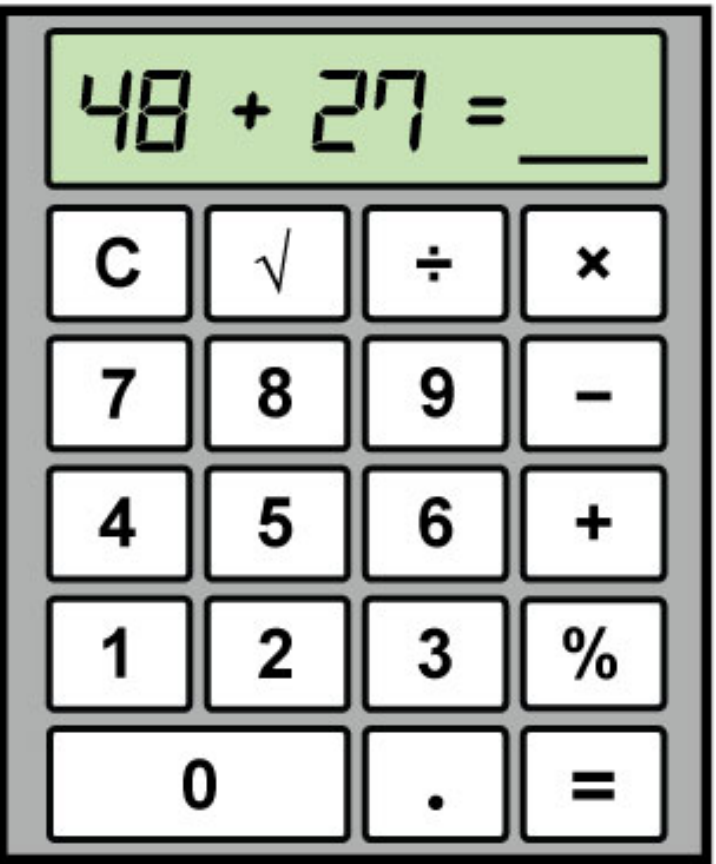
Adding? **+**
Subtracting? **-**
Multiplying? **x**
Dividing? **÷**

You are **adding**.
Push the **plus sign**.

[+]

Step 5: What is the bottom number?

27



Step 6: Push the numbers.

Find the 2. Push the 2. The 2 will show up on the screen. **Find the 7**. Push the 7. The 7 will show up on the screen.

[2] [7]

Note: If you make a mistake, push **clear**.

Step 7: Solve the problem.

Push the **equal sign**.

[=]

The answer is **75**. **75** is on the screen.

75

Step 1: Look at the subtraction problem.

$$\begin{array}{r} 48 \\ -\ 27 \\ \hline \end{array}$$

Step 2: What is the top number?

48

Step 3: Push the numbers.

Find the 4. Push the 4. The 4 will show up on the screen. **Find the 8**. Push the 8. The 8 will show up on the screen.

Note: If you make a mistake, **push clear**.

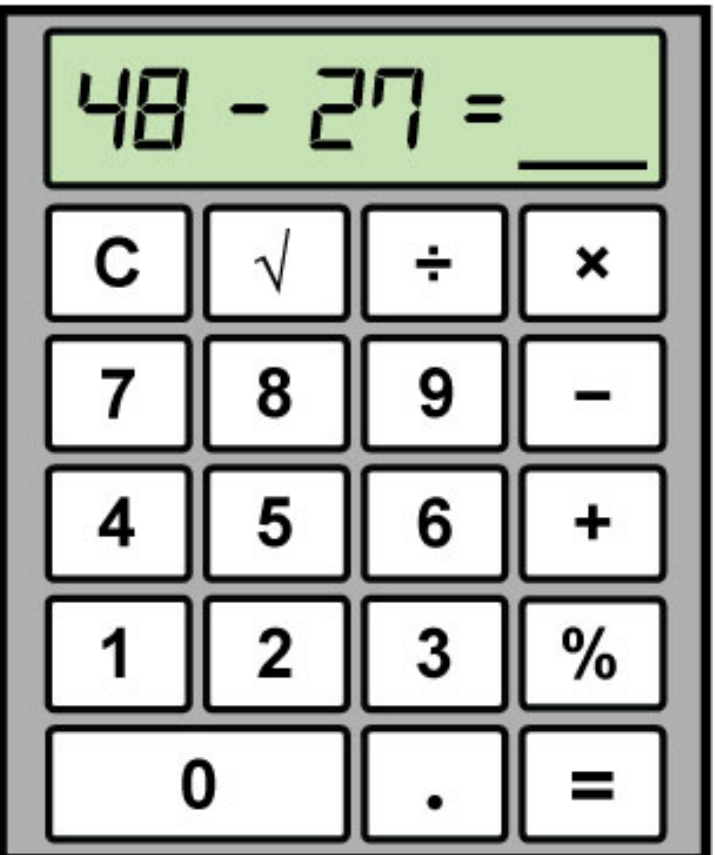
Step 4: What are you doing?

Adding? **+**
Subtracting? **-**
Multiplying? **x**
Dividing? **÷**

You are **subtracting**. Push the **minus sign**.

Step 5: What is the bottom number?

27



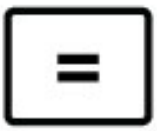
Step 6: Push the numbers.

Find the 2. Push the 2. The 2 will show up on the screen. **Find the 7**. Push the 7. The 7 will show up on the screen

Note: If you make a mistake, push **clear**.

Step 7: Solve the problem.

Push the **equal sign**.



The answer is **21**. **21** is on the screen.

