

Middle School Lesson Plan

From Ice to Dust: Exploring Mars Through Earth Analogs

Student Handout



AEROSPACE

STEM

Mystery Images

What do you **see**?

What do you **think**?

What do you **wonder**?

What do you already know about Mars?

Station 1: “Feel the Climate” – Temperature & Adaptation

Conditions of Climate Box A

Conditions of Climate Box B

Temperature of Climate Box A:

Temperature of Climate Box B:

What would you wear to survive in Climate Box A?	What would you wear to survive in Climate Box B?
Which climate cards belong in the Arctic?	Which climate cards belong in the Desert?

Station 2: “Geo Detective” – Soil & Rock Samples	
Which of the soil/rock types belong in each environment? Describe or draw them.	
Arctic:	
Desert:	
What might erosion/wind do to the Arctic?	What might erosion/wind do to the Desert?
Which geological process was likely to occur in the Arctic? Freeze-thaw or wind erosion?	Which geological process was likely to occur in the Desert? Freeze-thaw or wind erosion?

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Station 3: “Survivor Challenge” - Ecosystem Builders	
Arctic	Desert

Station 4: “Human on the Edge” - Survival Decisions	
Scenario Summary:	Survival Items to Bring:
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Fill in the Venn Diagram and compare the following:

- Temperature ranges
- Water availability
- Atmospheric conditions
- Geological features
- Life forms present
- Human survival challenges

