## MICHIGAN STATE BOARD OF EDUCATION STATEMENT OF ASSURANCE OF COMPLIANCE WITH FEDERAL LAW

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The sample items included in this set can be used by students and teachers to become familiar with the kinds of items students will encounter on the paper/pencil summative assessments. The sample items demonstrate the rigor of Michigan's academic content standards. They are not to be interpreted as indicative of the focus of the M-STEP assessments; they are simply a collection of item samples. Every standard is not included in this sample set.

## Read the passage. Then, answer questions 1 through 7.

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.

1. Which sentence from the passage supports the conclusion that the Chinese discovered that hot air is lighter than cold air?
A. "Hot air balloons were the first way humans flew."
B. "The idea for these balloons came from China over a thousand years ago."
C. "The Chinese made a lantern to use as a signal."
D. "It was a balloon made of paper, using a candle to both light it and carry it upward."
2. This question has two parts. First, answer part A. Then, answer part B.

## Part A

Which sentence best describes the author's main idea in paragraph 1?
A. The hot air balloon was invented before the airplane.
B. Human flight was the idea of Orville and Wilbur Wright.
C. Human flight, which is important to history, is over a thousand years old.
D. The hot air balloon, the first way humans flew, was based on ancient Chinese Ianterns.

## Part B

Which detail from the passage best supports your answer in part A?
A. "...they flew their airplane, the Wright Flyer, into the pages of history."
B. "...humans had been flying for many years before that famous event."
C. "Hot air balloons are the first way humans flew."
D. "The idea for these balloons came from China, over a thousand years ago."
3. 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?
A. to explain how a hot air balloon works
B. to describe the history of human flight
C. to explain how humans changed the way people flew
D. to describe how the modern hot air balloon was created

## Part B

Which sentence from the passage best supports your answer in part A?
A. "Orville and Wilbur Wright became famous when they flew their airplane, the Wright Flyer, into the pages of history."
B. "Today, the hot air balloon design is the same as the balloons in China, although the materials are a little different."
C. "The hot air balloon flies by a simple design."
D. "However, hot air balloons are a wonderful way to see the earth from up in the clouds."
4. Read the paragraphs from the passage.

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.
How does the author's use of these paragraphs add to the reader's understanding of air movement? Make two choices.
A. The paragraphs help the reader understand that moving air feels hot.
B. The paragraphs help the reader understand how to move hot and cold air.
C. The paragraphs help the reader understand the use of propane gas to move air.
D. The paragraphs help the reader understand that hot air balloons travel on currents.
E. The paragraphs help the reader understand how hard it is for the pilot to fly a balloon.
F. The paragraphs help the reader understand the role the pilot plays in moving the balloon.
5. How is the second paragraph different from the ones that come after it in the passage?
A. It describes the history of hot air balloons, while the other paragraphs describe how modern hot air balloons are made.
B. It helps a reader understand why a hot air balloon can fly, while the other paragraphs help a reader understand how to fly one.
C. It describes how hot air balloons carry passengers, while the other paragraphs describe how passengers get out of hot air balloons.
D. It helps a reader understand the materials needed for building a hot air balloon, while the other paragraphs help a reader understand how to fly one.
6. Read the sentence from the passage.

When the balloon is deflated, it lays flat as a pancake on the ground, and the passengers can leave the basket.
Why does the author use the phrase "flat as a pancake"?
A. to help the reader understand how a balloon becomes flat
B. to help the reader understand what a flat pancake looks like
C. to help the reader understand what a deflated balloon looks like
D. to help the reader understand how a balloon lands on the ground
7. Read the sentence from the passage.

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.
How does the phrase "simple design" help the reader understand the author's thoughts about the design of a hot air balloon?
A. It shows that the author believes it is easy to fly a hot air balloon.
B. It shows that the author thinks that hot air balloons are easy to build.
C. It shows that the author believes the way a hot air balloon works is easy to understand.
D. It shows that the author thinks that it is easy to draw hot air balloons before they are built.
8. Liz is writing a story for her class about winning the county spelling bee. Liz wants to revise the story to include a better opening. Read the draft from her story and complete the task that follows.

For the last two years, I have been the runner-up in the county-wide spelling bee. Both years I lost to Aaron Long, but I knew that this was my year. I was ready. I had won my school's spelling bee, I had studied long lists of words, and my parents had been calling words out to me for weeks. It was a beautiful spring day, and I felt confident. This was going to be my lucky day. There was no doubt that I was going to win this contest.

Choose the best beginning sentences to introduce the story.
A. Spelling bees are great contests. When I was in the fourth grade, I loved getting ready for them.
B. Winning the county-wide spelling bee was important to me. Spelling was my best subject in school.
C. Training for a spelling bee is a lot like training for a track meet. You have to work hard to be the best, and the training is hard.
D. My mouth was dry as I walked into the high school auditorium. It was the day of the county-wide spelling bee, and I wanted to win.
9. A student is writing a report for her teacher about a recent class trip to a local museum. Read the draft of the report and complete the task that follows.