Lesson 20

Instructional Targets

Math Standards for Geometry–Geometric Measurement and Dimension

- *Visualize relationships between two-dimensional and three-dimensional objects:* Identify and compare three-dimensional objects that have volume.

Math Standards for Measurement and Data

- *Life Skills for Measurement:* Select units and use measurement tools accurately in the context of a daily living activity. Solve problems involving measurement.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Measure It!: Thunderstorm Pie

Measuring is a count of how many units are needed to fill, cover or match an object or area being measured. Students need to understand what a unit of measure is and how it is used to find a measurement. They need to predict the measurement, find the measurement and then discuss the estimates, errors and the measuring process. Following a recipe is a real-world application of informational text (the recipe) and measurement tools.

This lesson focuses on measurement skills and tools for volume (dry and liquid measure when cooking). Simple kitchen tools, such as measuring cups and spoons, allow students to experience the life skill of basic cooking. Cooking is also a participatory activity: Even those who do not eat by mouth can enjoy the activities. Explore adapted cooking tools that promote participation. In this lesson students will make the main dish, Thunderstorm Pie (Shepherd's Pie). Emphasize to students that many food choices are based on the weather outside. On cold days, many people want to eat something warm. Ask students what they like to eat on cold and hot days. For fun, as you layer the dish tell students the cooked ground meat is like Earth, the peas are like rain, the carrot shavings are like lightning and the mashed potatoes on top are like clouds. Note: Always consider student food allergies when making a recipe.

You will need (serves 6)	Directions
• 1 lb ground beef • 2 T butter • 2 C water • 1 pkg instant mashed potatoes • 2 C frozen peas • 2 C carrots, shredded • 1 C cheddar cheese, shredded • pan • microwave-safe bowl • spoon • 9-in baking dish	1. Preheat oven to 375 degrees. 2. Put ground beef into pan and cook until brown. 3. Put water, butter and instant mashed potatoes to bowl. Stir. 4. Put bowl into microwave and cook on high for 4 minutes. 5. Put browned ground beef into 9-in baking dish. 6. Add peas and shredded carrots to ground beef. 7. Add mashed potatoes and then cheese on top. 8. Bake for 20 minutes. 9. Eat.

Recipes may be used over several days of instruction.

Day 1 Discuss ingredients. Ask, "What will we need to buy?"
Day 2 Teach measurement tools. Have students identify cups and spoons.
Day 3 Discuss the sequence. Have students cut apart steps and put them in order.
Day 4 Make the recipe. Prepare and enjoy.

Standards Connection

- Ounces, cups, gallons, pints: All of these measurement units are associated with volume. Use the connections lessons to increase students' understanding of volume and help them compare the measurement units for size and capacity. Vary the units each week so that students will become familiar with additional proportions and learn when to use them.

Additional ideas for measurement instruction are provided in the ULS Instructional Guides: Mathematics.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will use standard measurement tools and units to measure the volume of an object. • Students will apply use of volume measurements in real-world scenarios.	• Students will select a volume measurement tool appropriate to a real-world task. • Students will match objects with same volume measurements.	• Students will compare two measured volumes to determine which is larger. • Students will match objects of same size and shape.

Resources and Materials	Additional Resources
Recipe Recipe review Picture/word cards Standards Connection Lesson 20	Additional ideas for measurement instruction are provided in the ULS Instructional Guides: Mathematics.

Standards Connection Lesson 20

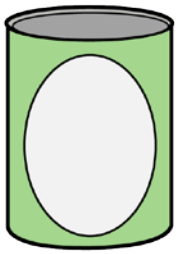
Instructional Targets	
	Math Standards for Geometry–Geometric Measurement and Dimension • *Visualize relationships between two-dimensional and three-dimensional objects:* Identify and compare three-dimensional objects that have volume.

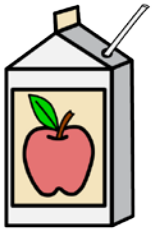
Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use standard measurement tools and units to measure the volume of an object. • Students will apply use of volume measurements in real-world scenarios.	• Students will select a volume measurement tool appropriate to a real-world task. • Students will match objects with same volume measurements.	• Students will compare two measured volumes to determine which is larger. • Students will match objects of same size and shape.

Learning About Ounces!

The list below shows several items that are measured in ounces. Present real examples of these items and have students determine each item's weight in ounces. Continue this activity and extend interest by introducing a variety of objects.

Find these items. How many ounces is each? (read the label)

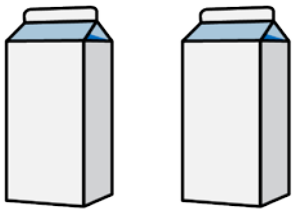
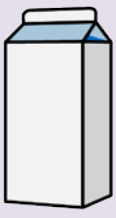




Make estimates: Choose two items. Which one do you think is heavier?
Compare the items in ounces to see which item(s) is heavier.

Standards Connection Lesson 20

Equivalent Volumes Present empty containers of these sizes.
Focus on one measurement unit or equivalent each week. Estimate, measure and demonstrate equivalents.

1 cup 	½ pint 
2 cups 	1 pint 
4 cups 	1 quart 
4 quarts 	1 gallon 
2 half gallons 	1 gallon 
2 quarts 	½ gallon 

Making Comparisons Use the chart to compare two measurable items.

	> greater than more	
	< less than less	
	= equal to same	

Instructional Targets

Math Standards for Statistics and Probability

- *Summarize, represent and interpret data on a single count or measurement variable:* Create a bar graph to represent data. Interpret data from a bar graph. Compute the mean (average) and median of a data set.
- *Summarize, represent and interpret data on two categorical and quantitative variables:* Compare data on a graph to show the relationship between two sets of data.
- *Interpret linear models:* Describe a rate of change based on a line on a graph.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Read This Chart: Record Rainfall

Charts and graphs are tools that provide useful information. In this lesson, students are reading a weather chart of record rainfall and voting for their favorite type of weather.

