Smarter Balanced Sample Test Item

Grade 4

ELA

Name_____

Directions. Share this test item with your parent. Read the passage and answer the related questions on the following page. Ask your parent to sign the paper to show that you worked together on this test item.

Man's First Flight
by Kiera Downie

Orville and Wilbur Wright became famous when they flew their airplane, the *Wright Flyer*, into the pages of history. But humans had been flying for many years before that famous event. Hot air balloons were the first way humans flew. The idea for these balloons came from China over a thousand years ago. The Chinese made a lantern to use as a signal. It was a balloon made of paper, using a candle to both light it and carry it upward. It wasn't long before people began to think that if they could make a small balloon fly, they could make a big balloon fly, too—one big enough to hold a person.

Today, the hot air balloon design is the same as the balloons in China although the materials are a little different. We now make the balloons from nylon, a strong and flexible material. They are attached to large baskets that are made of wicker and big enough to carry people. Wicker is woven wood that is strong and lightweight. The strength helps the basket hold the passengers. The light weight makes it easy for the balloon to carry the basket.

The hot air balloon flies by a simple design. The balloon is filled with hot air. Hot air weighs less than cold air. So when the hot air is trapped inside of the balloon, the balloon's response is to rise up in the cooler air surrounding it.

In order to make sure the balloon continues to float, the air is heated by burners. The burners are filled with propane which is the same fuel used in outdoor gas grills. Just like a grill, the propane is lit and burns right beneath the opening at the bottom of the balloon. That flame heats the air inside the balloon and makes it rise into the air. The balloon's pilot must turn the burner on and off to heat the air. In this way, the pilot makes the balloon move up and down. But how does a hot air balloon move from side to side?

Hot air balloons travel on natural air currents. An air current is a flow of air over the earth. We feel air currents as wind on our faces. All around the world, air flows in different directions. These currents flow in layers above the earth. Sometimes one current will flow east, but the current above it will flow west. A hot air balloon pilot uses the burner to lift the balloon into different currents. The balloon moves east, west, north, or south depending on the current it's in.

Of course, a hot air balloon also has to land. To land, the pilot has to slowly cool the air inside. The pilot opens a flap at the top of the balloon. The flap lets in cool air and releases hot air from the balloon. As the air slowly cools, the balloon drops from the sky. It is important the pilot lets the cool air in slowly, or the balloon will fall too quickly. The balloon drifts downward and eventually comes to a stop on the ground.

Once the balloon lands, the pilot releases all of the remaining air. This is called deflation. When the balloon is deflated, it lays flat as a pancake on the ground, and the passengers can leave the basket.

Hot air balloons are difficult to pilot. They only move as fast as the air currents will carry them. Because of this, we don't fly balloons to work or school. However, hot air balloons are a wonderful way to see the earth from up in the clouds. It's strange to think that a simple idea for a lantern led to the modern use of hot air balloons. It's even more strange when you learn that the way balloons fly isn't much different from the way those lanterns flew.

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This question has two parts. First, answer part A. Then, answer part B.

Part A

Which conclusion about the author's purpose is supported by the passage?

Ⓐ to explain how a hot air balloon works

Ⓑ to describe the history of human flight

Ⓒ to explain how humans changed the way people flew

Ⓓ to describe how the modern hot air balloon was created

Part B

Which sentence from the passage **best** supports your answer in part A?

☐ "Orville and Wilbur Wright became famous when they flew their airplane, the *Wright Flyer*, into the pages of history."

☐ "Today, the hot air balloon design is the same as the balloons in China although the materials are a little different."

☐ "The hot air balloon flies by a simple design."

☐ "However, hot air balloons are a wonderful way to see the earth from up in the clouds."

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What conclusion can be drawn about the types of building materials used when making a hot air balloon? Support your answer with details from the passage.

Parent Information. The Smarter Balanced assessment is an online summative assessment that measures a student's progress toward college/career readiness and is administered at the end of the grade level. This page includes one example of a test item that is found in the **fourth grade** Smarter Balanced Practice test. To experience other test items, visit the Smarter Balanced Practice test website at the following link: http://sbac.portal.airast.org/practice-test. ***Note:*** *Some of the topics presented in the practice test may not have been taught in your student's class yet.*

Parent Signature _____