

# Third Grade – Trimester Three

## Life Science Design Challenge

### Background/Scenario:

NASA astronauts just returned from a trip outside of our solar system. With them, they have brought one animal that was found on an alien planet.

### Problem Statement

This animal has specific characteristics and specific needs. The astronauts are bringing this animal to a zoo and your team has been hired to design and construct an appropriate enclosure to allow for the animal to survive and thrive.

### Requirements

Here are the specifics for the animal:

- **Needs an external heat source to regulate body temperature.**
- **Begins life in an aquatic environment and breathes with gills during this time**
- **As an adult lives on both land and water**
- **Lungs form in adults and gills become non-functioning**
- **Has permeable skin that allows some water and air through (water and the air in their environment must be kept fairly clean and free of pollutants)**
- **Needs to be kept moist**
- **Eats organisms similar to Earth's fish**

### Constraints

\*Only use the materials that are provided

\* This challenge must be completed before starting instruction on the unit.

\*After completing the unit, students will improve their enclosure based on their knowledge of habitats.