- In the first part of this activity, students will read a chart containing specific information, then answer questions about it. The chart provided is a line graph depicting record one-day rainfall in United States' cities.
- In the second part of the activity, students will design and conduct a related survey and record their findings on a bar graph. Through analysis of the gathered data, students will report findings and determine the probability of a particular outcome. The picture choices may be made into stickers by printing on a full sheet of label paper. Students will vote for their favorite type of weather and chart the results.
- In the last activity, students will examine averages. Point out that the *median* is the middle point of data information and that the *mean* is the average of the data numbers.

Probability Quiz

- Use the bonus quiz question that involves a daily living probability situation. Three options are provided. Discuss the scenario and determine the probability of each option occurring.

Learn more about mean, mode and median with this interactive game:
www.bbc.co.uk/schools/ks2bitesize/maths/data/mode_median_mean_range/play.shtml

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will design survey questions and collect, organize and report data presented on a graph. • Students will compare data from tables and graphs to report specific information. • Students will calculate an average (mean) from data. • On the basis of information gathered, students will determine the probability that something is likely or unlikely to occur.	• Students will ask questions to gather data information and display the data on a graph. • Students will identify specific data information from a table or graph. • Students will identify a middle point (average) in a set of data. • On the basis of available information, students will determine that something is likely to happen.	• Students will ask a question and select pictures as part of a data-gathering process. • Students will report data information that is presented in a table or graph. • Students will communicate data information that describes an average. • Students will select an activity that is likely to occur.

Resources and Materials	Additional Resources
Chart and questions Survey chart and questions Mean and Median activity Probability quiz Survey chart picture cards Survey cards	

Lesson 22

Instructional Targets

Math Standards for Measurement and Data

- *Life Skills for Measurement:* Apply knowledge of money skills to real-world problem solving situations and scenarios.

Math Standards for Algebra

- *Building Blocks to Algebra:* Understand and use +, - and = in problems. Solve addition and subtraction problems. Model and solve problems involving multiplication or division.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Money: Severe Weather Kit

This lesson focuses on money skills. The use of money is a problem-solving skill that requires several mathematical processes when applied to real-world situations. The scope of this lesson is limited to one or two problems in each skill area, but students who need additional practice may work on real-world scenarios provided by the teacher. In this lesson, students will be purchasing items for a severe weather kit. This lesson allows students to strengthen individual skill areas. Students will learn to recognize coins and the values of coins and bills. They will also practice selecting specific money amounts and calculating costs. Choose the most appropriate activity on the basis of each student's needs. Scenarios in this lesson may be used to help students understand the exchange of money for purchases.

Skills

Money 1: Counting Like Coins 1, 5, 10, 25
Money 2: Counting Mixed Coins to $1.00
Money 3: Amounts to $5.00
Money 4: Amounts to $10.00
Money 5: Amounts to $10.00/"One-Up" Method
Money 6: Adding Amounts to $5.00
Money 7: Adding Amounts to $10.00
Money 8: Adding Amounts to $10.00; 3 Items
Money 9: Adding Amounts to $20.00; 3 Items
Money 10: Adding Amounts Under $100.00
Money 11: Adding Amounts Over $100.00
Money 12: Making Change to $5.00 – No Borrowing
Money 13: Making Change to $5.00 – Borrowing
Money 14: Making Change to $10.00 – No Borrowing
Money 15: Making Change to $10.00 – Borrowing
Money 16 and 17: Problem Solving
Money 18: Problem Solving – Ratio With Multiplication
Money 19: Problem Solving – Ratio With Division
Money 20: Problem Solving – Percentage With Tip
Money 21: Problem Solving – Percentage With Discount

Expanding problem-solving sequences: Students will learn to find a better price for an item and then determine whether they have enough money to make a purchase. They will also use a unit ratio for making a purchase. You may wish to use scenarios like these: (1) We paid $6.00 for 3 pairs of socks. How much did each pair cost? (2) One hamburger costs $1.50. How much will 4 hamburgers cost? In addition, students will calculate percentages as these are applied to sale items or tips.

- Vary the ways to apply these activities on the basis of each student's abilities.
- Encourage students to use a calculator.

Standards Connection

- The lesson activities in this section focus on problem-solving processes that build financial literacy.
- Comparison of money amounts may be drawn from the lesson's problem scenarios to determine less than (<), greater than (>) and equal to (=).
- Students will calculate percentages for taxes, tips and sales items. Relate these skill to situations when planning money for an outing in the community.

Pre- and post-assessments are available through Monthly Checkpoints.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will calculate the amount of money needed for a purchase and ascertain the coins and bills required to complete that purchase. • Students will calculate addition and subtraction problems in the context of a real-world scenario.	• Students will match coins and bills to a given price. • Students will model addition and subtraction of two sets of objects in the context of a real-world scenario.	• Students will exchange money for a purchase. • Students will select a money amount in an addition or subtraction problem.

Resources and Materials	Additional Resources
Money scenario cards Standards Connection Lesson 22	Price tags, coins and bills are provided in the ULS Instructional Tools: Math Pack/Money. Additional ideas for money instruction are provided in the ULS Instructional Guides: Mathematics.

Standards Connection Lesson 22

Instructional Targets	
	Math Standards for Algebra • *Building Blocks to Algebra:* Recognize and compare numbers showing the symbols >, < or =. Math Standards for Measurement and Data • *Life Skills for Measurement:* Apply knowledge of money skills to real-world problem-solving situations and scenarios. Math Skills for Ratios and Proportional Relationships • *Life Skills for Ratio and Proportional Relationships:* Apply understanding of percent into real-world scenarios (10% tip, 30% sale, etc.).

