Create Your Own Habitat

An In Class Exploratory Activity

Created by The Owl Teacher

A fun way to explore habitats in your classroom while studying ecosystems!

Mini-Aquarium Guppy Habitat

Materials:

20 oz. bottle without cap
Water plant
Guppy
Fish Food
Conditioned Water*

Directions:

1). Clean out a 20 oz. bottle and let it dry.
2.) Fill the bottle with conditioned water*
3.) Put a water plant in bottle.
4.) Add guppy.
5.) Feed daily.

***Notes:**

With this project, I just simply went to the pet store and requested a guppy. These are Feeder Fish for much larger fish. These are typically ten cents each (give or bag with water and air. the water into the bott that your water is alre making one habitat. Ho they will likely place sev water. Therefore, you tap water has metals i conditioned, you can pu can then mix with a gall bottle for the fish.

Just a small part of th

Mini-Terrarium Cactus Habitat

Materials:

Shoebox or plastic container
Plastic wrap
Sandy soil
Cactus (one or more)
Small rocks
Spray bottle with water

Directions:

1). Decide if you are going to use a shoebox or plastic container. If you are going to use a shoebox, line it with plastic wrap.
2.) Place sandy soil in the container/shoebox. Make sure the soil is deep enough for the cactus and its roots.
3.) Place the cactus in the soil and place the rocks around them. Lightly spray the soil with the water.
4.) Place your desert ecosystem in a sunny location. Every other day, use your finger to observe h add a small amount of water. IF t careful not to add too much wate

***Notes:**

You may wish to have more than o be found at nearly any local store, Amazon. To make sandy soil, I just playground sand. However, they do soil. Either will work. The purpose shoebox from soaking up the wate just fine. The rocks I collected fro

Mini-Terrarium Earthworm Habitat

Materials:

Earthworms
Dirt (From outdoors)
Spray bottle with water
Grass and dead leaves
Apple slices
Large jar or gallon jug
Sand
Ruler
Brown paper bag (lunch)

Directions:

1). Fill the container 2/3 full with alternating layers of dirt and sand. (Do not use potting soil). Layers should be obvious and easy to observe.
2.) The dirt should be damp, never dry. The dirt can be moistened with the water in the spray bottle. It is best to maintain the same level of dampness of the dirt in which the worms were found or bought.
3.) After the layers of dirt and sand have been prepared and moistened add the leaves, apple, and then the earthworms. Le cover the outside of the jar with a brown paper lunc dark.

***Notes:**

I have bought night crawlers in the hunting and fishi superstore such as Meijer, Walmart, and so on. Thes that appears to be potting soil. I believe that as lon fertilizer it can still be used. My observations have b is not as "exciting" as the others to the students be see things in action or happening as well as other env Earthworms tend to bury themselves underground much of "nothing." What students will note is the la may wish to forewarn students of this.

Mini-Terrarium Ants (in Colonies) Habitat

Materials:

Clear quart-size jar with lid
Sandy soil or sand
Orange Slices or nuts
Ants (typically red ants)
Water
Medicine Dropper
Small plant with roots

Directions:

1). Add the sand or sandy soil into the quart size jar about ¼ full.
2.) Add the ants.
3.) Add an orange slice and a few nuts along the top.
4.) Place a small plant into the sand (or sandy soil) with the roots covered.
5.) Add one or two drops of water, using the medicine dropper, to the top of the soil.
6.) Place the lid on the jar and keep it out of direct sunlight.

Mini-Terrarium Cricket Habitat

Materials:

2-Liter soda bottle w/cap
Scissors
Ruler
Soil From outside
Small rocks
Small plant with roots (such as grass)
Water in spray bottle
Twig
Cricket
Lettuce leaf or apple slice

Directions:

1) 3 inches from the bottom of the bottle make a cut all the way around the bottle. This will give you now a top piece and a bottom piece. Take the top piece (with the bottle neck on it) make 6 one inch slits around the bottom edge evenly spread out. This will help it expand to slide over the separate bottom piece that was just cut. (I strongly recommend teachers do this part.)
2.) Fill bottom piece of the bottle with a thin layer of rocks. Put one or two rocks aside to hold up the twig later in step Four.
3.) Place soil on top of the rocks but not all the way to the top of the cut section. Just enough to cover the rocks and the roots of the plant. Then plant the small plant in the soil.
4.) Arrange the extra rock(s) and twig on the soil. Add a piece of lettuce or fruit.
5.) Moisten the soil with the spray bottle. Put the top piece on the bottom by expanding the cut sections and pushing in on the bottom piece. Then open the lid and drop the cricket in. Put the lid back on.
6.) Put the terrarium in a sunny spot (but not direct sunlight). Remove the top piece as needed to add food, but watch for the cricket to "try to escape."

***Notes:**

Crickets are feeder animals and can be found for approximately ten cents at local pet stores. You will need to change the food daily.

Mini-Ter Decompos

Materials:

Clear quart-size jar with screw-on lid or ziplock bag
A few small food scraps (bread, fresh fruit, or vegetables, or cheese. NO meat or fish)
Masking tape
Small hand towel
Brown Paper Bag (lunch)

Directions:

1). Place food scraps into the jar or
2.) Wrap masking tape around the a
3.) Fold the towel and place the jar
to keep the jar from rolling.
4.) Cover with the brown lunch pape
5.) Observe every other day (M, W,
weeks.

