



**Canadian Minecraft: Education Edition Challenge 2021
Teacher Support Document**

Challenge Description:

The year is 2049 and your students are set to blast off and travel to one of humanity's next frontiers. Will it be Mars, the Moon, or even destinations on Earth that will push your students' creativity, collaboration and critical-thinking skills to the limit? What will a community look like in these new and challenging environments?

Students will begin at Logics Base meeting several helpful characters before heading to Science Village. Each scientist in the village will provide students with valuable science highlights and video demonstrations that can help them not only stretch their imaginations, but also build a scientifically possible and empowering vision of tomorrow. Once they visit Science Village and sponge up all of the available science knowledge, they can choose the SLS Rocket (Orange) to head to the Moon's equator, Starship to head to Mars' North Pole or the Logics Air #1 Falcon Heavy Rocket to head to a frontier destination on Earth. Destinations on Earth include the Arctic, Underwater or Floating opportunities, Coastal Flood Zone and even underground in a mountain.

Build, build, build, and record a walk-through video (using Flipgrid) of your final build as students explain their vision of a 2049 community at their chosen future frontier.

Helpful in-game coordinates to help students:

***All build sites are optional and only supported suggestions*

To Teleport use the command /tp @p ____ ____ _____. (no commas just spaces between #s)

Location	Coordinates	Location	Coordinates
Spawn	111, 71, -284	Arctic spawn "Polar Prime"	-4304, 153, 664
Moon Spawn	-991, 156, 206	Floating or Underwater Site "Atlantis II"	1164, 63, 865
Moon mid-Space Stop	-207, 84 36	Flooding Coastline "Coastal Climb"	18, 68, -1544
Mars Spawn	473, 153, 664	Underground "Digdug Oasis"	-3720, 72, 2656
Mars mid-Space Stop	-104, 89, 16	Back to Earth / Orion Module	-386, 63, -656
Science Village	160, 70, -222	Starship to MARS	263, 82, -284
SLS Demo Rocket	109, 71, -348	Logics Air #1 Rocket	243, 74, -179
SLS Rocket to MOON	260, 82, -284		

Other helpful teaching tips:

- **IMPORTANT: Under Settings → Video → Make sure to turn off "Render Clouds" for any work in space. It is best to generally keep clouds off for this challenge**

**** You can also use the command /time set day to make it daylight (Suggested only for Earth locations) but remember it will make the whole world become daytime and impact other groups if they too are working in the same world.**

1. All players should be in **Creative Mode** which means they can fly around and build with all possible materials. On Mars and the Moon border blocks **are not in place** holding students on the provided terrain. Students may stray and need teleporting.
2. If students can't place certain items they may need to turn on world builder using the **command /wb**. This however will allow them to bypass border blocks. It will also give them the power to add NPC characters to their community to demonstrate human population.
3. The machine/device that hosts the world is the machine/device that the world file is saved on. You can export and backup the world file under the main GAME settings at the very bottom. This file can be then transferred via the cloud to other devices or users for further work. In other words, work does not always have to be done at school.
4. When filming your final video walk-through of the community the student recording should **go into video settings and turn off HAND and HUD to remove all overlays on the screen** resulting in crisp and clear widescreen video.

- Though this is a science-heavy challenge the word “community” does appear in a huge number of curriculum documents and many courses can benefit from adding this challenge to their end-of-year plans! It is ideal for science, social studies, language arts and technology education programs for all ages. You can win valuable prizes for your school too!

Suggested Teaching Plan:

Week/Class	Suggestions
1	Review the challenge and other Minecraft Teaching Resources and Lessons from Logics Academy. Find interested students for the challenge or choose classes to compete.
2	Try some of the Minecraft: Education Edition lesson offerings from Logics Academy
3	Have student teams visit Science Village in the Future Frontiers Challenge World to become inspired by the valuable video content and suggestions.
4-6	Choose Mars, the Moon or Earth and rocket off to that destination where students can build in creative mode their vision of community in 2049.
7-8	Finalize your community and capture a clear and final video walk-through of the student build. Submit your creation to the contest Flipgrid before the deadline.