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will compare two money amounts and use symbols to indicate >, < or =. • Students will calculate percentages in real-world scenarios.	• Students will compare two money amounts and determine which amount is bigger, smaller or equal in amount. • Students will locate a percentage amount from a chart.	• Students will state a money amount using a voice output device. • Students will identify a number that represents a percentage.

Comparing prices is a skill that may prove difficult for some students. Use the lesson's scenarios to demonstrate comparing prices and objects. Some students may use both mathematical terminology and symbols: greater than (>), less than (<) and equal to (=). Other students may use only simple terminology: *more, less* and *same*.

$ ___ . ___ ___	> greater than more	$ ___ . ___ ___
$ ___ . ___ ___	< less than less	$ ___ . ___ ___
$ ___ . ___ ___	= equal to same	$ ___ . ___ ___

Buying an item on sale is a good idea. Use this form to create sale prices and calculate the amount to pay after a certain percentage off is applied.

Item price	x	Percentage off (.00)	=	Amount of discount
Item price	**-**	**Amount of discount**	**=**	**Price you pay**

What is the item price?	What is the percentage off?	What will be the new price?
	10 %	
	20 %	
	30 %	
	40%	
	50 %	
	60 %	

In our culture, it is customary to tip restaurant servers and hairdressers. Use this chart to develop scenarios for tipping. Calculate a 10% or 20% tip.

Where will you go?	What is the amount of your bill?	Calculate a 10% tip (.10)	How much will you pay in all? (bill + tip = total)

Where will you go?	What is the amount of your bill?	Calculate a 20% tip (.20)	How much will you pay in all? (bill + tip = total)

Sales tax is another amount that must be calculated when planning a purchase. Most states have a sales tax on certain items. Learn the sales tax for your state or city. Round the figure to the nearest whole number; for example, 5.25% rounds to 5% or .05.
www.en.wikipedia.org/wiki/Sales_taxes_in_the_United_States

Where will you go?	What is the amount of your bill?	Calculate the tax ____%	How much will you pay in all? (bill + tax = total)

Instructional Targets

Math Standards for Measurement and Data

- *Life Skills for Measurement:* Apply knowledge of time skills to real-world, problem-solving situations and scenarios.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Schedules and Times: Monthly Activities

A calendar is an organizational system that helps us plan activities and keep scheduled appointments. Use a classroom calendar to record the activities for each month. Write activities on certain dates or use picture symbols to identify the activity and the date on which it will occur. Schedule periodic "calendar times" during which students will suggest items to be placed on the calendar. Ask, "What will we do tomorrow? This week? Next week? What should we do to plan and prepare for certain activities?" As unit activities are introduced in a lesson, add new activities to the calendar.

- Be sure to put a specific time next to each activity recorded on the calendar. Continue to give students practice in telling time, such as telling time to the hour or half hour.
- Use the time card provided to schedule the time for each daily activity and indicate the amount of time needed to complete that activity.
- Consult the daily schedule plan included with this lesson for additional information. Note that scheduling activities may also be completed by using the ULS Core Materials, Lesson 1.1 and Lesson 1.2.


Standards Connection

- The form included provides an extension for calculating elapsed time.


Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will read time and apply it to a real-world activity.	• Students will represent times for morning, afternoon, evening in the context of a real-world scenario.	• Students will select a time for a personal activity of the day.

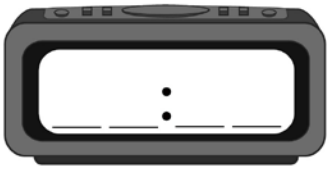
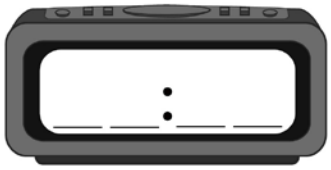
Resources and Materials	Additional Resources
Calendar Daily schedule Standards Connection Lesson 23	Time cards and digital/analog clocks are provided in the ULS Instructional Tools: Math Pack/Time. Additional ideas for time instruction are provided in the ULS Instructional Guides: Mathematics. ULS Core Materials, Lesson 1.1 and Lesson 1.2

Standards Connection Lesson 23

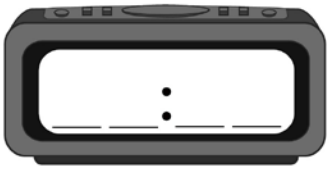
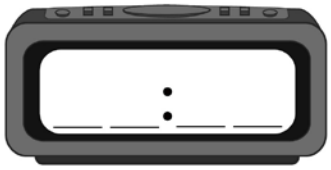
Instructional Targets	
	Math Standards for Measurement and Data • *Life Skills for Measurement:* Apply knowledge of time skills to real-world, problem-solving situations and scenarios.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will read time and apply it to a real-world activity.	• Students will represent times for morning, afternoon, evening in the context of a real-world scenario.	• Students will select a time for a personal activity of the day.

Consider real activities of the day or week. Have students calculate the amount of time an activity will take and recognize the end time.

Activity	Start time	How long?	End time
			

Consider real activities. Have students determine the time at which the activity will begin, calculate the time needed to prepare for or travel to this activity, as well as the time to start getting ready.

Activity	Activity time	How long to get ready or travel?	Time to prepare or leave
			

Instructional Targets

Math Standards for Geometry–Congruence

- *Experiment with transformations in the plane:* Identify points, lines, line segments and angles (right, acute, obtuse) within the context of real-world situations. Establish congruency by applying a turn (rotation), a flip (reflection), or a slide (translation) to match items of similar size and shape.

