Quick Launch 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: Get a high-level view of the Space Hazards unit.				
Planning Steps	Educator Planning & Reflection Notes			
Click on the Navigating the Space Hazards Unit video. 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)	Which pathway(s) do you plan on offering for your learners?			

Read the Space Hazards Pathway Learning Sequence for Science and/or Engineering.

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)

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?

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?

STEP 2: Get to know the different features and teaching supports found in the Space Hazards Science Educator Guide.

Planning Steps	Educator Planning & Reflection Notes	
Overview of Features and Teaching Supports in Educator Guide. 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)	Star features you'll use most often.	

Reviewing Materials

Review the material checklist for the science pathway. (~5 min)

SCIENCE LEARNING PATHWAY

(Science Pathway p. xxiii to xxiv)

What materials do you still need to purchase?

Where will you store materials between sessions?

What environment setup would work best for your group?

ENGINEERING LEARNING PATHWAY

(Engineering Pathway p. xxiii to xxv)

What materials do you still need to purchase?

Where will you store materials between sessions?

What environment setup would work best for your group?

STEP 4: Chart your course for how the Space Hazards Science unit will be implemented into your current program.

Planning Steps	Educator Planning & Reflection Notes		
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. 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	SCIENCE LEARNING PATHWAY Which format might work best given your program's schedule? What adjustments might you need to make?	ENGINEERING LEARNING PATHWAY Which format might work best given your program's schedule? What adjustments might you need to make?	

curriculum can fit your needs! (~10 min read)						
Optional Next Steps : Interested in learning more? Here are some recommended next steps in your Space Hazards learning mission.						
Planning Steps	Educator Planning & Reflection Notes					
Planning for YOUR Learners Needs: Read the the following teaching supports provided in the Educator Guide on pages xv to xxii:	Which strategies best match your learners' needs? What are 1-2 new strategies you'd like to try?					
 Instructional Tips for Learning. Ideas for Inclusion Activities [To be added]. Inclusive Grouping Strategies Ideas for Building Family & Community Connections. 						
These resources provide instructional strategies you may consider to help meet the needs of your learners. (~20 min read)						
Explore some of the additional video resources on supporting unique learners' needs (~3 mins each):						
Supporting Multilingual Learners						

•	Supporting	Indigenous	<u>Learners</u>

• Supporting Learners with Diverse Physical and Sensory Abilities

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.

SCIENCE LEARNING PATHWAY (Science Pathway p. 1 to 63)

activities?

What connections do you see between

Which parts might need extra prep time?

What might your learners find most challenging or exciting?

ENGINEERING LEARNING PATHWAY

(Engineering Pathway p. 1 to 125)

What connections do you see between activities?

Which parts might need extra prep time?

What might your learners find most challenging or exciting?