JOURNEY through the UNIVERSE

ARE THERE OTHER NEIGHBOR-HOODS LIKE OUR OWN?

GRADES K-4

LESSON 1: MY HOMETOWN

LESSON ABSTRACT

In this lesson, students critically think about what resources are needed for survival, and where these resources can be found. First, students define the essential resources needed for survival by considering themselves on an isolated island, far from the comfort and familiarity of their own neighborhood. Through discussion, they distinguish the non-essential needs—TV, refrigerator, car, etc.— from the essential—water, food, shelter (a reasonably comfortable environment), and air, and recognize tools that can be used to secure essential needs—sharp stick, fishing line, etc. They then build a three-dimensional model of their own neighborhood—their home and extended community—and identify where the essential resources are found.



My Hometown

Overview

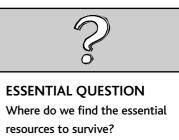
What are the essentials for life, as we know it, to survive? Air, food, shelter, and water have always been the essentials for human life. Whether camping in the woods, vacationing at the beach, or exploring the Moon, we can't survive without these items.

In the world that we humans have built for ourselves, our constructed environment, it's pretty easy to find most of our essential needs. Air is all around us, although in some areas it is so polluted by human activities that people wear masks to breathe the air. We get our food at grocery stores, restaurants, fast food places, and some of us even grow our own vegetables or raise our own animals. Shelter comes in many forms and is not only the places we live — such as apartments, houses, mobile homes – but also the clothes we wear to protect us from the cold or from the Sun. Water we get from faucets or wells or buy in bottles at the grocery store.

We don't need all of the things we have constructed to get our essential needs. For a long time, humans' essential needs were met in the natural environment. For example, in a forest there is fresh air to breathe; food such as nuts, berries, fruits, and fish; a cave can be a good shelter from the weather and from cold; and a stream provides lots of fresh water.

But not all natural environments are so hospitable to human survival. Many natural environments right here on Earth require us to bring our needs with us to survive. Some of these environments are underwater (no air, no shelter), deserts (no water), or very cold places (no shelter and no food).

In this activity, students critically think about what is needed for survival, and more importantly where it can be found. Students will explore how they would meet essential needs in an unknown environment and also in their own neighborhood. Through this process they begin to identify local resources for air, shelter, food, and water. They will build a three-dimensional model of their neigh-





OBJECTIVES

Students will:

- Identify the basic requirements needed for survival.
- Identify resources for survival found within their own community.
- Follow directions to build a model of their neighborhood.
- Draw a conclusion about the resources in their neighborhood.

borhood based on these local resources, so that they can see what is necessary in their own environment for them to survive.

Their model should also include some of the non-essential resources that we also use. For example, banks (for money), libraries (for knowledge), or gas stations (for transportation). These resources are also important to those living in a constructed environment and should be identified.

Procedures

- 1. Put students into cooperative groups.
- 2. Have students imagine that they have been stranded on a deserted island. In groups, students should brainstorm a list of the types of materials and resources that they would need to survive until they could be rescued.
- 3. Once the cooperative groups have completed their list they will separate all of the resources into two different categories. Category 1 is Essential Needs, Category 2 is Non-essential Needs. Obviously a video game is not essential, but students might argue that matches are essential. Matches can help start a fire that will keep you warm.
- 4. Once the groups have compiled their Essential Needs category, explore with them as a class why they need each item. The class should be able to determine that each item allows you to obtain a fundamental essential need for human life (e.g., air, food, water, shelter, or a comfortable environment). For instance, a spear might be viewed as an essential need because it allows you to catch fish - which is food.
- 5. As a class consolidate all the groups' essential needs into a master list of the fundamental essential needs for human life (e.g. air, food, shelter, and water, or a comfortable environment). Students will now explore how these needs are met in their own neighborhood.
- 6. In their groups, have students define their neighborhood or community. Then, have them use the craft materials to create a model of it. As they build the model, encourage the students to think about their class' list of fundamental human needs and where they might find the resources to meet these needs in their community.
- Once students have finished their model community, they will create a color key to indicate where each of these resources might be found within their community. Example: "Food" may have a blue star, "Shelter" may have a yellow dot.
- 8. The groups will now use the key to label on their model where these important resources might be found.
- 9. Once students have completed and labeled their model, have them present their model to the rest of the class.



MATERIALS

- Sheets of white poster paper
- Miscellaneous art supplies for model building, such as:
- Crayons or markers
- Meter sticks
- Shoe boxes
- Milk cartons
- Construction paper
- Juice boxes
- Tape
- Glue
- Scissors

Questions and Conclusion

To assist students in presenting their model communities to the class, have them think about the neighborhood or community that they live in. How big is it? What resources are found there? Where are the resources found? How are many of these resources important for their survival? After this exploration, the students might write up what they learned.



ASSESSMENT

Students' work can be evaluated using the following rubric:

4 Points

- All parts of the model are complete and accurately labeled.
- The presentation accurately describes the needs for human survival and the importance of the elements of the community.
- Presentation is clear and understandable.

3 Points

- All parts of the model are complete and labeled.
- The presentation accurately describes the needs for human survival and the importance of the elements of the community.

2 Points

- Model parts are few but acceptable.
- Some parts are labeled.
- Presentation content is difficult to understand.

1 Point

- Model parts are few but acceptable.
- Color key not complete or not used.
- Presentation content is difficult to understand.

0 Points

- Incomplete model.
- Off topic or unrelated.
- Presentation not completed.

Transfer and Extension

- Research some unique environments, such as the ocean, Antarctica, or the Moon to see if they might have the fundamental resources necessary for life to survive.
- 2. You are going on a six-month trip. Because of limited space, you will only be allowed twenty-five pounds of personal belongings. What would you bring and why?
- 3. Other animals, such as termites, ants, bees, chimpanzees, lions, and coral, live in communities. Research these communities to see how each member of the community is important to its survival. How do members of these communities get the resources needed for survival?