Math Standards for Geometry–Similarity, Right Triangles and Trigonometry

- *Understand similarity in terms of similarity transformations:* Identify shapes by similar attributes (e.g., similar angles). Identify parts of a right triangle (right angle, legs) in real-world objects and areas.

Math Standards for Geometry–Modeling with Geometry

- *Apply geometric concepts in modeling situations:* Identify the shape in real-world two-and three-dimensional objects.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Geometry: Weather Report

Geometry is the branch of mathematics that studies properties of points, lines, curves, plane figures and solid shapes, as well as their measurement and relationships. Early learners begin to identify shapes and manipulate these shapes to recognize spatial positioning. Students learn about points, lines and angles and apply reasoning skills to measurement strategies. The coordinate plane is a framework for spatial organization and the foundation for geometric thinking. Scaled drawings can be designed to replicate real-world situations and problems involving shapes and measurement. Choose the level of activity that is most appropriate for each student. In this lesson students will be measuring items in order to create a weather information station.

- Measuring for Area and Length
  - This activity includes a model of a severe weather warning poster drawn to scale. The simplest task requires students to measure the model's sides in inches. These scaled measurements may be converted to feet at the next level. Students will use the measurements to calculate perimeter and area of the model. Select skills for this activity on the basis of individual student abilities and needs. One-inch unit squares are provided to support area measurements.
- Fit It in This Space
  - In this activity, students will determine how to fit a set of objects into a designated space. If possible, the scenario may be applied to real objects in the environment.

Standards Connection

- These lessons build on areas of geometry using the terminology associated with circles, angles and right triangles, while connecting life skills applications that can be applied on a regular basis.

This site provides an online tool for exploring shapes with tools to rotate, flip and translate these shapes.
illuminations.nctm.org/ActivityDetail.aspx?ID=35

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will use lines and angles within shapes to solve a real-world problem. • Students will identify properties of shapes to solve a real-world problem. • Students will use a model representing two- and three-dimensional objects to solve real-world problems.	• Students will match like shapes in the context of a real-world problem. • Students will identify shapes in the context of a real-world problem. • Students will arrange two-dimensional figures on a model of a real-world scenario.	• Students will select objects of same shape in the context of a real-world problem. • Students will select shapes in the context of a real-world problem. • Students will match two-dimensional figures on a model of a real-world scenario.

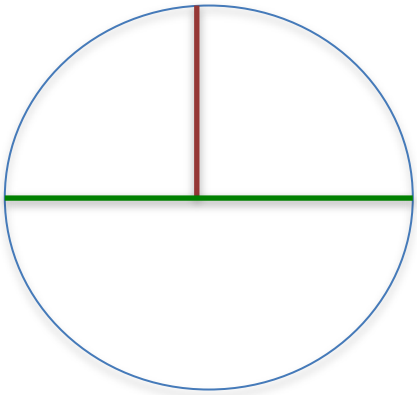
Resources and Materials	Additional Resources
Built-to-scale models for area and space One-inch unit squares Fit It in This Space Standards Connection Lesson 24	Additional ideas for geometry instruction are provided in the ULS Instructional Guides: Mathematics.

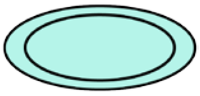
Instructional Targets	
STANDARDS Connection	Math Standards for Geometry–Circles • *Understand and apply theorems about circles:* Identify parts of a circle (radius, circumference, diameter) in real objects and areas.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use circles and circle measurements to solve a real-world problem.	• Students will match like circles in the context of a real-world problem.	• Students will select objects with circles in the context of a real-world problem.

Terms to know about a circle

Circumference: The boundary line of a circle or the length of such a boundary line.
Radius: The distance from the center of a circle to any point on its circumference.
Diameter: A line segment that passes through the center of a circle and has its two endpoints on the circle. This term also represents the length of such a line segment.





What can we do with circles?

Some jars and containers have circular lids. Collect containers and lids of various sizes, some large and some small. Direct students to determine which lid fits on which container. Some lids may fit on more than one container. This activity is a problem-solving process that involves making an estimated guess and then checking the guess by putting a lid on a container.

Most plates are circles. Collect a variety of paper plates and have students sort and stack them according to size.

Instructional Targets		
	Math Standards for Geometry–Congruence*:* • *Experiment with transformations in the plane:* Identify points, lines, line segments and angles (right, acute, obtuse) within the context of real-world situations. Establish congruency by applying a turn (rotation), a flip (reflection), or a slide (translation) to match items of similar size and shape.	
Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use lines and angles within shapes to solve a real-world problem.	• Students will match like shapes in the context of a real-world problem.	• Students will select objects of same shape in the context of a real-world problem.

Terms to know about angles

Right angle: An angle that measures 90°. It is the angle formed by two perpendicular lines, such as the corner of a square, or two perpendicular planes, such as a wall and the floor.
Acute angle: An angle that measures between 0° and 90°.
Obtuse angle: An angle that measures between 90° and 180°.
Congruent: Planar figures or solid shapes that have the same size and shape.

Right Angle

Obtuse Angle

Acute Angle

What can we do with angles?

Folding paper for a purpose requires creating precise angles. The two sides of a sheet of paper folded in half should be the same, or congruent; that is, edges should meet and sides should align. Display examples of precisely folded papers, such as business letters or programs for a special event. Look for tasks that will allow students to learn about angles by folding. Folding jigs are provided in the ULS Transition Passport Toolbox/Vocational/*Bifold Jig* and *Trifold Jig*.

