

Extreme Destinations

4th-5th grades

Overview

In this build series, students will reflect on life for humans in an extreme destination on Earth. They will think critically about a place on Earth with an extreme environment and consider how resources and life in this place differ from the environment in which they live. They will also explore how people living in these places use naturally occurring resources to survive.

Connect to Curriculum

This build series can be part of classroom activities that involve:

Life Sciences:

- Identifying ways that changes in an organism's environment affect its behavior and ability to survive.
- Understanding that humans obtain living and nonliving resources from their environments.

Earth and Space Sciences:

- Developing an understanding of Earth's major systems and how they support a variety of ecosystems and organisms.
- Identifying some of Earth's major natural resources on which humans depend for survival.
- Describing atmospheric and weather conditions.
- Investigating locations and conditions in which earthquakes and volcanoes occur.

Before You Begin

Assess and encourage prior learning by:

- Introducing and defining key vocabulary: *atmosphere*, *climate*, *land features*, *resource*, *system*, and *water features*.
- Reading about and researching different extreme environments and how people use the resources found there to survive. It is a good idea to consider atmosphere, climate, and natural resources.
- Reading fiction or nonfiction texts or watching videos about these places and the people who live there, such as documentary films, books, or stories about populations that live in the rain forest, in the desert, or at high altitudes.

Build and Share

Have students build and share their models by following the steps outlined in the Challenge Cards provided with this activity.



Tip:

Consult the Quick Start Guide of this activity pack for ideas on classroom management and organization.



Vocabulary:

- atmosphere:** the air or climate of a specific area
- climate:** the meteorological conditions of an area, including temperature, rainfall, and wind
- land features:** the surface or terrain of a given area of land
- resource:** something that can be used to support or help
- system:** a group of interacting elements forming a complex whole
- water features:** the conditions of a body of water



Reflect on the Experience

Encourage students to record and reflect on their models and ideas.

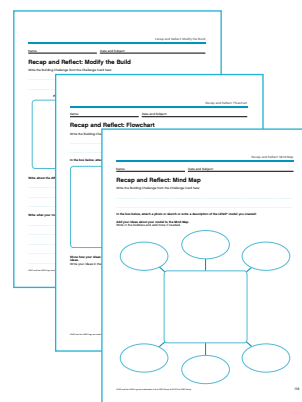
Extensions

After completing the build series, encourage further learning by:

- Writing a comic strip about the journey to the destination and what happened on the way or when settling there. (Language Arts, Visual Arts)
- Packing a suitcase or box with the things a human would need to survive in this place (e.g., images of things, collages of images, or actual artifacts). (Science, Visual Arts)
- Writing a comparison of life in one's own community with what life would be like for people living in an extreme environment. (Language Arts, Science)
- Repeating the same series of build statements and activities to investigate and think critically about another extreme environment, such as the arctic tundra or desert, or a very different geographical location, such as a coastal community or mountainous area. (Language Arts, Science, Social Studies)

