Muse® Teacher Guide: September 2017



THE BOREDOM ISSUE

Students examine the causes, cures, and benefits of boredom in people and animals. They will discover how boredom relates to creativity and how technology may be taking this important emotion from us.

CONVERSATION QUESTION

Why is boredom an important emotion?

TEACHING OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will ask science-based questions and define problems
- Students will engage in an argument using evidence

In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and crosscurricular activities.

SELECTIONS

Ho-Hum, I'm Bored
Expository Nonfiction, ~850L
Beastly Blahs
Expository Nonfiction, ~1050
Out of Left-Field Cafe
Expository Nonfiction, ~1150



Ho-Hum, I'm Bored

pp. 10–14, Expository Nonfiction

This article dives into the causes and cures of boredom and takes a look at when it is a good thing to be bored.



RESOURCES

Boredom Investigation Planner

OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will engage in an argument using evidence

KEY VOCABULARY

psychologist (p. 10) a scientist who specializes in the study and treatment of the mind and behavior **monotonous** (p. 10) used to describe something that is boring because it is always the same **epically** (p. 12) something that is done in an epic way, meaning in a lengthy, grand, or important way **tolerance** (p. 14) the ability to accept, experience, or survive something harmful or unpleasant

ENGAGE

Conversation Question: Why is boredom an important emotion?

Ask students to recall when they have been bored in the past day or two. Have them discuss with a partner what caused them to be bored, how it felt, and if they did anything to change this emotion.

INTRODUCE VOCABULARY

Together, review the vocabulary words and read them aloud. Have students copy each word, then scan the article with a partner to locate the words. Using context clues, students suggest a definition. Finally, students look up the word and correct any of their misconceptions.

READ & DISCUSS

The author of this article supports the idea that boredom has a purpose. Ask students to read the article with a partner, and look for the reasons and evidence the author uses to support this idea. Then guide the class in a discussion using these prompts:

- What evidence did you find to support the idea that boredom is important?
- What personal experiences have you had that support or do not support this idea?

CONCEPT FOCUS: PLANNING INVESTIGATIONS

INSTRUCT: After reading the article, have students work in small groups to design their own boredom investigation using the *Boredom Investigation* planner. Have them review the experiments in the article for ideas. They may want to plan an investigation that compares the creativity of two groups of students, one that has completed a boring task and another that is normally stimulated, to compare results.

ASSESS: Students present their investigation design to the class to explain how their plan could add information to the scientific study of boredom.

EXTEND

Language Arts Students write opinion pieces related to boredom. They may want to write about the importance of boredom, why boredom should be avoided, or the role of technology related to boredom (good or bad). Be sure that students use reasons and evidence to support their claim.

Boredom Investigation Planner

nvestigation Question
Write what you hope to
ind out in the form of a
research question.
nvestigation Procedure
Describe how the nvestigation will be set .p.
Control Group
Explain how you will use a control to compare results.
Data Collection
Describe what will be observed and how it will be recorded.
Analysis
Explain how results will be reviewed and analyzed.
Conclusion
Describe how the analysis will be used for future research questions depending on the results.

Beastly Blahs

pp. 18–23, Expository Nonfiction

This article explores how scientists are studying animal boredom to create healthier, happier animals in confinement.



OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will ask science-based questions and define problems

KEY VOCABULARY

listlessly (p. 20) acting without energy or spirit

enrich (p. 20) to improve the quality by adding something to it

hormone (p. 21) a molecule produced by the body to regulate its functions *diminishing* (p. 23) becoming or causing (something) to become less frequent or important

ENGAGE

Conversation Question: Why is boredom an important emotion?

Guide a classroom discussion about how boredom affects animals. Have students support their ideas with examples from pets or other animals they encounter. Use these prompts to initiate engagement:

- How might an animal show it is bored?
- How might boredom harm or help an animal?
- What can be done to reduce boredom for captive animals?

Have students return to these questions after reading the article to see what information and ideas they can add.

INTRODUCE VOCABULARY

Write the vocabulary words where they are visible to the class. Together, read the words aloud. Ask volunteers to share possible meanings. Acknowledge correct meanings and then read the definitions aloud. Finally, tell students to look for these words as they read the article.

READ & DISCUSS

The text and photos in this article provide many examples about how captive animals' environments can be enriched to minimize boredom. Lead a class discussion about how enclosure alterations and activities help with animal health and wellbeing. Use the following questions to discuss how these are designed and implemented.

- What do scientists need to know about each animal to come up with the best enrichment plan?
- Which of the examples in the article do you think will be the most effective and why?

CONCEPT FOCUS: DESIGN SOLUTIONS

INSTRUCT: After reading the article, have students work in small groups to construct a captive animal enrichment plan to diminish boredom for a type of animal found at a local zoo or shelter. Have them review the examples in the article for ideas, as well as conduct research on the animal to learn what might stimulate them in a captive situation.

ASSESS: Students present their boredom buster solution to the class and answer questions to clarify their ideas.

EXTEND

Language Arts-Writing Students write an informative text of their solution to diminish boredom of a type of animal found at a local zoo or shelter. They will write these as proposals to send to the zoo or shelter.

Out of Left-Field Cafe

pp. 40–43, Expository Nonfiction

This article explores how scientists are studying animal boredom to create healthier, happier animals in confinement.



OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will ask science-based questions

KEY VOCABULARY

volcanologist (p. 41) a scientist who
studies volcanoes
ornithologist (p. 41) a scientist who
studies birds
sedimentologist (p. 42) a scientist who

studies sedimentary rock

ENGAGE

Conversation Question: Why is boredom an important emotion?

Ask students to imagine they are scientists studying the most interesting thing imaginable. Record their ideas on a class chart. Briefly discuss how these scientists are likely to spend their time. Discuss how while some tasks are exciting, there will also be times of waiting or completing tedious experiments. Ask students to think about how scientists deal with boredom and how it might be a necessary part of their job.

INTRODUCE VOCABULARY

Write the vocabulary words where they are visible to the class. Ask students what these words have in common. Guide them to notice the suffix that indicates the words relate to a type of scientist. With a partner, have students predict the field of science each word represents, then look up the definition to find out if they are correct and to discover some details about what each scientist studies.

READ & DISCUSS

Read the article with a partner, and then use these prompts for discussion:

- What strategies do scientists use to cope with boredom?
- In what circumstances is boredom necessary for scientists?

Be sure to ask students to look for examples and evidence in the article to support their answers.

CONCEPT FOCUS: ASK QUESTIONS

INSTRUCT: Have students reimagine being the scientist they chose in the Engage activity. Have students work with a partner to interview each other in the role of this scientist, including questions about what they like about their career and how they cope with tedious tasks.

ASSESS: Students record the interview questions and answers in writing or as an audio recording. Use these to assess how students have understood the main points of the article.

EXTEND

Language Arts Students write imaginative narratives describing the day in the life of a type of scientist of their choice. The narrative will include the kinds of work they do in a day, the challenges they encounter, the exciting parts or the work, and what task they perform that is boring. They will also include how they use boredom to enhance their work in the field.