

Science
eLearning
Ms. Hammond

Name _____
Date _____

In the event that ACAS is closed due to inclement weather, students are expected to complete the assignments listed below. Should students have questions regarding these assignments, they may contact me by e-mail (maryellenhammond@acalt.org) between 9:30 a.m.-11:00 a.m. and 1:00 p.m.-2:30 p.m. to receive assistance. These assignments are due within two days of our return to school. **Failure to turn in all work within two days of returning to school will result in a zero for each day, and no seat hour will be awarded for the day(s) missed.**

Students should complete the attached worksheets.

Name _____

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Activity

1

IRA/NCTE

Standard 1

Directions: Read the magazine article below, then answer the questions.

Cerro Grande Forest Fire Not What Was Prescribed

June 20, 2000— On May 5, a fire intentionally set by the National Park Service at Bandelier National Monument in New Mexico began burning out of control. What began as a prescribed burn became Cerro Grande fire— one of the worst fires in New Mexico's history. The fire was prescribed to remove brush and undergrowth in parts of the forest. By burning away this wildfire "fuel," the Park Service hoped to prevent a natural, uncontrollable wildfire from occurring. It also hoped to restore the natural cycle of fire necessary for forests to survive.

Forest fires can serve a purpose. The variety of plants in an area is often ten times greater after a wildfire because of the nutrient-rich soil that fires can produce. Fires burn mineral-storing parts of plants into ash. Rain or snow dissolves the ash into the soil, providing essential minerals to the soil. Some plants even depend on fire for survival. Many pine trees cannot reproduce without the help of fire. Their cones will not open and release seeds unless heated.

Many natural forest fires are started by lightning. However, it is common practice for the National Park Service to prescribe burns such as the one in New Mexico. Unfortunately in this case, good intentions had devastating results. Strong winds and hot weather caused the fire to spread rapidly, making it difficult to contain. By May 10, the fire had consumed more than 7,200 hectares of land. It also had destroyed many homes along the edge of the forest near Los Alamos, New Mexico. Thousands of people had to be evacuated. Embers from the fire were being carried up to a mile away by the wind, causing spot fires to erupt. When the fire was finally contained on June 6, it had burned almost 20,000 hectares of land, more than 200 homes, and caused more than \$1 billion in damage.

Time will tell whether the forest will ultimately benefit from the fire or be forever damaged. The enormous amount of damage might outweigh any benefits. Most certainly, the lives of the people who watched the fire swallow up so much of the land have been forever changed.

Multiple Choice

1. What does the word *prescribed* mean in "prescribed burn"?
 - a. to order
 - b. to outlaw
 - c. to give medical advice
 - d. to claim a right to
2. Which is an opinion from the article?
 - a. Many pine trees cannot reproduce without the help of fire.
 - b. By June 6, the fire had consumed more than 20,000 hectares of land.
 - c. Most certainly, the lives of the people who watched the fire swallow up so much of the land have been forever changed.
 - d. Many natural forest fires are started by lightning.
3. What is a spot fire?
 - a. a smaller fire burning in the middle of the main fire
 - b. a fire set on the boundaries of a wildfire to control it
 - c. a fire started away from the main wildfire by embers from it
 - d. a fire intentionally set to control undergrowth and brush

Activity 1 (continued)

**Short
Answer**

- 4. What caused the Cerro Grande fire to consume so much land so quickly?
 - a. too much undergrowth
 - b. spot fires erupting
 - c. heavy rain
 - d. strong winds

- 5. What is the author's attitude toward the National Park Service? Use information from the article to support your answer.

- 6. How would the article change if the author was writing it for a newspaper in Los Alamos, where many people lost their homes?

Activity

4

IRA/NCTE

Standard 2

Directions: Read the two newspaper articles below, then answer the questions.

Navy Sonar May Be Responsible for Beached Whales

March 16— In the past two days, at least 16 whales have beached themselves on the shores of three islands in the Bahamas. Concerned bystanders were able to push some of the 12-foot to 15-foot whales back into the water, but seven of the whales have died.

Although the cause has not been determined, some scientists think that tests being conducted by the U.S. Navy in the area might be the cause of the whale's strange behavior. The ships were using sonar to detect submarines. Whales are highly sensitive to sound, and very loud noises created by the sonar tests could have disoriented the whales and even caused ear damage. Scientists said they will investigate to find the cause of the strange behavior. They plan to conduct necropsies on some of the whales to determine the cause of their deaths.

Report Released on Dead Whales

June 14— Marine biologists reported today that the seven whales who died last March in the Bahamas probably were disoriented by a "distant explosion or an intense acoustic event." The loud noise caused bleeding and damage to the tissues around the whales' inner ears, disorienting them and causing them to swim ashore.

Biologist Darlene Ketten of the National Marine Fisheries Service said that there might be a link between the death of the whales and the sound generated by Navy sonar tests, but she cannot say for sure. One possibility is that the loud noise was caused by an underwater landslide in the area.

According to the report, except for damage to their ears, the whales were healthy and free from disease. Whatever the cause, a Navy spokesperson said, "We hope to build upon what we will learn . . . to ensure that it does not happen again anywhere in the world."

Multiple Choice

1. What newsworthy event was the reporter writing about in these two articles?
 - a. Seven whales died mysteriously.
 - b. The Navy was conducting sonar testing.
 - c. Research shows that whales are sensitive to sound.
 - d. Scientists are performing tests on dead whales.
2. Most readers might infer from the first article that
 - a. the whales died of natural causes.
 - b. Navy sonar tests were probably responsible for the whales' deaths.
 - c. these whales are on the endangered species list.
 - d. the Navy is not responsible for the death of the whales.
3. In the last sentence of the first article, what does the word *necropsies* mean?
 - a. written reports provided to government agencies
 - b. medical examinations to determine cause of death
 - c. X rays of vital organs
 - d. underwater studies conducted on marine animals and plants

Name _____

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Activity 4 (continued)

**Short
Answer**

4. Which of the following statements is NOT presented as a fact in either article?
- a. Navy sonar tests caused the death of the whales.
 - b. Seven whales died in the Bahamas.
 - c. Whales are sensitive to sound.
 - d. Some of the whales examined had damage to their inner ears.

5. Do you think the Navy tests were responsible for the whales' deaths? Use information from the two articles to support your opinion.

6. What might be different about these two articles if the reporter was writing them for a team of marine biologists?
