Example Scenario Grades 7-9 (SEC I-III)



Tomato Trouble

An Orion spacecraft is heading to Mars. Attached to the outside of the spacecraft are several containers. In the containers are supplies and equipment. The temperature and pressure in the containers is similar those in the spacecraft.

The astronauts suddenly hear an alarm. There is a problem with one of the containers outside. The astronauts go for a spacewalk to see what is wrong. They find that one of the containers has a hole in it. It has been hit by a tiny meteorite. The astronauts cover up the hole but realize that it is the container that holds the tomato seeds needed for the greenhouses on Mars.

The seeds have been exposed to the space environment for several days. The seeds are now very cold and have had not air. Yikes! The astronauts wonder if the seeds will still be able to grow when they get to Mars.



