



acadience® reading 7–8

Oral Reading

Student Materials

Grade 8 | Benchmark 3

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Sandstorm Surprise

► The Arizona desert was beautiful, but as Lorenzo and his father were discovering, it was also incredibly windy. When they'd left their campsite this morning for a hike along the trail, a stiff but pleasant breeze had been blowing. That breeze had steadily increased over the hour they'd been walking. Eventually, the wind became a gusty gale that whipped Lorenzo's hair across his face and threatened to practically tumble him off the trail.

Eventually, Lorenzo and his father decided they'd been blown about enough, and turned to retrace their steps back to the campground. The sight that greeted them gave them pause; the sky in the direction they were headed was no longer blue, but beige. They stood dumbfounded for several moments before it finally registered: sandstorm!

Leaning into the wind, they began trudging toward the campsite, but with the wind blowing so fiercely, it was a struggle. The cinnamon curtain ahead of them loomed closer and denser, and they blinked and squinted as grains of sand landed in their eyes. As the quantity of sand swirling in the air increased, so did their discomfort. Needles of sand stung their exposed legs and arms.

The dust sweeping over the ground made it difficult to determine whether they were still on the trail. Lorenzo's father got Lorenzo's attention by tapping his shoulder, then he pointed to a nearby outcropping of boulders. Lorenzo nodded, and the hapless hikers stumbled over and hunkered down behind the largest boulder. "Excellent idea," Lorenzo started to shout, but was treated to a mouthful of grit. With the boulder shielding them from the brunt of the wind and their faces covered, they were slightly less uncomfortable, remaining there until the wind lessened.

When they finally reached their campsite, their tent was flat on the ground and one of the poles had snapped. Fortunately, when they pitched the tent, they had been unable to drive the tent stakes into the rocky surface and they'd weighed it down by placing numerous heavy rocks around the tent's edge. Their supplies were safe, too, since they'd stashed them in the car. They were able to repair their pole enough so the tent would stand. Lorenzo fetched bottles of water to wash the grit out of their mouths and to celebrate successfully surviving their first sandstorm

Desert Plant Adaptations

► An ecosystem consists of a group of organisms and the environment in which they live. Although desert landscapes appear harsh and barren, deserts are important ecosystems that cover about one third of the earth's land surface and are home to a surprising variety of plants. The plants that inhabit deserts have adaptations that make it possible to survive in the arid environment.

A desert plant faces two principal challenges. The first is to capture enough water, and the second is to minimize evaporation, or plant water loss. To capture enough water, some plants have developed extremely long roots that run just below the ground surface. When it rains, these shallow root systems capture the water and pipe it to the plants. Other plants, like sagebrush, have a deep tap root, or main root, that enables the plant to use underground water sources and not rely as much on the scarce rain that falls in deserts.

The mulga tree has a different method of capturing an adequate amount of water. Its roots lie close to the base of the tree and its tiny leaves grow upward. When it rains, the leaves act like funnels, channeling the rain to the base of the tree where the roots can quickly absorb the water.

A desert plant's second challenge is evaporation, which threatens to deplete any moisture that the plants manage to absorb. Some plants have adapted to this challenge by developing thick, waxy leaves, stems, or roots to contain the water and seal it in. Plants that store water in this way are called succulents. Other plants have surfaces that look like fans. These plants swell when they absorb water and fold back up like an accordion as the water is used or lost. There are plants that have small or spiny leaves that lessen the exposed surface area, and still others that have developed glossy, reflective leaves.

The yucca plant faces evaporation with a different adaptation. On the skin of yucca plants there are stomatas, or small pores that exchange gas between the plant and the atmosphere. When they are open they also enable evaporation. The yucca plant closes its pores throughout the day and opens them only at night when there are lower evaporation rates.

Plant adaptations vary by location and desert conditions, but each enables the plant to survive such an unforgiving environment.

From a World War to a Cold War

► World War II had ended in 1945, but for the next 40 plus years, the United States (U.S.) and the Union of Soviet Socialist Republics (USSR) were part of a conflict referred to as the Cold War. In a Cold War, neither side ever declares war or launches a weapon against the other. Instead, the Cold War between the U.S. and the USSR included a costly weapons race and the taking of sides in conflicts around the world.

The seeds of the Cold War were planted during World War II when the U.S. and the USSR emerged as superpowers, or the most powerful nations in the world. They had been allies, fighting together against Germany and Japan. Divisions in political and economic points of view caused distrust between the two superpowers. Part of this distrust came from what the U.S. saw as the USSR's desire to spread communism. In communism, the government owns and operates businesses and services, while individuals lose personal freedom. During World War II, the USSR had freed Eastern European countries from Germany and then set up communist governments in them.

To counter the spread of communism to other countries, the U.S. created a strategic plan called "containment." Under this strategic plan, the U.S. supported countries fighting communism and gave them economic aid. The USSR responded by providing support and economic aid to countries who embraced communistic ideals. Conflicts in which the U.S. and USSR provided support to opposing sides included wars between North and South Korea and North and South Vietnam.

Another issue was the race between the U.S. and the USSR to build nuclear weapons. The USSR began building a nuclear program and tested its first atom bomb in 1949. Both the U.S. and the USSR began to stockpile nuclear weapons. This began an arms race to see who could build the greatest number and largest nuclear bombs.

Gradually, changes in the world economy and treaties that limited the number of nuclear weapons altered the Cold War relationship. Both nations realized that it was in their best interest to work together to limit nuclear weapons. Stockpiles of nuclear weapons began to be reduced. The formal end to the Cold War took place in 1991 when the USSR collapsed as a nation and turned back into separate, smaller countries. Peoples from both the U.S. and the USSR were relieved the Cold War was over.
