Catherine Johnson: A Mathematician in the Space Program

1. Why did Catherine love math?
   A. She could see whether an answer was right or wrong.
   B. It helped her win prizes at school.
   C. Her brother taught her how to solve every problem.
   D. It let her count stars from her classroom.
2. Why did Catherine's family move closer to a school?
   A. Catherine wanted to live near the research center.
   B. Her town did not have a high school for Black students.
   C. Her brother needed to attend college.
   D. The family wanted to be near a space launch.
3. What did the women called "computers" do at the research center?
   A. They built rockets and airplanes.
   B. They taught geometry classes to engineers.
   C. They made calculations to help engineers plan airplanes and flights.
   D. They operated the room-sized computer.
4. How did Catherine get to attend the engineers' meeting?
   A. She asked whether a law prevented her from going, and there was none.
   B. The engineers invited all the women to attend.
   C. She finished calculating the rocket's flight path first.
   D. Her professor told the team she should be there.
5. Why did astronaut John Glenn ask Catherine to check the computer's calculations?
   A. He wanted her to plan a trip to the Moon.
   B. He trusted her to make sure the numbers were correct.
   C. He wanted her to teach him how computers worked.
   D. He needed her to choose where the rocket would land.
6. Why did Catherine double-check NASA's computer calculations for the Moon flight?
   A. The computer worked more slowly than people.
   B. The engineers had not studied geometry.
   C. The flight was long and dangerous, so the calculations needed to be accurate.
   D. Astronaut Neil Armstrong asked her to change the flight plan.
7. What was one result of Catherine's work on the first American spaceflight?
   A. Alan Shepard's flight followed her calculated path and splashed down on schedule.
   B. John Glenn became the first person to walk on the Moon.
   C. Catherine became the first woman to fly a rocket.
   D. The research center replaced its computers with calculators.
8. How did Catherine show confidence and persistence when she faced unfair rules or difficult math problems?

Sentence starter: Catherine showed confidence and persistence when she ____ because ____.

Answer Key:

1. A — Catherine liked math because it was easy to see whether an answer was right or wrong. (1:37–1:43)
2. B — Her town did not have a high school for Black students, so her family moved closer to a school she could attend. (2:23–2:40)
3. C — The women made calculations that helped engineers design airplanes and flight plans. (4:01–4:16)
4. A — Catherine asked if there was a law against women attending; the engineers said no, so she went to the meeting. (5:17–5:49)
5. B — John Glenn trusted Catherine and wanted her to confirm that the computer's calculations were correct. (7:21–7:37)
6. C — The Moon trip was long and dangerous, and a mistake could send the rocket past the Moon. (7:51–8:18)
7. A — Alan Shepard followed Catherine's flight path and splashed down right on schedule and target. (6:36–6:55)
8. She challenged unfair rules, asked to attend the engineers' meeting, and kept working on difficult calculations until she found a flight path. (5:17–5:49; 8:35–9:15)