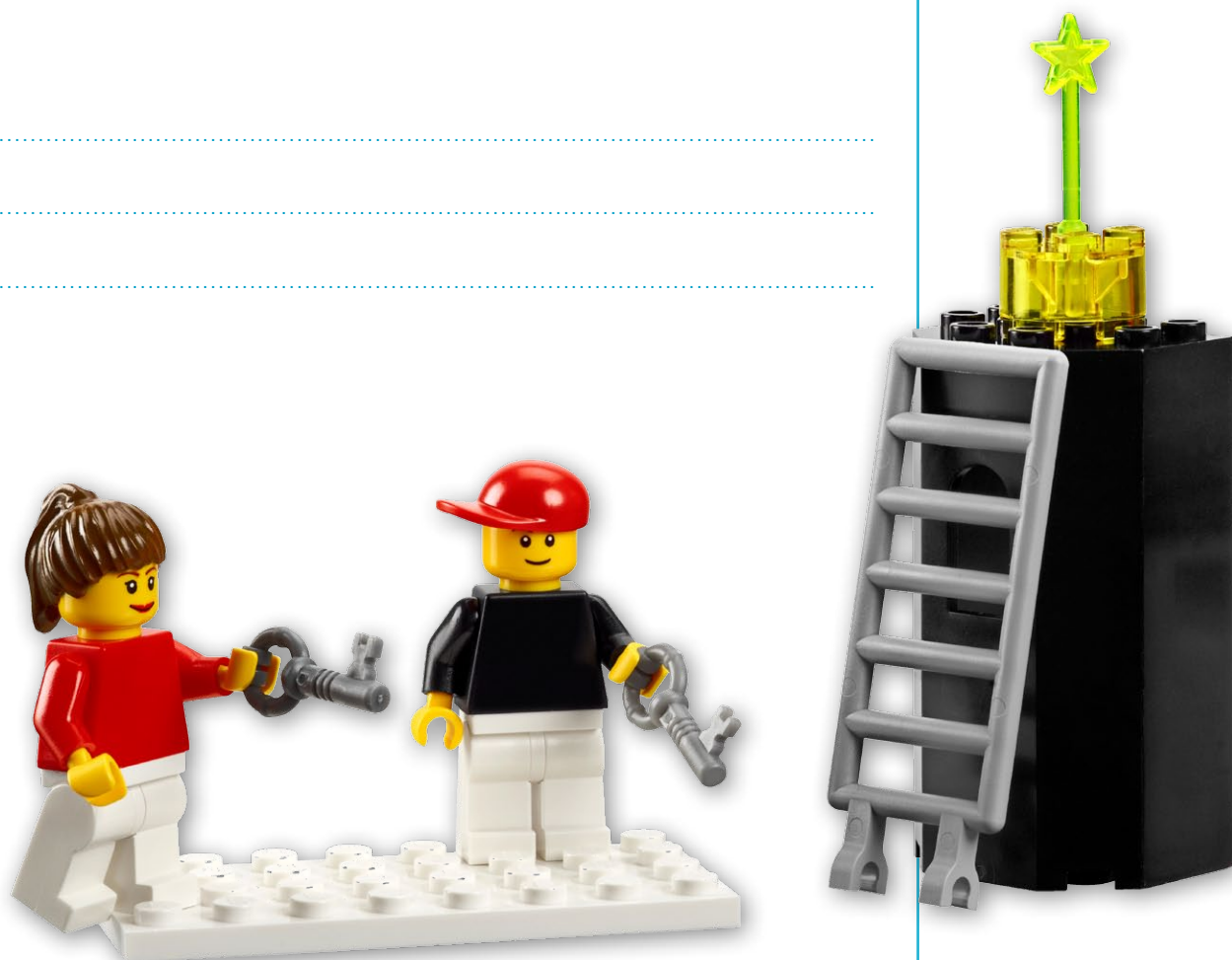
Facilitating Questions:

Notes:



Tip:

Use one of the Recap and Reflect Worksheets available in the Support Materials section of this activity pack to document the build experience.



Topic: Extreme Destinations

1 Think about



These four building tasks will help you express your thoughts and ideas about life in an extreme environment.

Build: Build a model that represents a place on Earth with an extreme environment.

Building Time: 3-4 minutes

Share: When the building time is up, take turns telling each other about what you have built.

Keep your model on your own building plate.



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2 Remember



Now that you've thought about a specific extreme environment, it is useful to recall how you use natural resources in daily life.

Build: Build a model that represents the natural resources you currently use each day to survive.

Building Time: 3-4 minutes

Share: When the building time is up, take turns telling each other about what you have built.

Keep your model on your own building plate.



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3 Imagine



Now you will use your imagination and creativity to think about these natural resources and if they are available in the extreme environment you chose.

Build: Build a model that represents how your access to these resources would be different if you were living in this extreme environment.

Building Time: 3-4 minutes

Share: When the building time is up, take turns telling each other about what you have built.

Keep your model on your own building plate.



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4 Conclude



Now you will build a model that sums up what you have learned so far.

Build: Build a model that represents how you would use the resources available in this environment to survive.

Building Time: 3-4 minutes

Share: When the building time is up, take turns telling each other about what you have built.

Keep your model on your own building plate.



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