Daily living and vocational tasks that require an awareness of angles include folding clothing linens. Devise opportunities that allow students to have regular practice with folding, and encourage students to focus on achieving precise angles.

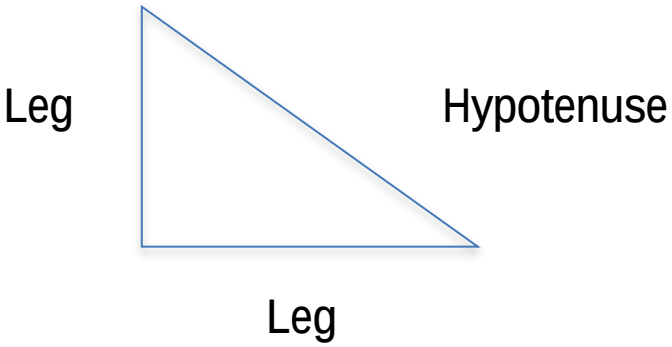
Standards Connection Lesson 24

Instructional Targets	
	Math Standards for Geometry–Similarity, Right Triangles and Trigonometry: • *Understand similarity in terms of similarity transformations:* Identify shapes by similar attributes (e.g., similar angles). Identify parts of a right triangle (right angle, legs) in real-world objects and areas.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will identify properties of shapes to solve a real-world problem.	• Students will identify shapes in the context of a real-world problem.	• Students will select shapes in the context of a real-world problem.

Terms to know about triangles

Right triangle: A triangle, one of whose interior angles is 90°.
Pythagorean Theorem: A theorem in geometry stating that in a right triangle, the area of the square on the hypotenuse is equal to the sum of the areas of the squares drawn on the other two legs.



What can we do with right triangles?

Have students position books on a shelf at a right angle. Remind students that they may need to place a bookend next to the last book to keep the books upright. Tell students to note the angle change when the books are allowed to lean.

Tell students that wall decorations, when hung correctly, are positioned at a right angle with the ceiling and the floor. Point out that sometimes this positioning requires the use of a level to keep the top edge straight and in exact alignment. After the item is hung, its position may need to be readjusted. To reinforce the concept, have students practice hanging real pictures and decorations.

Lesson 25

Instructional Targets

Math Standards for Algebra

- *Building Blocks to Algebra: Understand and use +, - and = in problems. Solve addition and subtraction problems. Model and solve problems involving multiplication or division.*

Math Standards for Algebra–Creating Equations

- *Create equations that describe numbers or relationships:* Represent a real-world situation with an algebraic expression.

Math Standards for Algebra–Reasoning with Equations and Inequalities

- *Understand solving equations as a process of reasoning and explain the reasoning:* Order a sequence of steps to solve an equation.
- *Solve equations and inequalities in one variable:* Use equations to solve real-world problems when a part is unknown. Use inequalities (e.g., < and >) to solve real-world problems where a part is unknown.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Algebra: Charting the Weather

Algebraic thinking is a process of solving problems in situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions.

- Algebra: A generalization of arithmetic in which letter symbols are used to represent unknown quantities so that we can generalize specific arithmetic relationships and patterns.
- Algebraic expression: An algebraic expression is made up of three things: numbers, variables and operation signs, such as + and -.

The scenarios in this lesson focus on charting weather events. This lesson's real-world scenarios promote mathematical problem solving and the ability to write mathematical sentences. Students are asked to determine a mathematical process and write a math sentence that states the answer to the problem. Choose the most appropriate activity on the basis of each student's needs.

- Simple Sentences and Write Sentences 1 and 2
  - Students will solve for an unknown in a simple addition or subtraction process.
- Problem Solving
  - Students will use a chart to gather data for problem solving.
- Simple Sentences and Write Sentences 3
  - Students will multiply or divide a number of objects or numbers for a specific reason.
- Multi-Step Problem 1 and 2
  - Students will solve multiple-step problems involving more than one operation.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will calculate addition and subtraction problems in the context of a real-world scenario. • Students will read, write and solve a math sentence. • Students will use a combination of operations to solve multi-step problems in the context of a real-world scenario. • Students will model multiplication and division with objects and numbers that show equal groups in the context of a real-world scenario.	• Students will model addition and subtraction of two sets of objects in the context of a real-world scenario. • Students will select pictures and numbers to model a math sentence. • Students will use operations and models to solve a two-step problem in the context of a real-world scenario. • Students will count equal number of objects in selected groups or an array.	• Students will count a set of objects in an addition or subtraction problem through an active participation response (e.g., voice output device, eye gaze choice board). • Students will select a number (errorless choice) within a math problem. • Students will select numbers and count within a two-step problem in the context of a real-world scenario. • Students will count a set of objects in a group through an active participation response (e.g., voice output device, eye gaze choice board).

Resources and Materials

Scenario cards for math sentences

Additional Resources

Additional ideas for algebra instruction are provided in the ULS Instructional Guides: Mathematics.

Samples of arrays to model multiplication and division are provided in the ULS Instructional Tools: Math Pack/Arrays.

Lesson 26

Instructional Targets
Reading Standards for Informational Text • *Range and Level of Text Complexity:* Read and use grade level and age-appropriate informational materials, including social studies and technical texts that are adapted to student reading level.
Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan
Related Content: Trading Cards Collecting items such as stamps, coins or baseball cards is a hobby that some students may already enjoy. The trading cards used in this lesson are meant to encourage students to start such a collection or share their knowledge of collecting with the class. • Display the larger poster in the classroom and use it to introduce and discuss the notable person or foundation shown. • Provide each student with a trading card. Print the pages provided on cardstock or heavier paper for durability. Consider options for collecting and trading cards. • Discuss with students the accomplishments of each person or foundation shown on the cards. Note the times during which these people lived and indicate whether the person or foundation are still living. These trading cards may be introduced along with the Chapter Book.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will independently read informational materials, including social studies and technical texts that have been adapted to student reading level.	• Students will read supported and shared informational materials, including social studies and technical texts that have been adapted to student reading level.	• Students will actively participate in supported reading of informational materials, including social studies and technical texts that have been adapted to student ability level.

