

## Teacher's guide

During the video, you may wish to ask students some probing questions. Although there are many questions that can be asked, we have selected some questions that can be answered by students in grades Kindergarten through 5<sup>th</sup>. Below is a set of questions that may assist you while viewing the video.

Please pause at the time indicated below and ask students the questions provided. (These are guiding questions, only.)

**2:46** – You saw students experimenting and designing things that would help us in the future. If you could change anything in this world, what would it be? (Ensure that you mention that the changes should focus on Science, Technology, Engineering, Arts, or Mathematics, “STEAM”). Ask them to think, pair, share.

**4:52** – In 1961 when Sharon Hagle was in elementary school she saw the first American spaceship travel to space. She couldn't imagine a person going to space. Back then it took days to travel to space and come back to earth. Today, engineers think that you could go to space and return in one day. (Leaving at the beginning of the school day and returning by dismissal?) Do you think this is possible? Why or why not? (You may want to start the conversation by asking them if they have seen changes in STEAM areas that are working faster or better than a year ago.). Think, pair, share.

**6:18** – A space craft will travel 250 miles above the earth to get to the international space station. What do you think a person going to space needs to learn and do prior to their trip? (You may want to begin the conversations by discussing a trip to another state/country by plane, train, or automobile).

**8:58** – Going to space requires a great deal of training. Sharon Hagle experienced:

- Zero gravity
- Spinning in a chair (to experience speed and gravity)
- Flying in a supersonic jet (to better understand the feeling of flying fast and high in the sky)
- Wearing a 220 lb. space suit (to practice using the suit)
- Working in a pool (to simulate weightlessness)

Why do you think the astronauts had to attend so much training? (Ask students to think about areas such as sports that need physical training or teaching that requires extensive education and training.)

Extension: Of all the training you observed, which did you find most interesting? Why? Think, pair, share.

**10:53** – Food is very important to survival. Why do you think it is important to package food that is going to space? Do you think that you would eat the food that the astronauts are required to eat? Think, pair, share.

**13:31** – In this video, you saw a “mother ship” carrying the spaceship. Do you think that you would like to travel to space in this ship? Why or why not?

Extension: What do you think the astronauts will see while they are in space? Take a minute to think and then share with a partner.

Extension: Why is training, prior to space travel, important? (You may want to begin with the breathing technique demonstrated in the video.) What do you think the astronauts will do on the flight to space? Take a minute to think and then share with a partner.

**15:00** – Sharon Hagle’s dream is to travel to space. Do you think she will succeed? Why or Why not? Think, pair, share.

Extension: Do you think that you would like to travel to space one day? If your dream does not include traveling to space, what would you do instead that would change our world to make it better. Think, pair, share.