

# BUSY BUILDERS

## *Kindergarten: Animals Impacting Their Environment*

### OVERVIEW

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For this activity, **head to the Ecosystems Gallery**. On the Upper Level, you will find the [Desert Zone](#) in the middle of the gallery. Lead your group into the Desert Zone to learn more about how animals change their environment in this extreme location.

#### **Next Generation Science Standards**

This lesson supports the following performance expectation:

- K-ESS2-2      Students who demonstrate understanding can construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

#### **Focus Question**

How do animals use what's around them to create what they need to survive?

#### **Changing Environments**

Plants and animals are constantly changing the environment that they live in. Plants have roots that can grow through concrete or into underground pipes. Animals use materials to build homes, hide food, trap other animals, and more. We see evidence of humans modifying their environment every day in our cities, houses, farms, or other structures, but often don't notice how much animals change the environment as well.

Ants are an example of an animal that is constantly modifying, or changing, the environment to suit its needs. Ants work together to gather materials and bring them back to the colony for use. In the Desert Zone, you will see two different types of ants working to carry earth and food to their colonies and transport waste out. Each colony has a foraging area and a nest area, with pipes connecting them.

# SMALL GROUP CHALLENGE

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Help your group explore how animals change the environment in which they live. Students should work together to complete the observation guide for the Desert Zone.

1. Tell your group that you are searching for ants. You will see two different species of ants inside the gallery. You may observe either colony.
2. Tell students that they are focusing on how ants change their environment by moving things around and building things.
3. Have the students observe the ants for 1 minute, watching for what changes the ants make.
4. Assign one student to sketch a group of ants they watched on the observation guide.
5. Ask students the following questions:
  - How are the ants changing their environment? *Ants alter their environment as a group to build a home and gather food.*
  - How do you know they're changing the environment? *You should see ants moving material around from one area to another. Over time, the two areas may look drastically different.*

# VISIT DEBRIEF

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As you wind up your visit to the Ecosystems Gallery, ask students to reflect on what they found in the Desert Zone. Have students record a response to the focus question in their notebook: *How do animals use what's around them to create what they need to survive?*



# IN THE CLASSROOM: GOING FURTHER

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You will need:

- Writing tools
- Poster or Drawing Paper
- Desert Zone Observation Guides
- Student Notebooks

## Answering with Evidence

Lead a discussion with students about how humans change the environment to meet our needs. List or draw examples of ways that we have modified the environment. You may choose to walk around the school and find specific examples such as: removing trees to place buildings, creating gardens, cutting grass, picking flowers, etc.

Tell students that you have a friend that told you “only humans have the ability to change their environment to meet their needs.” Students will create a poster and a presentation that convinces your friend that they are wrong:

1. Split the class into small groups.
2. Have each group come up with three examples of how animals change their environment to meet their needs. They should reference their observation guide and notebooks from the Science Center visit.
3. Students should draw or write their examples on the poster paper.
4. Groups should share their poster and arguments.
5. *Optional:* Have a friend or another teacher come in as the person that thought only humans can change their environment to listen to the student explanations.



# DESERT ZONE OBSERVATION GUIDE



Find 2 examples of ants moving an object from one area to another.

Draw your examples.

A large, empty rounded rectangular box intended for drawing the first example of ants moving an object.A second large, empty rounded rectangular box intended for drawing the second example of ants moving an object.