Resources and Materials	Additional Resources
Trading Cards: Al Roker, Daniel Gabriel Fahrenheit, Galileo Galilei	

Instructional Targets

Standards for Speaking and Listening

- *Presentation and Knowledge of Ideas:* Present information in an organized manner appropriate to a task, audience or situation. Integrate media to enhance a presentation. Adapt communication using formal or informal language to communicate effectively in a variety of contexts and tasks.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Related Content: Oral Report

Students are often required to give oral or written reports. In this lesson, the students will generate a report on different weather events. Additional research and reading may be needed before generating this report. The report may be generated in written or oral forms. The text-to-speech feature can be used to read sample reports aloud to students.

- Text-only and symbol-supported templates are provided for planning the report. Students will identify the topic in the first sentence.

  This is a report about _____.
  (Tell 2–3 sentences about a weather event) _____.
  (Why is this weather event important for us to know?) It is important because _____.

- The goal of this lesson is to encourage students' expressive skills. Encourage topic development through questions, discussion and guided research.
  - Build on each student's personal modes of communication, including verbal ability, AAC devices and communication boards.
  - Consider ways to integrate multimedia formats, such as images on a poster, PowerPoint® slides and assistive technology software, to enhance the presentation.
- Two sample reports are provided for students who may need maximum support. If a student requires use of augmentative communication, be sure this mode is integrated in the reporting format.
- Present the report orally or through videotaping.


Standards Connection

- Design this lesson as a research activity. Use the Standards Connection form to guide the process.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will communicate on a topic specific to the purpose and audience. • Students will select and use multimedia components to enhance a presentation. • Students will communicate by using formal or informal language specific to the task or topic.	• Students will communicate on a topic specific to the purpose and audience using picture supports. • With support, students will add multimedia components to a presentation. • Students will effectively communicate in a variety of contexts and tasks.	• Students will communicate basic information on a topic or experience using communication technology and picture supports. • Students will participate in creating multimedia components to support a presentation. • Students will communicate by using supported modes of expression.

Resources and Materials	Additional Resources
Sample reports: *sunny weather, hurricane* Planning template: text-only and symbol-supported Pictures: sunny weather, windy weather, rainy weather, snowy weather, hurricanes, tornadoes, blizzard, floods, ice storms, dust storms Standards Connection Lesson 27	Additional supporting pictures may be downloaded from SymbolStix Online, which is available free to all Unique subscriber by clicking on the SymbolStix button at: n2y.com

Standards Connection Lesson 27

Instructional Targets	
	Standards for Writing • *Research to Build Knowledge:* Research and gather information to answer a question or solve a problem. Generate a written text to summarize information from multiple sources; cite sources. Gather information from (adapted) literary or informational materials.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will research and gather information from multiple print and digital sources to answer a question or solve a problem. • Students will generate a report of one or more paragraphs to summarize information and list sources.	• Students will collect information from print or digital sources to answer a question or solve a problem. • Students will generate multiple sentences to summarize information.	• Students will select a picture from an errorless choice to contribute to a shared research and writing task.

Refer students to this helpful research site: www.kidsclick.org.

The unit chapter is meant to spark a variety of topics for students to research and learn more about.

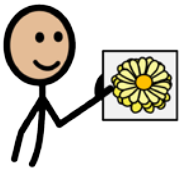
1. Write a question about what you want to learn:

_____

2. Time to research. Read books. Look on the Internet. Make notes or print pictures.

3. How will you make a report? Will you write it? Will you make a poster?

4. When you have your report ready, check it over.



5. Share what you have learned with someone else.

Instructional Targets
Standards for Scientific Inquiry • Identify questions to guide scientific investigations. Conduct simple scientific investigations. Use tools to gather data and information. Analyze and interpret data. Communicate and support findings.
Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Science Experiment: A Thunderstorm Is Coming

Scientific inquiry "refers to the activities of students in which they develop knowledge and understanding of scientific ideas, as well as an understanding of how scientists study the natural world." (*National Science Education Standards)* This lesson follows the step of a scientific inquiry process to engage students in developing a hypothesis, conducting an experiment and arriving at a conclusion.

In this science experiment, students will learn what happens when cold and warm air meet. Discuss the steps for the simplified scientific method that students will use. The text-to-speech feature can be used to read directions aloud to students.

1. Ask a question.
2. Make a guess.
3. Do an experiment.
4. Organize data.
5. Find the conclusion.

You will need (per group of students)	Directions
• 2 blue ice cubes (dyed with blue food coloring) • red food coloring (3 drops) • clear, plastic tub • water	1. Fill clear, plastic tub ¾ full of water. 2. Let water stand for 1 minute. 3. Place 2 blue ice cubes in one corner of the tub. 4. Place 3 drops of red food coloring in the opposite corner. 5. Observe and record results.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will follow steps of a scientific process related to grades 9–12 science topics.	• Students will follow steps of a scientific process with support related to grades 9–12 science topics.	• Students will actively participate in a scientific process related to grades 9–12 science topics.

Resources and Materials	Additional Resources
Science experiment Science experiment cards	

Instructional Targets
Social Studies Standards for History • *American History:* Use multiple sources to create a sequence of events from a historical period.
Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

History Timeline: It's Cold Out There!

