Name:

Nonfiction Reading Test Redwoods and Arms Races

Directions: Read the following passage and answer the questions that follow. Refer to the text to check your answers when appropriate.

Redwoods are the tallest trees in the world. They grow to be as high as 380 feet. Compare that to an American football field, which is 300 feet long. A redwood would impress you if you stood near one. But why do they grow so tall?

It's hard to see from the ground, but the redwoods are competing. They are fighting with each other to get the most sunlight. The trees that get the most sunlight grow taller. Trees that get stuck under other trees do not get as much light. They lose the opportunity to grow taller. So redwoods must grow taller to compete or they will get trapped on the bottom.

Growing so tall is risky. The wind is more threatening to a tall tree. It is also hard to grow so much. Redwoods use all their energy to grow tall. The trees might be better off if they didn't have to grow so tall to survive. Their lives would be safer and easier. But there is no way for them to coordinate. They cannot agree to stop growing as tall as possible. So they compete their whole lives.

People face similar challenges. For example, nations spend a lot of money to protect themselves from other nations. The US spends more than half its budget on defense. Most other nations spend 10-30% of theirs on arms and armies. That's a lot of money.



We could spend that money on schools, roads, and parks. We could spend it on feeding hungry people or helping the environment. We could spend it on advancing art, philosophy, or science. So why don't we?

The problem is that if a nation has no military, then they face the risk of invasion. A nation with a mighty army may take their resources and destroy them on a whim.

Like the redwoods, which grow taller to their own *detriment*, we are locked in a harmful race. Most people agree that world peace is better than an arms race. In a peaceful world, we could use all our resources to make our lives better.

That sounds nice, but what if one nation broke the agreement? What if they built an army in secret? What if they used their secret army to destroy us? Can we afford to take that risk? Most nations decide that they cannot. Rather, they choose to spend a lot of money on defense programs.

Name:

Redwoods and Arms Races (Questions)

- 1. Why does the author believe that redwoods grow so tall?
- a. They are in a life or death fight for sunlight.
- b. They want more oxygen, which is higher in the atmosphere.
- c. They want more rain, so they race toward the clouds.
- d. They want more exposure to wind, so they grow high.
- 2. Which best describes the author's purpose in the FIFTH paragraph?
- a. To propose ways that we could fix the redwoods and save the forests
- b. To make a wish list of what he would do if he were the president
- c. To explain how our government is corrupt and evil
- d. To list how tax money could be better spent than on defense
- 3. Why does the author think that it'd be better for redwoods if they were shorter?
- a. Growing wider helps the tree to get more sun.
- b. Growing tall is dangerous and hard.
- c. Growing tall is boring and time-consuming.
- d. Growing wider helps the tree get more wind.
- 4. What risk do redwoods take if they stop growing taller?
- a. They will have less access to wind and water.
- b. The wind is more likely to knock them over.
- c. They are more likely to be harmed in a war.
- d. Other trees will take their sunlight.
- 5. With which statement would the author most likely AGREE?
- a. Spending tax money on defense is wasteful and we should NOT do it.
- b. Spending tax money on defense is the best thing we can do as a species.
- c. Spending tax money on defense is wasteful but we should still do it.
- d. Spending tax money on defense is good because missiles help people.

- 6. Which best defines the word *detriment* as used in paragraph 7? Use the context clues.
- a. To make things worse
- b. To make things better
- c. To keep things about the same
- d. To come to an agreement
- 7. According to the text, a nation that doesn't spend on defense faces which risk?
- a. They will not be able to control their citizens.
- b. They will not be able to invade other lands.
- c. Another nation may invade and destroy them.
- d. Another nation may want to trade with them.
- 8. According to the text, which statement is TRUE?
- a. Most nations spend around a quarter of their budgets on defense.
- b. Most nations spend more than half of their budgets on defense.
- c. Most nations spend almost none of their budgets on defense.
- d. Most nations spend all of their budgets on defense.
- 9. With which statement would the author most likely DISAGREE?
- a. Redwoods use a lot of energy to grow so tall.
- b. There are no downsides to maintaining a strong army.
- c. Growing too tall is dangerous for a tree.
- d. Defense budgets use a lot of resources.
- 10. Which statement best expresses the MAIN IDEA of this text?
- a. SOME competitions are harmful to ALL competitors.
- b. ALL competitions are good for ALL competitors.
- c. NO competitions are good for ANY competitors.
- d. NO competitions are harmful to ANY competitors.

1. How does competition affect the lives of redwoods? Use text to support your response.

2. How are redwoods and arms races similar? Refer to the text to support your response.

