

Design Challenge: Animal Crossings



Materials

- *Crossings: Extraordinary Structures for Extraordinary Animals* by Katy S. Duffield from your local library or view an animated read aloud on YouTube.
- Obstacle Templates (attached)
- Obstacle Cards (attached)
- Blocks or other building materials*
- Animal figurines (optional)

*Note: Students may design bridges, underpasses, tunnels, etc. out of a variety of available materials including blocks, LEGO pieces, playdough, paper, and tape.

Learning Objectives

- I can design and build a wildlife crossing for animals to travel over, through, or under an obstacle
- I can explain why an animal crossing would keep wildlife safe

Skills

-  Language Development
-  Problem Solving
-  Creative Play
-  Math Skills

Exploration

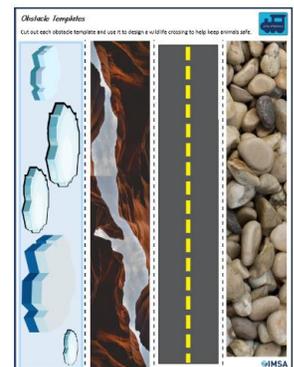
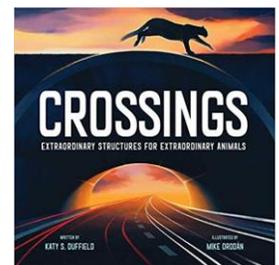
Begin this activity by asking students to think of ways that they move over, through, and under objects while they are traveling. Encourage them to think about what types of structures (i.e., tunnels, bridges, underpasses) allow them to accomplish these tasks as well as what they are crossing (i.e., rivers, roads, mountains). Then, ask students to consider these same obstacles impact animals:

- **What types of things might an animal need to cross over, through, or under?**
- **What kind of structures could be built to help animals cross these obstacles?**
- **Who might build these structures? What would they be made of?**
- **How might these structures be helpful to animals?**

Then, read (or view) *Crossings: Extraordinary Structures for Extraordinary Animals*. Take adequate time to explore each page, identifying the animals that are impacted and why a crossing is necessary to keep them safe.

Explain to students that they will be creating their own wildlife crossings to help their animal(s) travel safely. Provide learners with an Obstacle Template and/or present a scenario to them from the Obstacle Cards. Students may use available materials to create a tunnel, overpass, bridge, or other crossing for their animal. Encourage students to reflect on their design:

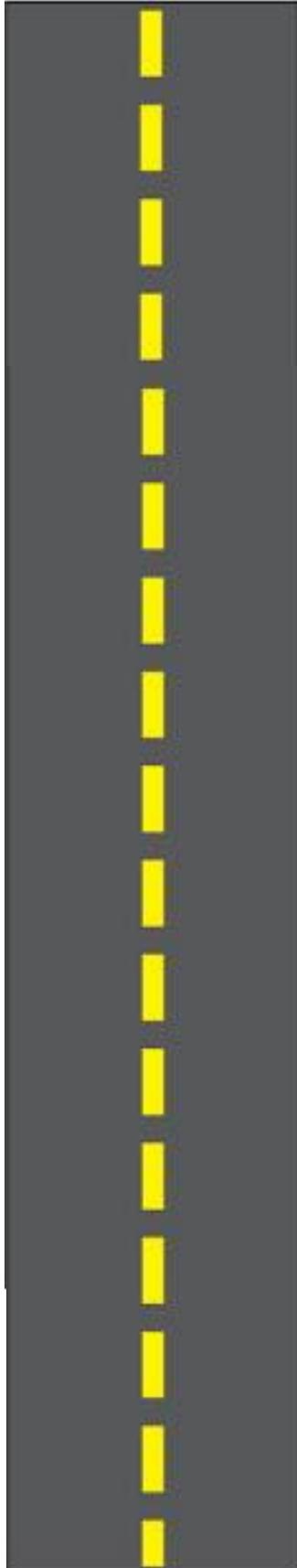
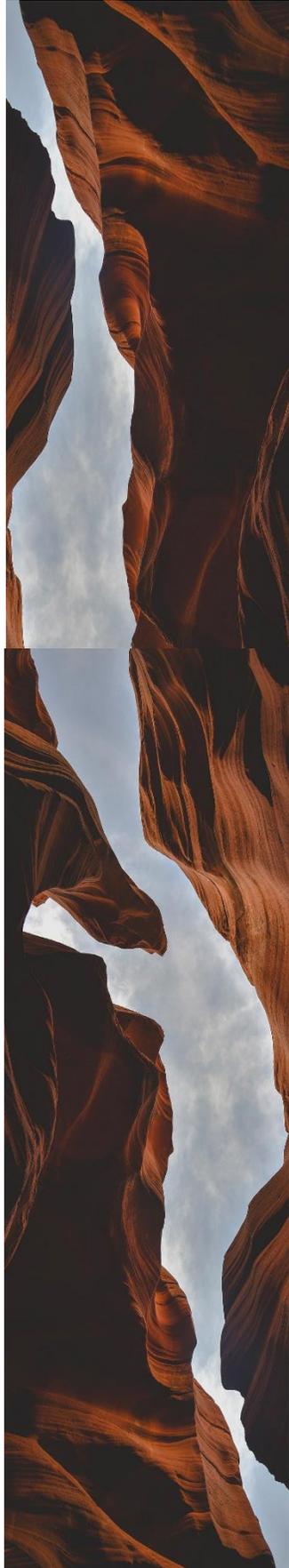
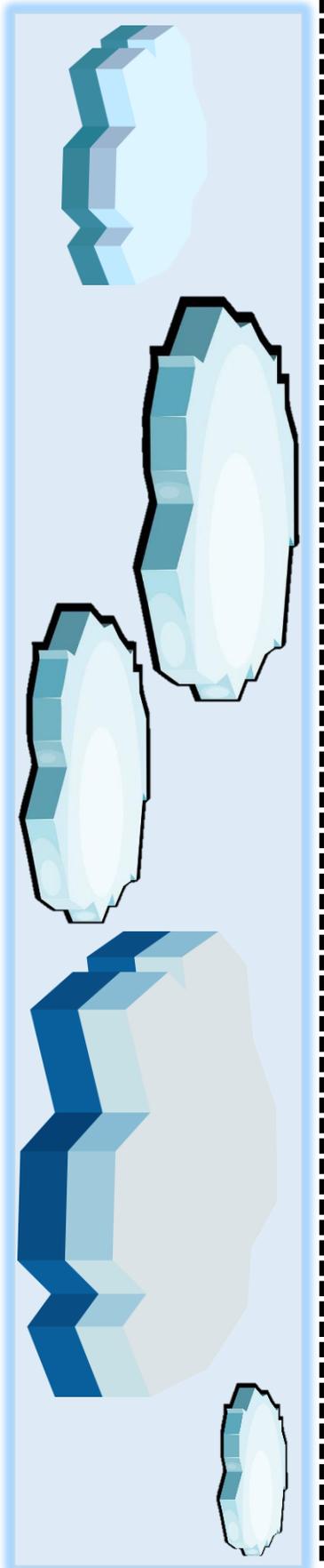
- **What type of crossing did you build for your animal? How will it be used?**
- **How will your animal stay safe?**
- **Why might your animal need to cross over this obstacle?**
- **Do you think your crossing would work for all types of animals? Why or why not?**



Obstacle Templates



Cut out each obstacle template and use it to design a wildlife crossing to help keep animals safe.



Obstacle Cards



Consider each scenario and design a wildlife crossing to help keep animals safe.

1

A crossing is needed for animals to travel under a large mountain that supports a busy road.

2

A crossing is needed for animals to travel through large ice glaciers.

3

A crossing is needed for wildlife to safely travel over construction.

4

A crossing is needed for forest animals to travel under a railway.

5

A crossing is needed for wildlife to travel over a raging river that leads to a large waterfall.

6

An underpass is needed for animals to travel beneath a busy subway system.