Some NPC Embedded Media:

Character	Media Type / Topic	Link
Return to Earth Logics Doctor	Re-entry Story Video	https://www.youtube.com/watch?v=-gswlglWMil
	Orion Module Tour Video	https://www.youtube.com/watch?v=wVYwFFzaPp0

<p>Moon Canadarm 3 Expert</p>	<p>Animation of Canadarm3</p> <p>Meet the Builders of Canadarm 3</p> <p>Hadfield Canadarm2 Video</p> <p>Canadarm History Vid</p>	<p>https://www.youtube.com/watch?v=sRSNeGXTj6Q</p> <p>https://www.youtube.com/watch?v=BKfpCto9ZMA</p> <p>https://www.youtube.com/watch?v=K7NvsxcoDKo&t=13s</p> <p>https://www.youtube.com/watch?v=cRt8cH1iMp4</p>
<p>Moon Lunar Specialist</p>	<p>Artemis Base 2028?</p> <p>Expert FAQ Video</p> <p>“We are Going” Motivational Video</p> <p>IRings Mcgill University invent the new wheel video</p> <p>Lunar Lava Tubes Video</p>	<p>https://www.youtube.com/watch?v=1bJKAu11Ni4</p> <p>https://www.youtube.com/watch?v=5RJT21ckUIk</p> <p>https://www.youtube.com/watch?v=vl6jn-DdafM&t=105s</p> <p>https://www.youtube.com/watch?v=UNQe6g0lLas</p> <p>https://www.youtube.com/watch?v=EJDjyN3ni3U</p>
<p>Outside Lava Tube Expert</p>	<p>NASA Lunar Lava Tube Video</p> <p>Lava Tube Facts Video</p> <p>Lava Tube Tour</p>	<p>https://www.youtube.com/watch?v=EJDjyN3ni3U&t=23s</p> <p>https://www.youtube.com/watch?v=bRfUqeUZq0l</p> <p>https://www.youtube.com/watch?v=gTZQ91q2L24</p>

Mars Mission Lead	NASA Ideas Video	https://www.youtube.com/watch?v=94bIW7e1Otg
	SpaceX's Vision	https://www.youtube.com/watch?v=zSv0Y7qrzQM
	Mars Lava Tube Video	https://www.youtube.com/watch?v=MIQpsMQqDF8
	Mars Homes Designs	https://www.youtube.com/watch?v=LCuZC-CRg4M
Starship Scientist	SpaceX Path to Mars Starship	https://www.youtube.com/watch?v=lhydEz-ja1g
	Starship Launch Animation	https://www.youtube.com/watch?v=C8JyvzU0CXU
	Spaceship science	https://www.youtube.com/watch?v=OKy2Z2BnyU8
Extreme Climate Specialist	The Polar People Video	https://www.youtube.com/watch?v=rr1HMmtYaqw
	Over/Underwater Living	https://www.youtube.com/watch?v=CUAUMmLyBQQ
	Underwater City?	https://www.youtube.com/watch?v=R-BE_TmDOD8
	Svalbard Furthest North Community on Earth	https://www.youtube.com/watch?v=5NhIRwCq428
	Underground living on Earth	https://www.youtube.com/watch?v=ywBwXyF1UuI
Earth Engineer Specialist	Floodproofing luxury	https://www.youtube.com/watch?v=kqBeQA_nBBE
	Floating House	https://www.youtube.com/watch?v=JgIK_OziOPA
	Floodproofing Pillars	https://www.youtube.com/watch?v=i2H5XEAYIW8
Directions Guide	We are Going Video	https://www.youtube.com/watch?v=vl6jn-DdafM&t=105s

Logics lead Scientist	Artemis Program	https://www.youtube.com/watch?v=OslhTw0CK8U
	Apollo 11	https://www.youtube.com/watch?v=w4wx_3XOrns
	Space X Falcon	https://www.youtube.com/watch?v=brE21SBO2j8
	Rocket Travel	https://www.youtube.com/watch?v=9LENvGRsr7Q
	Deep Space Food	https://www.cbc.ca/news/technology/deep-space-food-nasa-canada-1.5915888
Logics Scientist Leaving Science Village	TedTalk Woman President of SpaceX	https://www.youtube.com/watch?v=Dar8P3r7GYA
Logics SLS Technician	SLS Video	https://www.youtube.com/watch?v=_T8cn2J13-4
	Rocket Science	https://www.youtube.com/watch?v=Q65H3W13xWo
	Hot Fire Test	https://www.youtube.com/watch?v=XGRE_7yz_kM

Support:

Reach out to Logics Academy any time through the challenge website <http://logicsacademy.com/futurefrontiers/>

Find Logics Academy and share progress on Twitter @LogicsAcademy

Flipgrid Submission Site: www.Flipgrid.com/Logics using your Google or Microsoft Education Login Credentials.