Our day at the children's museum started on the first floor, which was about life on Earth. At an exhibit on Earth's history, we dug for fossils in the Dinosaur Dig. Next was a nature display where we listened to bird songs and shook hands with a monkey.
The second floor was all about space. We got to visit a planetarium, a kind of theater that shows the night sky on a high, curved ceiling. We also learned how a telescope works.
We viewed a group of stars called the Milky Way. Looking at the stars helped us understand why someone would want to become an astronaut.
Write an introduction that clearly states the main idea of the report and sets up the information to come in the body of the report.
10. A student has written the draft of an opinion letter to his principal about the school's short recess periods. The student wants to revise the draft to add more support for his opinion. Read the draft of the letter and complete the task that follows.
Dear Principal Phillips,
I am writing to ask you to make our recess period longer. Twenty-five minutes is just not long enough for students to play. By the time we get outside, we have already lost about ten minutes of our time. What time is left does not allow us to play any active games, and we have to hurry back to class. Also, recess is the only time during the day that we can spend with our friends. Having a longer recess would make us better and happier students.
Sincerely,

## Blake Hudson

Choose two sentences that would add the best support to the underlined opinion about recess.
A. Most students like to play games such as softball and volleyball.
B. If we had a longer recess, we would get more exercise and be healthier.
C. If we had a longer recess, some students could spend some of it studying.
D. In my brother's high school, the physical education periods are one hour long.
E. Another problem is that the sports fields are not large enough for baseball and softball.
F. Students who have more time to be active will be able to think better when they are back in class.
11. A student is writing a book report for his class about a book with a character who found a pony. Read the draft of a paragraph from the book report and complete the task that follows.

Alex lived out West and loved to take walks in the mountains and explore the canyons. One summer morning he took a walk down a pathway in a canyon behind the barn. He saw and heard a pony that seemed to need help. When Alex got closer to the pony, he saw that its hoof was caught under a rock. Alex went slowly down the path and spoke quietly to the pony. Alex was able to free the pony and take it home. Since his father could not find its owner, Alex was allowed to keep the pony.
The writer wants to replace the underlined words to make his meaning clearer. Which word would be a better choice?
A. called
B. talked
C. muttered
D. whispered
12. A student is writing a story for class. She needs to correct the punctuation and grammar usage mistakes in her story. Read the paragraph from the draft of her story and complete the task that follows.

We was eating supper last night when we heard a huge crash from outside. What had happened? For about ten seconds, we all sat there wondering, and looking at each other. My dad stood up, and we followed him into the yard to see what had caused the loud noise. A giant branch had fallen off the oak tree next to the house. If it had dropped just three feet to the left, it would have crashed right through the roof!

Choose the two sentences that contain mistakes in punctuation or grammar usage.
A. We was eating supper last night when we heard a huge crash from outside.
B. What had happened?
C. For about ten seconds, we all sat there wondering, and looking at each other.
D. My dad stood up, and we followed him into the yard to see what had caused the loud noise.
E. A giant branch had fallen off the oak tree next to the house.
F. If it had dropped just three feet to the left, it would have crashed right through the roof!
13. Choose the sentence that is punctuated correctly.
A. I gave the teacher my name and was told, "that I was not in the right class."
B. "I gave the teacher my name," and was told that I was not in the right class.
C. "I gave the teacher my name and was told, I do not believe you are in the right class."
D. I gave the teacher my name and was told, "I do not believe you are in the right class."
14. A student made a plan for a research report. Read the plan and the directions that follow.

## Research Report Plan

Topic: early American schools
Audience: students in social studies class
Purpose: to inform
Research Question: What were children taught in early American schools?

The student found a source for the research report. Read the source.
In the early days of America, children had many jobs. Boys were expected to help their fathers with the farm work. Likewise, girls were expected to help their mothers with the housework. There wasn't much time for school. Most children who had some time for learning went to a dame school. The name of the school came from the teachers who were called dames. These teachers showed children how to recognize the letters of the alphabet, how to spell, and how to do simple math. If a family could pay for it, some boys had additional schooling from a schoolmaster.

Choose one sentence that has information that answers the research question.
A. In the early days of America, children had many jobs.
B. Boys were expected to help their fathers with the farm work.
C. Likewise, girls were expected to help their mothers with the housework.
D. There wasn't much time for school.
E. Most children who had some time for learning went to a dame school.
F. The name of the school came from the teachers who were called dames.
G. These teachers showed children how to recognize the letters of the alphabet, how to spell, and how to do simple math.
H. If a family could pay for it, some boys had additional schooling from a schoolmaster.
15. A student is writing a report about the California Gold Rush. She found a timeline. Read the timeline and the directions that follow.

Timeline of People Moving West


The student found a second source. Read the second source below.
In 1803, the United States bought a large piece of land from France. This was called the Louisiana Purchase. This made the United States much larger by adding land west of the Mississippi River. Later, gold was found at Sutter's Mill in California. After that, more people began to journey west.

People came from all over the world to California. Most of these people wanted to find gold.
Choose all of the sentences below that support the information in the timeline.
A. In 1803, the United States bought a large piece of land from France.
B. This was called the Louisiana Purchase.
C. This made the United States much larger by adding land west of the Mississippi River.
D. Later, gold was found at Sutter's Mill in California.
E. After that, more people began to journey west.
F. People came from all over the world to California.
G. Most of these people wanted to find gold.
16. A student is writing a research report about hovercraft. She found a source. Read Source 1 and the directions that follow.

## Source 1: Hovercraft by Jane Thomas

In 1955, a British man put some cans and tubes together and made the first tiny hovercraft. Hovercraft look like a ship and can float over water, land, or even swamps. They work really well in places where the land is rocky, swampy, or icy because they can float as little as six inches or as much as seven feet into the air. Hovercraft float because they have big fans that are on the bottom of the craft. The big fans lift them off the ground. This makes hovercraft very useful in places that do not have many roads. In fact, hovercraft are the best way to travel when there are no roads to follow. They are even used to save people when they need help, like during a flood.
The student took notes about hovercraft. Select two notes that support the author's opinion in Source 1.
A. Hovercraft are used in many countries in the world.
B. Hovercrafts are now being used to give tours in many cities.
C. People who love hovercraft can join clubs and take part in races.
D. Some hovercrafts are so small that only one person can ride in them.
E. Hovercraft can help rescue teams get safely to areas where cars cannot travel.
F. By floating above rocks and waves, hovercraft offer a smooth ride for passengers.

