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EXEMPLAR

Units & Lessons

ENGLISH LANGUAGE ARTS

Grade 2

Grant funded by:



Lesson 13: Science Behind Twisters

Focus Standard(s): RI.2.5, RI.2.2, W.2.2

Additional Standard(s): RI.2.1, RI.2.9, L.2.4a

Estimated Time: 1 hour and 10 minutes

Text(s): *Twisters and Other Terrible Storms!* by Mary Pope Osborne

Resources and Materials:

- Reader's Response Journal (RRJ)
- Note Cards
- Chart paper
- Sticky Notes
- Handout 1.4: Student Participation Checklist
- Handout 6.2: Weather Tracking Graph
- Handout 13.1: Sample Menu
- Handout 13.2: Blank Bingo Card
- [Fact Tracker](#)
- [Menu options – Read Think Write](#)
- Video: [The Birth of a Tornado](#)
- Video: [How Tornadoes form](#)

Lesson Target(s):

- The students will take information gained from the last lesson and today's lesson to write a short report

Guiding Question(s):

- What is a tornado?
- How do tornados form?
- What is the science behind tornados?

Vocabulary

Academic Vocabulary:


- Connection
- Key details
- Main topic
- Text feature
- Text structure
- Summarize

Instructional Strategies for Academic Vocabulary:

- Introduce words with student-friendly
- Read and discuss the meaning of words
- Write/discuss using the words

<p>In-Context Vocabulary:</p> <ul style="list-style-type: none"> • Atmosphere • Cirrus • Cumulus • Funnel • Hail • Stratosphere • Stratus 	<p>Strategies for Teaching How to Determine Context Clues:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Definition <input type="checkbox"/> Cause and effect <input type="checkbox"/> Examples
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<p>Direct Instruction Text Vocabulary:</p> <ul style="list-style-type: none"> • Review all words placed on the word wall. 	<p>Instructional Strategies for Direct Instruction:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Introduce words with student-friendly examples <input type="checkbox"/> Model how to use the words in writing <input type="checkbox"/> Read and discuss the meaning of words <input type="checkbox"/> Students create pictures/symbols to represent words <input type="checkbox"/> Students write/discuss using the words <input type="checkbox"/> Students act out the words or attach meaning to words
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Symbol	Type of Text and Interpretation of Symbol
	Instructional support and/or extension suggestions for students who are EL, have difficulty performing/reading well below the grade level and/or for students who and/or a more advanced students who perform/read well above grade level.
✓	Assessment (Pre-assessment, Formative, Self, or Summative)

Instructional Plan

Understanding Lesson Purpose and Student Outcomes:
 Explain to students the target skill for the day: listing text features in informational text and how those text features are used.
 Ask students what a text feature is. Ask students to list some text features that they hear in the video clip they watch.
 Display the following “I Can” Statements:
 students this lesson will give them information about different text features and their purposes.
 Display the following “I Can” Statements:

- I can use text features to find information.
- I can find the main idea and key details in a text.

Have students tell you if they recognize any words in the “I Can” statements. Discuss what students already know about text features.

Anticipatory Set/Introduction to the Lesson:

- Teacher will introduce the daily learning target by showing videos. Students will view one of the videos [The Birth of Tornadoes](#) and [Tornadoes Form](#) to introduce learning target. The students will gain background about tornados from the video.

Activity 1: Preview

Teacher introduces learning target: The teacher will work with class to create an anchor chart about tornados. KWL chart. Students will review main idea and key details. The students will write what they already know on one color, what they want to learn on another color. When the lesson is finished, they can come back and write what they learned on the tornado paper around the chart.

Activity 2: Vocabulary

Use the In-Context vocabulary words or a review of words to play Vocabulary Bingo.

1. Hand out preprinted Bingo grids. **Handout 13.2: Blank Bingo Card**
2. Let students fill out the week's vocabulary words in any pattern on their papers.
3. Instead of saying the word, pantomime, show, draw, or give a verbal description (synonym).
4. Winner must not just say the winning word, but use them all in a sentence!
5. Increase motivation and participation by using a team approach that invites the team to create the sentence.

For students who are EL, have disabilities, or perform/read well below the grade level:

- Be specific and pair a struggling student with another student who will assist them for the game.

Extensions and/or a more advanced text for students who perform/read well above grade level:

- Create a pile of higher level vocabulary words for these students to challenge them.

Activity 3: Read the Text

Students listen as the teacher reads aloud Chapter 5 and 6 of *Twisters and Other Terrible Storms*; Discuss how tornados form. Project a large Venn Diagram to assist students with understanding. Prompt class discussions regarding contrasting hurricanes and tornados. Use evidence from the text for the Venn Diagram.

Note: Think about your students. If they need differentiation regarding reading aloud, read this [Edutopic](#) article.

Activity 4: Understand the Text

Students discuss the chapters in small groups based on the guiding questions. Students also discuss the key details and keep notes.

High level questions:

- What origin was the word, *tonare*, from page 5?
- How did tornado alley get its name?
- Describe how tornados form?

On level questions:

- Where is tornado alley?
- What type of clouds do tornados come from according to text on page 60?
- What else are tornados called according to the text?

Low level questions:

- According to the text, how long do most tornados last?
- _____ out of _____ tornados that happen in the world, happen where?

Question for all:

- How are tornados and hurricanes similar and different?

Activity 5: Respond to the Text

Create a small project to show the knowledge they acquired today. Focus on the main idea and key details. All choose how to present this information. Use **Handout 13.1: Sample Menu**.

Use the link below for guidance and examples: [Menu options](#)

Writing Opportunity:

Students write an informative passage about the similarities and differences between tornados and hurricanes using the Venn Diagram from earlier in the lesson to assist students in writing. Remind students of the informational writing checklist used previously.

For students who are EL, have disabilities, or perform/read well below the grade level:

- Provide additional information for the students to use while writing.

Extensions and/or a more advanced text for students who perform/read well above grade level:

- Write the passage and make an illustration (drawing, photo, graphic) to help comprehension.
- Students can complete this extension in a [Fact Tracker](#) book page 9:

Activity 6: Closing

The students share out their projects. The teacher will review the lesson before the exit ticket.

- ✓ Use **Handout 1.4: Student Participation Checklist** throughout the lesson to monitor progress.

Reflection


- ✓ Exit Ticket: Provide students with a card that has 5 stars. Have them fill in the number of stars that they learned today. Explain to them that the more stars they fill in, the more they learned. The less stars they fill in, the less they learned. Explain that it is important for you to see how much or how little they feel that they learned today. Remind them to monitor that too. Explain that there is no right or wrong answer.

Homework

Handout 6.2: Weather Tracking Graph Continue to track the weather in their area. The students can use the one similar. Add cloud tracking this week.

Handout 13.1: Sample Menu

Students will use the choice board to pick three in a row to complete in class.

Journal entry about living through a natural disaster.	Act out a weather forecast.	Create analogies for the weather.
Design a weather warning poster.	Student Choice 	Do an experiment demonstrating a pattern of weather.

Make a weather rap!	Create a dance representing the patterns of weather.	Chart the weather trends in a particular area.
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Handout 13.2: Blank Bingo Card

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For training or questions regarding this unit,
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