




Deep Space Mission Planning-to-Teach Checklist for Space Hazards


How to use this planning tool:

1. Download or print the [Space Hazard Unit Educator Resource Guide for Science and/or Engineering](#).
2. Read through each section in the order below, as each section builds on the prior information.
3. Jot down key thoughts and questions in the *Educator Planning & Reflection Notes* to help you plan for teaching.
 - Flag items that need follow-up (for example, checking available materials or learning space needs).
 - Focus on capturing ideas that relate specifically to *YOUR* learners and programs.

STEP 1: Experience a Space Hazards Adventure	
Planning Steps	Educator Planning & Reflection Notes 
<ul style="list-style-type: none"> • Experience a Space Hazards Adventure as your learners would. <i>Find the Ready-SET-Go Adventure on p. 1 of the Science Educator Guide or Engineering Educator Guide. Note this Adventure is the same for both learning pathways. (~45 min)</i> 	
STEP 2: Get a high-level view of the Space Hazards unit.	
Planning Steps	Educator Planning & Reflection Notes 

<p>Click on the Navigating the Space Hazards Unit video. <i>This video shows how each adventure builds on the previous one, leading your learners toward proposing a solution in science or technology design in engineering. (~3 min)</i></p>	<p>Which pathway(s) do you plan on offering for your learners?</p>	
<p>Read the Space Hazards Pathway Learning Sequence for Science and/or Engineering. <i>The pathway learning sequence provides a high-level overview of each adventure in Space Hazards Science and Engineering and how they build on one another. (~10 min per pathway)</i></p>	<p>SCIENCE LEARNING PATHWAY (Science Pathway p. xi-xiii) Science adventures intentionally build on one another. What ideas do you have to support learners who may miss a day of learning? What key moments in this pathway can you use to help connect learners' to career opportunities in science?</p>	<p>ENGINEERING LEARNING PATHWAY (Engineering Pathway p. xi-xiii) Engineering adventures intentionally build on one another. What ideas do you have to support learners who may miss a day of learning? What key moments in this pathway can you use to help connect learners' to career opportunities in engineering?</p>
<p>STEP 3: Get to know the different features and teaching supports found in the Space Hazards Science Educator Guide.</p>		
<p>Planning Steps</p>	<p>Educator Planning & Reflection Notes </p>	
<p>Overview of Features and Teaching Supports in Educator Guide.</p>	<p>Star features you'll use most often.</p>	

<p><i>This resource provides key information about the front matter of the educator guide and the instructional design of the Space Hazards adventures. (~10 min read)</i></p>		
<p>Reviewing Materials</p> <p><i>Review the material checklist for the science pathway. (~5 min)</i></p>	<p>SCIENCE LEARNING PATHWAY (Science Pathway p. xxiii to xxiv)</p> <p>What materials do you still need to purchase?</p> <p>Where will you store materials between sessions?</p> <p>What environment setup would work best for your group?</p>	<p>ENGINEERING LEARNING PATHWAY (Engineering Pathway p. xxiii to xxv)</p> <p>What materials do you still need to purchase?</p> <p>Where will you store materials between sessions?</p> <p>What environment setup would work best for your group?</p>

<p>Planning for YOUR Learners Needs: Read the the following teaching supports provided in the Educator Guide on pages xv to xxii:</p> <ul style="list-style-type: none"> ○ Instructional Tips for Learning. ○ <i>Ideas for Inclusion Activities [To be added].</i> ○ Inclusive Grouping Strategies ○ Ideas for Building Family & Community Connections. <p><i>These resources provide instructional strategies you may consider to help meet the needs of your learners. (~20 min read)</i></p> <p>Explore some of the additional video resources on supporting unique learners' needs (~3 mins each):</p> <ul style="list-style-type: none"> ● Supporting Multilingual Learners ● Supporting Indigenous Learners ● Supporting Learners with Diverse Physical and Sensory Abilities 	<p>Which strategies best match your learners' needs? What are 1-2 new strategies you'd like to try?</p>
<p>STEP 4: Chart your course for how the Space Hazards Science unit will be implemented into your current program.</p>	
<p>Planning Steps</p>	<p>Educator Planning & Reflection Notes </p>

<p>Planning for Space Hazards in your program: Review sample schedules to see examples of how the Science and Engineering Pathways can fit into an out-of-school time program.</p> <p><i>These schedules will help you see how Space Hazards fits into your schedule. Whether you've got daily sessions or just a few hours a week, the PLANETS curriculum can fit your needs! (~10 min read)</i></p>	<p>Which format might work best given your program's schedule? What adjustments might you need to make?</p>	
<p>Optional Next Steps: Interested in learning more? Here are some recommended next steps in your Space Hazards learning mission.</p>		
<ul style="list-style-type: none"> <i>(Optional)</i> Read through the Science/Engineering Educator Guide to understand how each adventure builds on the next. Think about any preparation and space considerations you need to make. 	<p>SCIENCE LEARNING PATHWAY (Science Pathway p. 1 to 63)</p> <p>What connections do you see between activities? Which parts might need extra prep time? What might your learners find most challenging or exciting?</p>	<p>ENGINEERING LEARNING PATHWAY (Engineering Pathway p. 1 to 125)</p> <p>What connections do you see between activities? Which parts might need extra prep time? What might your learners find most challenging or exciting?</p>

