

Headache – Causes and Cures

Lesson Plan

Grade Level: 9-12

Curriculum Focus: Health

Lesson Duration: One to two class periods

Student Objectives

- Review what they've learned about different types of headaches, their causes, and treatments.
- Work in groups to create a commercial for a headache treatment.

Materials

- Discovery School video on *unitedstreaming: Managing Your Health: Headaches*
Search for this video by using the video title (or a portion of it) as the keyword.

Selected clips that support this lesson plan:

- Tension Headaches
 - Headache Triggers
 - Migraines
 - Kids and Migraines
 - Cluster Headache
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- Print resources about headaches
 - Computer with Internet access
 - Supplemental materials such as poster board and markers

Procedures

1. As a class, review the definition of a headache. (Definition: Headache is a pain that comes from nerves surrounding the brain. When irritated, the nerves fire off pain signals.) Ask students to name situations or experiences that have caused them to have headaches. (Their suggestions may include allergies, noise, fatigue, stress, and exercise.)
2. List of the different types of headaches covered in the video. (Examples include tension headaches, exercise headaches, sinus headaches, migraines, and cluster headaches.) Which of these headaches is most common? Which are most severe? Briefly discuss the cause, symptoms, and treatments for each type of headache. Keep a running list of headache treatments on the board.

3. Have students work in groups of four or five to create a commercial for one type of headache treatment. They may focus on an over-the-counter medicine; a prescription drug; or a service such as acupuncture, massage therapy, or yoga. Commercials should address the following questions:
 - What type of headache does this treatment claim to remedy?
 - Who gets this type of headache? (If possible, include the number of Americans affected.)
 - What are the symptoms?
 - What are some external causes of this type of headache?
 - What are some internal causes?
 - Why should this treatment work?
4. Each group should write a script for their commercial. Encourage students to use facts and statistics from the video, as well as from their own research. The Web sites below from Discovery Health Online provide helpful information:
 - Headache
<http://health.discovery.com/diseasesandcond/encyclopedia/2939.html>
 - Migraine
<http://health.discovery.com/diseasesandcond/encyclopedia/572.html>
 - Cluster Headache
<http://health.discovery.com/diseasesandcond/encyclopedia/565.html>
 - Tension Headache
<http://health.discovery.com/diseasesandcond/encyclopedia/1791.html>
 - Pain Medications
<http://health.discovery.com/diseasesandcond/encyclopedia/1668.html>
5. Have groups present their commercials to the class. (Depending on time and resources, groups could perform their commercials as skits and possibly videotape them to be shown later in class.)
6. Conclude with a discussion about severe headaches. What are the signs of a serious migraine or cluster headache? What are the symptoms that should cause you to seek help? (Answers include severe or frequent headaches, “stabbing” feeling in head, pain in eye, loss of vision, or numbness.)

Assessment

Use the following three-point rubric to evaluate students’ work during this lesson.

- **3 points:** Students were highly engaged in class discussions; they produced a creative and thoughtful commercial that was based on several facts from the video and their research.
- **2 points:** Students participated in class discussions; they produced a somewhat creative and thoughtful poster that included some facts from the video and their research.

- **1 point:** Students participated minimally in class discussions; they produced a simplistic commercial with few or no facts from the video and their research.

Vocabulary

cluster headache

Definition: Sudden, severe headaches that occur in groups; may feel like a stabbing sensation on one side of the head

Context: Cluster headaches often occur one to two times a day for several weeks.

headache

Definition: Painful sensation in the muscles, the skin, or one of the organs in the head or near the brain

Context: Common over-the-counter pain medicines for headaches include aspirin, acetaminophen, ibuprofen, and naproxen.

migraine

Definition: A moderate to severe headache affecting one or both sides of the head; may be caused by changes in the blood flow in the vessels of the head

Context: Common symptoms of a migraine include a headache that can last for hours or days, nausea, vomiting, drowsiness, and sensitivity to sound, light, or smell.

tension headache

Definition: A painful sensation in the head or near the brain caused by stress or abnormalities in the neck, muscles, or bones

Context: Episodic tension headaches occur when a person experiences a stressful event; chronic tension headaches are associated with contraction of the muscles in the head and neck.

Academic Standards

National Academy of Sciences

The National Academy of Sciences provides guidelines for teaching science in grades K–12 to promote scientific literacy. To view the standards, visit this Web site:

<http://books.nap.edu/html/nses/html/overview.html#content>.

This lesson plan addresses the following science standards:

- Science in Personal and Social Perspectives: Personal and community health; Natural and human-induced hazards

Mid-continent Research for Education and Learning (McREL)

McREL's Content Knowledge: A Compendium of Standards and Benchmarks for K-12 Education addresses 14 content areas. To view the standards and benchmarks, visit link:

<http://www.mcrel.org/compendium/browse.asp>

This lesson plan addresses the following national standards:



- Health— Knows environmental and external factors that affect individual and community health
 - Language Arts— Writing: Uses the general skills and strategies of the writing process, Gathers and uses information for research purposes
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Support Materials

Develop custom worksheets, educational puzzles, online quizzes, and more with the free teaching tools offered on the [Discoveryschool.com](http://www.discoveryschool.com) Web site. Create and print support materials, or save them to a Custom Classroom account for future use. To learn more, visit

- <http://school.discovery.com/teachingtools/teachingtools.html>

