

AES 300_400 Blizzard Bag #1

CHECKPOINTS

Below are the answers to the items listed at the end of the lesson in the student textbook edition of *Exploring Space: The High Frontier*. These end-of-lesson items are not assigned in the lesson plans. The answers are provided here in case you want to assign any of them in your classes, for homework, or if your students ask you about them. They are in the same order as listed in the student textbook.

1. What is NASA's mission? What are NASA's four mission directorates? (p. 200)
2. List four NASA contributions to aeronautics. (p. 201)
3. What path does NASA's budget request take to get to Congress? . (p. 202)
4. What is the Science Plan and what does it do? NASA's Science Mission Directorate manages a complex list of research goals by means of what's known as the Science Plan. (p. 204)
5. Why is a rocket able to function in outer space? (p. 204)
6. In the original scenario for the *Apollo* missions to the Moon, how many booster rockets did it call for and what was the rocket name? (p. 206)
7. Why do astronauts get training in scuba diving? (p. 207)
8. What is TDRSS and where is its ground element located? (p. 208)
9. Who is Eugene F. Kranz and what is he known for? Eugene F. Kranz was the mission flight director for Apollo 13. He never left Earth. (p. 209)
10. What academic degree must an astronaut pilot have? (p. 210)
11. Who were the "Original Seven"? (p. 212)
12. What is the commander of a space flight responsible for? (p. 213)
13. What are "consumables," and what responsibility does a mission specialist have with regard to them? (p. 213)
14. What foreign nationals take part in a NASA mission, what role do they play? (p. 214)

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Activity 1: Question/Answer

Question	Answer
1. What word means anything related to the science, design, or operation of aircraft?	
2. What does NASA call the four main organizations through which they carry on their work?	
3. What are the two Mars Exploration Rovers that arrived on the red planet in 2004 and are still operating?	
4. Where does NASA get the money for their activities?	
5. What is another name for a launch vehicle?	
6. What is the cargo a rocket is to carry aloft called?	
7. What are the machines that duplicate what it's like to operate an airplane or a spacecraft called?	
8. What does TDRSS stand for?	
9. Where is TDRSS located?	
10. Who was the mission flight director of the <i>Apollo 13</i> ?	
11. What are the astronauts in the space program of the Soviet Union and its successor state, Russia, called?	
12. What is the name of the group of seven military pilots, chosen in 1959, who were the first astronauts?	
13. Who is in charge of getting everyone back to Earth from a mission unharmed?	
14. What position on a mission are those other than NASA astronauts who have specialized onboard duties?	