Historical thinking begins with a clear sense of time–past, present and future–and becomes more precise as students progress. Through this thinking process, students can begin to understand the relationships among events and draw conclusions.

This timeline shows significant dates that apply to reported, record cold weather in history.

1954: Montana posted a record low of -70 degrees Fahrenheit.

1971: Alaska posted a record low -80 degrees Fahrenheit.

1989: Nebraska posted a record low of -47 degrees Fahrenheit.

1996: Minnesota posted a record low of -60 degrees Fahrenheit.

2009: Maine posted a record low of -50 degrees Fahrenheit.

2014: Wisconsin posted a record low of -30 degrees Fahrenheit.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks		
Level 3	*Level 2*	*Level 1*
• Students will use multiple sources to create a description of a historical event or period of time.	• Students will use various sources to create a sequence of events in history.	• Students will select pictures to sequence a series of events in history.

Resources and Materials	Additional Resources
Picture timeline cards	

Instructional Targets

Standards for Writing

- *Range of Writing:* Participate routinely in supported writing activities, using conventional formats.

Which of your state standards are aligned to these instructional targets?

Classroom Activities/Lesson Plan

Journal Writing: Monthly Topics

In this lesson, students will be asked to write journal entries. The purposes of journal writing are these:

- To write personal thoughts.
- To write memories of people and events.
- To improve writing skills.

Each month, there will be four writing prompts. The first writing prompt will be a class journal writing activity. The other prompts will be either supported or independent writing activities. Journal entries may be dated and kept in a binder to follow growth. Students may use words or pictures to fill in a template or they may write independently. Journal entries may be shared orally. Choose the most appropriate writing template on the basis of each student's needs. Template C is blank, allowing students to use the most appropriate format to fill in the template with their own thoughts. This template may also be used if a student needs a scribe. Students are encouraged to fill in their own punctuation. Template B is text with one picture before a sentence. Students use picture cards, word cards or write a word to complete a sentence. Punctuation is deliberately omitted in the sentences so that students must provide it. Template A is symbol-supported. Students are encouraged to read and decide on a picture to complete a sentence. This lesson provides some pictures and words that will support those students who need help in completing the sentences. Students may also be allowed to illustrate the journal entry or attach a photo to it to help explain their experiences. An illustration page is available with this lesson. This page may not be appropriate for every journal entry.

Monthly Journal Topics

Entry 1 Whole Group Entry

- This journal entry can be completed on chart paper, whiteboard or large writing paper. Begin by modeling for students how to write the date. Continue by writing about the day's events. Encourage students to suggest events to record in the entry.

Entry 2 My Favorite Weather

- Students will write about their favorite kind of weather and activities they like to do in that weather.

Entry 3 Meteorologist

- This journal entry will allow students to imagine what their day would be like as a meteorologist.

Entry 4 I Am Thankful!

- In this journal entry students will write about people and things that they are thankful for.

Writing Conference

- After each journal entry, discuss with students what they have written. Have each student read his or her entry to you. Remind students to use correct capitalization and punctuation.

Standards Connection

- Use the chart from this document to review and revise for conventions.

Interactivity: This lesson is available for interactive participation. See lesson for more details.

Differentiated Tasks

Level 3	*Level 2*	*Level 1*
• Students will write routinely for a range of discipline-specific tasks, purposes and audiences.	• Students will participate routinely in supported writing activities for a range of discipline-specific tasks, purposes and audiences.	• Students will actively participate in shared writing and communication activities for a range of discipline-specific tasks, purposes and audiences.

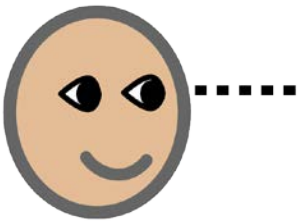
Resources and Materials	Additional Resources
Writing templates: Template C: starter sentence with writing lines Template B: one picture before sentence, no period at end of sentence Template A: pictures and symbols on sentence, period at end of sentence Fill-in picture/word cards and fill-in word cards Illustration page Standards Connection Lesson 30	Additional supporting pictures may be downloaded from SymbolStix Online, which is available free to all Unique subscriber by clicking on the SymbolStix button at: n2y.com

Standards Connection Lesson 30

Instructional Targets	
	Standards for Writing • *Production and Distribution of Writing:* With some guidance and support, plan, edit and revise writing with a focus on the purpose of the document. Standards for Language • *Conventions of Standard English:* Apply conventions of grammar when speaking or writing. Apply correct capitalization, punctuation and spelling in sentences.

Differentiated Tasks		
Level 3	*Level 3*	*Level 3*
• Students will plan, edit and revise writing to strengthen written sentences. • Students will demonstrate conventions of grammar in spoken and written sentence forms. • Students will demonstrate conventions of written language, including appropriate capitalization, ending punctuation and common spelling.	• With support, students will use pictures and text to plan, edit and revise a written sentence idea. • Students will create simple sentence forms in a grammatically correct order when speaking or writing. • Students will identify beginning capital letters and ending punctuation in a written sentence. • Students will spell familiar words with letter-sound matches.	• Given errorless choices of pictures, students will make a selection of pictures to plan, edit and revise a sentence idea. • With picture supports, students will combine two or more words during a shared writing or speaking activity. • Students will locate capital letters and ending punctuation in a sentence.

A shared checklist is a way to review and revise writing. In the writing conference, guide students to review a written text and revise it as needed.



☐ Do I have a **capital letter**
- at the beginning of the sentence?
- for names of people and places?

☐ Do I have punctuation at the end of the sentence?
- **period**
- **question mark**
- **exclamation point**

☐ Does my sentence make sense when I say it out loud?

☐ Are there any spelling words to check?