

| <b>Lesson Title:</b> Hurricane and Tornado Jigsaw |   | <b>Level of Lesson:</b> NRS 3 |
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| <b>Lesson Length:</b> 60-90 minutes               |   |                               |
| <b>Content Area(s)</b>                            | <b>Targeted <a href="#">IL ABE/ASE Content Standards</a></b>  |                               |
| Reading   | <p><b>3.R.CI.1</b> - Demonstrate the use of a variety of comprehension strategies to increase understanding of text.</p> <ul style="list-style-type: none"> <li>c. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text</li> <li>d. Explain the relationships or interaction between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. Use language that pertains to time, sequence, and cause/effect.</li> </ul>  |                               |
| Writing   | <p><b>3.W.RB.4</b> - Communicate information, data, and observations to apply information earned from reading to actual practice</p>  |                               |
| Speaking & Listening                              | <p><b>3.S.CC.1</b> - Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on topics and texts appropriate to skill level, building on others' ideas and expressing their own clearly.</p> <ul style="list-style-type: none"> <li>a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and/or other information known about the topic and explore ideas under discussion.</li> <li>b. Follow agreed-upon rules for discussions and carry out assigned roles.</li> <li>c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.</li> </ul> |                               |
| Speaking & Listening                              | <p><b>3.S.CC.4</b> - Comprehend key elements of oral information for:</p> <ul style="list-style-type: none"> <li>a. cause and effect</li> <li>b. comparison/contrast</li> <li>c. conclusions</li> <li>d. context</li> <li>e. purpose</li> </ul>   |                               |

- g. evaluation/critique
- j. sequence
- k. summaries
- l. technical subject matter

**Integrated [Essential Employability Skills](#)**

Personal Ethic (*Integrity, Respect, Perseverance, Positive Attitude*)

Teamwork (*Critical Thinking, Effective & Cooperative Work*)

Work Ethic (*Dependability, Professionalism*)

Communication (*Active Listening, Clear Communication*)

**Lesson Objectives (Students will be able to):**

- Answer text-based reading comprehension questions
- Work cooperatively in a group to solve a problem
- Utilize knowledge gained from text to evaluate information in a real-life context

**Engagement is not “one size fits all.” How are you providing multiple ways to engage all learners? Click on [Multiple Means of Engagement](#) to learn more about providing options for learners and explain how you are including this below:**

- Throughout this activity, students are working independently and with several different groups
- The themes of tornadoes and hurricanes are high-interest, accessible topics.

**Key Vocabulary:**

- tornado
- hurricane
- air mass
- air pressure
- front
- updraft
- evacuate

**Instructional Materials:**

Textbooks or online curriculum:

- [Weather Vocabulary Presentation](#)
- [Tornado and Hurricane Text Puzzle Pieces](#)
- [Full Tornado Article](#) (Grade level: 9)
- [Full Hurricane Article](#) (Grade level: 10)
- [Tornado Article Questions](#)
- [Hurricane Article Questions](#)
- [Emergency Kit Items](#)

Note: The tornado and hurricane articles have been rated at an NRS 5 reading level; however, the high interest topic and the jigsaw activity that accompanies the texts make these articles accessible to students at NRS 3.

### **Lesson Activities:**

- Lesson intro – Ask students to share their experiences and/or knowledge regarding hurricanes and tornadoes
- Vocabulary – Review lesson vocabulary with the students using this presentation: [Weather Vocabulary Presentation](#)
- Reading activity – Divide the students into two groups. One group will read about hurricanes, and the other group will read about tornadoes. Each student will be given just a quarter of the reading passage ([Tornado and Hurricane Text Puzzle Pieces](#)). Give students the question list ([Tornado Article Questions](#) and [Hurricane Article Questions](#)). Students are instructed to answer only the questions that they have answers to based on the puzzle piece they were given. In other words, there are many questions the students will not be able to answer because they were not given the sections that have this information.
- Information Sharing – Students assigned to a tornado reading passage meet together, and students assigned a hurricane reading passage meet together. Students are instructed to share answers to questions that their other group members do not have. Students are to only share the information orally; they are not to pass around the text that has the information or show what they have written for a given question.
- Survival kit evaluation – Give students a list of survival kit items ([Emergency Kit Items](#)). Ask students in small groups to determine which items they would select from the list for their given situation (hurricane or tornado) if they were only allowed to choose 5 items. Ask students to place a checkmark next to these items on the list. Encourage students to provide a reason based on the text they read for why they chose each item.
- Survival kit problem solving – Now put the students into new groups, combining several tornado students with several hurricane students. The students must come to a consensus about which 5 items they would select for a hurricane and tornado emergency kit respectively; however, the catch is that students are not allowed to select the same item for both the hurricane and the tornado kit. Therefore, students must negotiate which item has greater priority in each situation. For example, if both the tornado students and the hurricane students selected “food,” they need to determine which situation would require food more. Encourage students to cite evidence from their text for why they would need an item more than the other group.
- Debrief – Ask groups to share which 5 items they selected for their respective hurricane and tornado emergency kits. See if there is similarity in the items selected in different groups. Ask students to share their reasoning for why they picked certain items and the process through which their group came to a

consensus. Ask students to reflect on how their group functioned – what went well? What made this task difficult? Then ask students to reflect on the activity as a whole. Ask students why they were not given all the information up front. Ask students what benefits they received from working together. After the group debrief, ask students to submit their own personal reflection on the activity.

**Learners vary in the way that they react to and grasp information that is presented to them. Click on [Multiple Means of Representation](#) to explore ways that you can provide options for representing content and explain how you are including this below:**

- The vocabulary words are presented with word definitions as well as pictures.
- Students are receiving information about weather phenomena both through reading and through listening to their classmates.

**Performance Tasks:**

- Answer text-based questions
- Work cooperatively to fill in information gaps
- Evaluate the importance of emergency kit items based on information from text
- Negotiate with team members to determine which emergency kit items are more important in hurricane or tornado contexts

**Learners best express what they know in different ways. Click on [Multiple Means of Action & Expression](#) to explore ways to offer options for learners and explain how you are doing this below:**

- Students may choose the strategies they wish to interface with their groups.
- Students may complete the final reflection activity in whichever medium they prefer.
- As an extension activity, students can complete GED-style questions on weather phenomena.

**Notes:**

- It is imperative for students to listen to instructions for this activity to work. Stress to students how important it is for them to follow the instructions closely.
- Student accountability is also key for this activity. If one student does not do their part, the whole group will be less successful. If you have students who struggle with completing assignments or working cooperatively in a group, you may wish to assign their puzzle piece to a second student who can help fill in the gaps for the other student.
- This lesson was designed to accompany Steck-Vaughn Pre GED Preparation Science text (Aztec Paxen Publishing) Lesson “Weather” (pgs. 112-119).

- Tier 3 vocabulary words have been identified as the vocabulary focus of this lesson, but the instructor can incorporate level 2 vocabulary words at their discretion.