

K-2 Online Curriculum Activities

Habitat Hunt Cross-Curricular Extension

Habitat Hieroglyphics

Kindergarten. First and Second Grade Science and Math Extension
(could be a bit too complex for Kindergarten)

SCA Theme: Habitats

Focus Question

What do living things need to survive?

Activity Synopsis

Students will think about their homes to learn about the concept of habitats. Students will use shapes and symbols to create pictures that represent their own homes.

Time Frame

2 days (2 activities)

Objectives

The learner will be able to:

- Name the basic needs of living things (air, food, water, shelter and space)
- Define habitat as the place where a plant or animal can obtain what it needs to live
- Use data to create a bar graph
- Compare, sort and group objects using symbols

Standards

Science – K-1.4, K-2.1, K-5.1, **1-1.1**, 1-1.3, **2-1.3**, 2-2.1, 2-2.1, 2-2.3, 2-2.4

Math – K.G.1, K.G.2, K.G.3, K.MD.1, K.MD.2, K.MD.3, 1.G.1, 1.G.2, 1.MD.4, 2.G.1, 2.MD.10

ELA – Speaking/Listening – K.1, K.3, K.5, K.6, 1.1, 1.3, 1.5, 1.6, 2.1, 2.3, 2.4, 2.6

Materials

- Several red, green and blue pieces of construction paper
- Crayons or other drawing utensils
- Hieroglyphics key
- Blank bar graph template

Procedure

1. Model the procedure for creating a hieroglyph following the steps below. Explain that each student will create his/her own hieroglyph.
2. Ask each student where he/she lives and provide the student with the corresponding construction paper.
City or town - **Red**
Country - **Green**
Underwater – **Blue**

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3. Once each student has paper, the teacher will then proceed through each of the following clues one at a time, allowing children to add parts to their paper.

Do you live in a house, an apartment, a cave, or somewhere other than a house, apartment, or cave?

- If you live in a house, draw a triangle in the top left corner.
- If you live in an apartment, draw a square in the top left corner.
- If you live in a cave, draw an "X" in the top left corner.
- If you live somewhere other than a house, apartment, or cave, draw a circle in the top left corner.

How many people other than you live in your home?

- For each person other than you draw one horizontal line in the bottom left corner of the paper.

How many bedrooms are in your home?

- Place a capital letter "B" in the middle of your paper for each bedroom in your home.

Which food do you like best? Pizza, hamburgers, hot dogs, green beans or tree bark?

- Draw a triangle in the top right corner if it is pizza.
- Draw a circle in the top right corner if it is hamburgers.
- Draw a line in the top right corner if it is hot dogs.
- Draw a square in the top right corner if it is green beans.
- Draw a scribble in the top right corner if it is tree bark.

Where do you get drinking water from? Faucet, refrigerator door, water bottle or river?

- Draw an "F" in the bottom right corner if it is the faucet.
- Draw a "D" in the bottom right corner if it the refrigerator door.
- Draw a "B" in the bottom right corner if it is the water bottle.
- Draw an "R" in the bottom right corner if it is the river.

Here is an example of a fish hieroglyph (see example hieroglyph):

The student who created this hieroglyph lives in the city in an apartment. The apartment has three bedrooms. Two other people live in the apartment with the student. The student's favorite food is pizza and drinks water from the faucet.

4. The class can then participate in the following activities using their habitat hieroglyphs.
 - Students can trade and "read" each other's hieroglyphs using the key.
 - Students can find their "twin" or someone who has 2 things the same as theirs.
 - The teacher can put a sample on the board and ask, "Who matches this hieroglyph in one way?" (This is where students are learning to compare, sort and group objects and how to use and read symbols).
 - You could also make a bar graph of each question (how many student live in a city or town, the country, or underwater). Do the first couple graphs as a class and then have your students make the others based on the data you put on the board.
5. Review the results and explain how each of the questions represents something that they need: shelter, space, food and water. Space can be explained as the number of people in the house compared to the number of rooms. Ask the students if they would like to give up their home, their food, their water or their space. Presuming they all say no, explain that they need food, water, shelter, and space to survive. These elements make up a living thing's habitat.

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6. Ask the students if any of them live underwater, in a cave, eat tree bark or drink at the river (again, presumably the answer will be no). Are these things people normally do? (Answer: No). Can these be considered part of people habitats? (Answer: No). Are there plants or animals that live underwater or in caves or who eat tree bark or drink at the river? Yes, so other living things can live in habitats different from humans. Once the class has completed activities using their hieroglyphs, they can be arranged in a mobile to be hung from the ceiling.

Follow-up Questions

Has anyone ever changed habitats (moved)? Were all your habitat needs met in your old home?

Assessment

Using a key, the student will create a hieroglyph of an animal's habitat. First have each student pick an animal. Next have them use the following questions to create their animal's hieroglyph. (Have students put the animal they picked on the back)

Materials:

- Blue, brown and red construction paper cut into big and small sizes
- Writing utensils
- Animal cards

Questions might include:

- Does it live in water, on land or both? (water = blue card, land = brown card, both = red card)
- Does it need a large space or a small space? (large space = large card, small space = small card)
- Does it have feathers, scales or hair? (feathers = draw an "F" at the top, scales = draw an "S" at the top, hair = draw a "H" at the top)
- Does it eat plants, animals or both? (plants = draw a circle in middle of card, animals = draw a triangle in middle of card, both = draw a square in the middle of the card)
- Does it live with other animals or by itself? (other animals = draw 5 lines on the bottom of the card, by itself = no lines on card)

Example animals:

- Fish
- Mouse
- Tiger
- Cardinal
- Alligator
- River otter

Scoring rubric out of 5 points (one point for each correctly depicted symbol).