

Post-Launch Lesson Plan

PLANET I | INVESTIGATING PROBLEM-SOLVING

Objectives

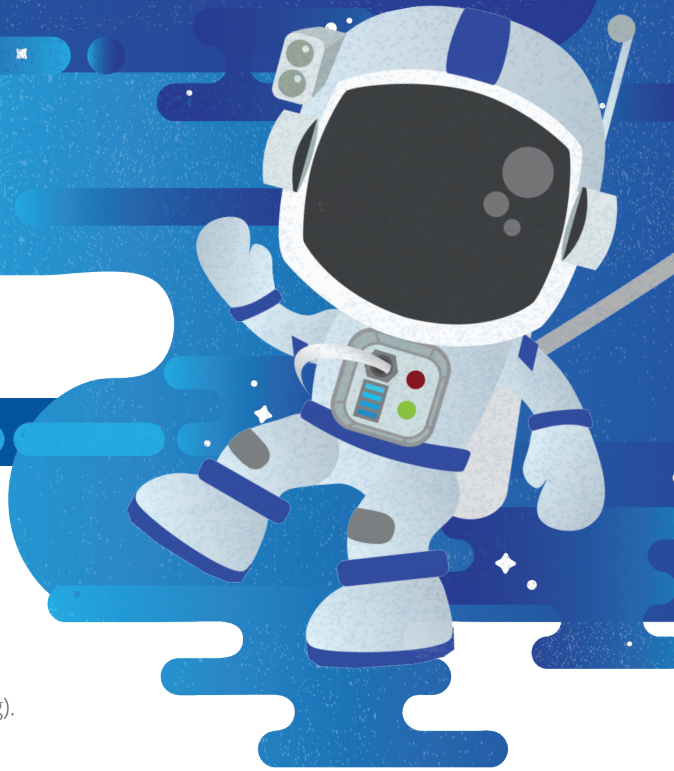
- Students describe different kinds of tools people use at work.
- Students understand the importance of cross-functional skills such as problem-solving.
- Students can name a skill that is important to all workers (problem-solving).

Preparation & Materials Needed

- Copies of the “Searching for Solutions” worksheet for all students.
- Chalkboard/whiteboard or chart paper.

Lesson Plan

Total Time: 15-20 minutes



INTRODUCTION

5-7 Minutes

Begin by processing what students learned from their visit to Planet I with questions such as the following:

- *Do you recall what the letter “I” stands for on Planet I? (Investigative) While you visited Planet I you were investigating “investigative” occupations!*
- *Do you remember the nickname given to individuals on Planet I? (“Thinkers”). Why do you think individuals in investigative occupations are considered thinkers?*
- *Can you recall some of the occupations that thinkers enjoy?*
- *What were similar things about thinkers in investigative careers?*
 - *Like to know how things work.*
 - *Enjoy examining or looking at things.*
 - *Like to use their brains.*
 - *Like to discover or find things.*
- *What investigative occupations sounded like something you might enjoy?*

Ask students to help you recall names of some of the tools individuals in Investigative occupations use. List these on the chart paper or chalkboard/whiteboard. See if students can name additional tools that could be used by persons in Investigative careers.



INSTRUCTION 3-4 Minutes	<p>Remind students that persons on Planet I are not only considered to be thinkers but also problem-solvers. Ask the class if anyone has ever been asked to solve a problem. Allow students to describe the situation and the steps they took to solve the problem.</p> <p>Explain that there are several steps to problem-solving, including:</p> <ol style="list-style-type: none">1. Identifying the problem.2. Investigating (or studying) the problem.3. Thinking of possible solutions.4. Picking a possible solution and trying it out.5. Then, checking to see if the solution worked. <p>(Optionally, write these steps on the chalkboard/whiteboard or chart paper so students can see the steps when completing the next activity).</p>
ACTIVITY 6-8 Minutes	<p>Using either of the attached “Searching for Solutions” worksheets, divide students into small groups or allow them to work independently to identify possible solutions to the four story problems.</p> <p>If using the first worksheet, ask students to write possible solutions in the space provided. If using the second worksheet, tell students to find and circle the answer that is not the best and be ready to explain why the solution they chose was not the best solution.</p> <p>When the activity concludes, process students’ answers as a whole class.</p>
CONCLUSION 1-2 Minutes	<p>At the conclusion of the lesson, ask the class if there are any school subjects that help them with developing their problem-solving skills. If not mentioned in the discussion, connect student learning and practicing of mathematics in school with helping students strengthen their skills in problem-solving. Emphasize that problem-solving is another skill – like goal-setting – that is an important skill for students to have no matter what planet they land on and no matter what occupation they choose in their future.</p>

2I ACTIVITY | INVESTIGATING PROBLEM-SOLVING

Searching for Solutions

My Name: _____

	List possible solutions in the spaces below:
1. Squeelo is repairing a car and realizes the wrench she is using isn't the right size. What could Squeelo do?	
2. Sleeb is a food scientist and uses a microphone to look for very small diseases in food. One day the light in Sleeb's microscope goes out. What could Sleeb do?	
3. Lightyear Lane is a veterinary technician but has very sensitive hearing. One day a dog barks so loud that it hurts Lightyear's ears. What could Lightyear do?	
4. Zeeb is a computer technician. One day when trying to fix a laptop computer it stops working. Zeeb can't get the mouse or the computer screen to work. What could Zeeb do?	

2I ACTIVITY | INVESTIGATING PROBLEM-SOLVING

Searching for Solutions

My Name: _____

	Circle the answer that is not the best solution:
1. Squeelo is repairing a car and realizes the wrench she is using isn't the right size. What could Squeelo do?	Ask another repair person for help.
	Find another tool of the right size.
	Look at an instruction manual or video.
	Sit and wait for something to change.
2. Sleeb is a food scientist and uses a microphone to look for very small diseases in food. One day the light in Sleeb's microscope goes out. What could Sleeb do?	Find out where the light bulb is and replace it.
	Go home.
	Send the microscope to a repair place.
	Ask for help.
3. Lightyear Lane is a veterinary technician but has very sensitive hearing. One day a dog barks so loud that it hurts Lightyear's ears. What could Lightyear do?	Buy and use ear plugs at work.
	Try to work with other animals instead of dogs.
	Say you will only work with dogs that don't bark.
	Stand farther away from dogs when possible.
4. Zeeb is a computer technician. One day when trying to fix a laptop computer it stops working. Zeeb can't get the mouse or the computer screen to work. What could Zeeb do?	Go get a snack.
	Call a computer repair business.
	Ask for help from someone else in the room.
	Take the computer battery out or unplug it.