STAT Lesson Plan for English Language Learners
Heat Stress / Estrés por calor
Lesson Duration: 30-40 minutes

Standards (as needed or required):
Lesson Objectives:
● Student will be able to understand how to stay safe while working in the heat.
  *El estudiante podrá entender cómo mantenerse a salvo mientras trabaja en el calor.*
● Student will be able to match heat stress vocabulary with the correct image.
  *El estudiante podrá emparejar el vocabulario del estrés por calor con la imagen correcta.*
● Student will be able to recognize symptoms of heat stress and explain how to respond to them.
  *El estudiante podrá reconocer los síntomas del estrés por calor y explicar cómo responder a ellos.*

I Can Statements:
● I can explain how to stay safe while working in the heat.
  *Puedo explicar cómo mantenerme a salvo mientras trabajo en el calor.*
● I can match heat stress vocabulary to the correct image.
  *Puedo emparejar el vocabulario del estrés por calor con la imagen correcta.*
● I can recognize symptoms of heat stress and I know how to respond to them.
  *Puedo reconocer los síntomas del estrés por calor y sé cómo responder a ellos.*

Materials Needed
● Vocabulary & Image Guide
● Vocabulary Practice Worksheet
● Answer Key for Vocabulary Practice Worksheet
● Heat Stress bilingual information sheets: Heat Symptoms and How to Respond and How to Stay Safe When Working in the Heat
● Cut-out flashcards Heat Stroke and Heat Stress
● Quizlet Activities:
  ○ Heat Phrases
  ○ Heat Vocabulary
● EdPuzzle Videos:
  ○ Heat Illness video: Cramps
  ○ Heat Illness video: Dehydration and Exhaustion
    ■ Videos used with permission from Pacific Northwest Agricultural Safety and Health Center (PNASH).
● Copies of Pre-Test/Post-Test
Target Vocabulary

Words
- Hat
- Light clothing
- Dark clothing
- Water
- Alcohol
- Minutes
- Sun
- Shade
- Rest
- Help

Phrases
- Wear a hat.
- Wear light clothing.
- Don't wear dark clothing.
- Drink water.
- Don't drink alcohol.
- Drink water every 15 minutes.
- Rest in the shade.
- Do not rest in the sun.
- Help each other.

Pre-Test Questions

1. Which of the following should you do to stay safe while working in the heat?
2. If a worker is showing signs of heat distress, what should you do?
3. If you are working on a hot day, it's okay to drink water only when you get thirsty.
4. Complete this sentence: Rest in the ______.
5. What is this a picture of?

Introduction/Opener/Activate Prior Knowledge

- Show the flashcard of the overheated car. Ask why the car has broken down, how this could have been avoided, and what can be done to fix it.
- Give students time to think and respond.
- Next show the flashcard of the man with heat exhaustion. Ask the same questions as above and give OSY time to respond. Ask them to share if they have experienced this themselves or had a fellow worker who got sick from
the heat. This will activate prior knowledge of the topic and indicate how much students already know.

- Once students have given their ideas, explain that people can also “break down” or get sick from the heat and that this lesson will help them to learn more about the topic.

Lesson Instructions

Language Note: The following lesson is intended to be taught entirely in Spanish or the students’ native language for beginning English Language Learners. If your students are more advanced, these same lessons can be taught using as much English as is appropriate.

While there may be a variety of available activities, it is important to select the particular activities that can be used for group or individual practice to meet the needs of the students. The objective is for students to practice with engaging activities that will enable them to practice what they are learning.

- Introduce Lesson Content:
  - Hand out the bilingual informational sheets: Heat Symptoms and How to Respond and How to Stay Safe When Working in the Heat.
  - Explain that workers can get sick from the heat.
  - Go over the symptoms of heat exhaustion and heat stroke listed in the handout. Look at the pictures and ask students what actions they see being taken to help. Allow students time to respond. Now read the How to Respond actions listed.
  - On the handout How to Stay Safe When Working in the Heat, explain that heat sickness can be avoided if the right precautions are taken. Go over the DOs and DON’Ts listed on that page.

- Lesson Content Practice:
  - Practice 1. Print paper flashcards of symptoms and response. Lay response cards on the table. Fan symptom cards and have each student pick one.
  - Students should act out the symptoms and have others guess and name the symptom.
  - Students should follow up with telling how to respond (ex. call 911, cool with a fan, etc.) and lay the symptom card on the correct response pile.
  - Extension: For students at a higher level of English, the symptoms can now be taught in English and the activity can be done with students responding with, “He feels _____ (dizzy, weak etc.). He should _____ (rest in the shade, drink water etc.)”
• Introduce English vocabulary:
  ○ Hand out the Vocabulary and Image Guide and go over the vocabulary in English.
  ○ Practice out loud as a group.
  ○ Say the phrases in English and have students repeat.
  ○ Give students feedback with pronunciation.
  ○ Repeat the term and give feedback until the student closely mimics your pronunciation.

• English vocabulary practice:
  ○ 1. Practice target words with flashcards.
  ○ 2. Practice target sentences with flashcards.
  ○ 3. Do the practice worksheet with multiple choice questions, matching questions, and sentences.

Virtual Activities:
• Flashcards on Quizlet that match the paper flashcards.
  ○ Heat Phrases
  ○ Heat Vocabulary
• Interpretive comprehension activities with videos using EdPuzzle.
  ○ Heat Illness video: Cramps
  ○ Heat Illness video: Dehydration and Exhaustion
    ■ Videos used with permission from Pacific Northwest Agricultural Safety and Health Center (PNASH).

Extension Activity/Connections to Other Topics
• Direct students to iSOSY Life Skills Can I Get Sick From the Heat? Lesson to extend their learning.

Post-Test Questions
1. Which of the following should you do to stay safe while working in the heat?
2. If a worker is showing signs of heat distress, what should you do?
3. If you are working on a hot day, it’s okay to drink water only when you get thirsty.
4. Complete this sentence: Rest in the ______.
5. What is this a picture of?
   **BONUS:** Explain how you can stay safe when working in the heat.

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<tr>
<th>Wrap-Up/What Have Students Learned?</th>
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<td>● Revisit the “I can” statements at the beginning of the lesson to determine what students have learned and what they can practice more on their own.</td>
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<th>Instructor Reflection</th>
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<tr>
<td>● When did students struggle?</td>
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<td>● When did students experience success?</td>
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<td>● Where to continue for the next lesson?</td>
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<td>● Other ideas for the future?</td>
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<th>Disclaimer</th>
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<td>● Images and information used in the iSOSY Heat Stress STAT Lesson were adapted from the OSHA's Heat Illness Prevention Campaign. The complete campaign is available at no charge at <a href="https://www.osha.gov/heat">https://www.osha.gov/heat</a>.</td>
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