***Notes:**

IF you choose to use a container ot
sure that it is sealed tightly to prev
Also check for allergies in your class
take some time to get going, depend
cool.

Can have several habitats going on at once – a different one per group, or have one at a different station.

Don't want multiple habitats?
Choose one and go with that!

Several different habitat choices to create in your classroom.

Have students create their own habitats


Name _____

Create Your Own Habitat Activity

Your task is to design a small habitat for a living organism that provides for all of its needs.

What small organism are you going to create a small habitat for?

What does your living organism need in order to survive?

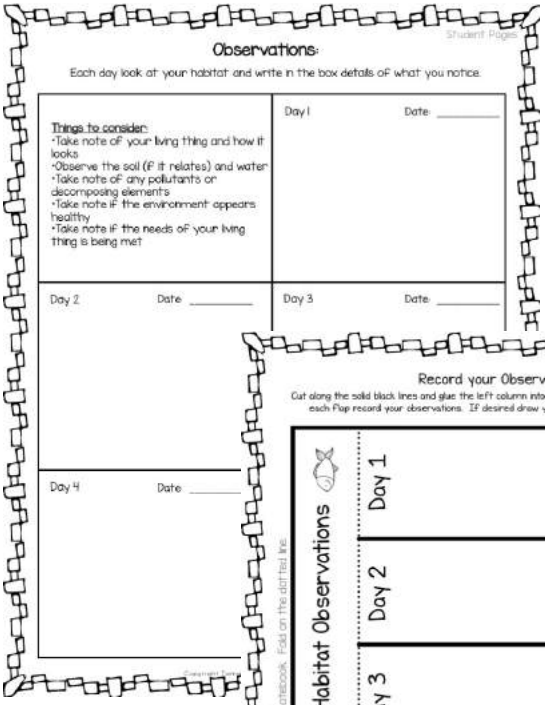
What will you use to house your animal in? (Examples: A 2-Liter bottle, Plastic containers, 1-Liter bottle, Glass Jar, Milk Jug, etc.)

What other materials will you need to create your habitat?

How will your habitat provide all your living thing's needs? Explain.

Now submit your plan to your teacher for approval.

Observation Forms


Observations:

Each day look at your habitat and write in the box details of what you notice.

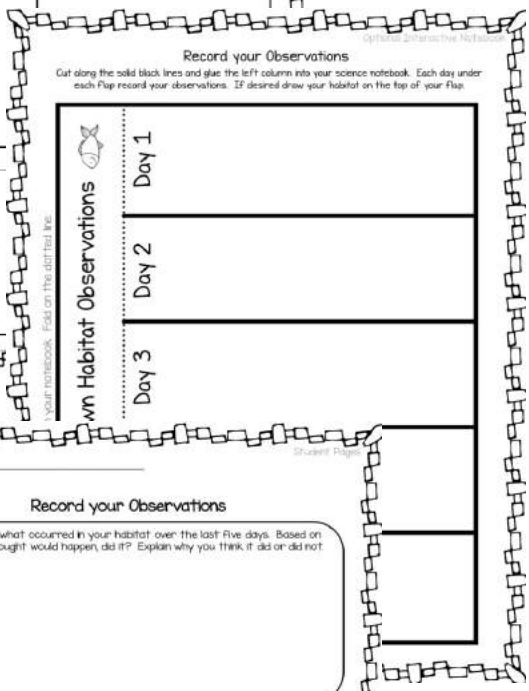
Things to consider:
•Take note of your living thing and how it looks
•Observe the soil (if it relates) and water
•Take note of any pollutants or decomposing elements
•Take note if the environment appears healthy
•Take note if the needs of your living thing is being met

Day 1 Date:

Day 2 Date:

Day 3 Date:

Day 4 Date:


Record your Observations

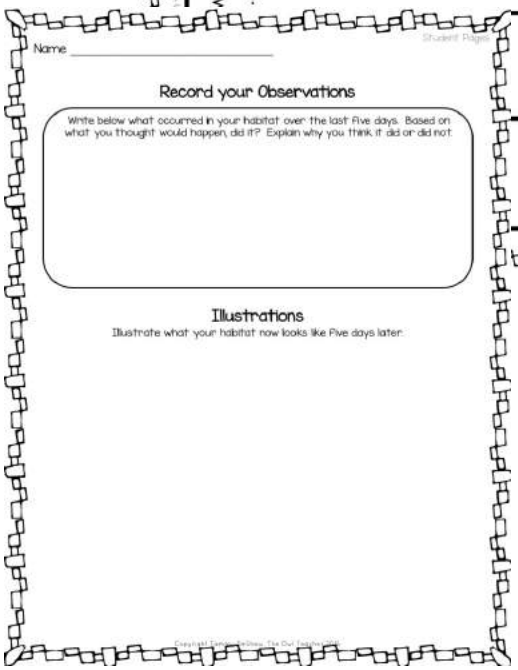
Cut along the solid black lines and glue the left column into your science notebook. Each day under each flap record your observations. If desired draw your habitat on the top of your flap.

Habitat Observations

Day 1

Day 2

Day 3


Name _____

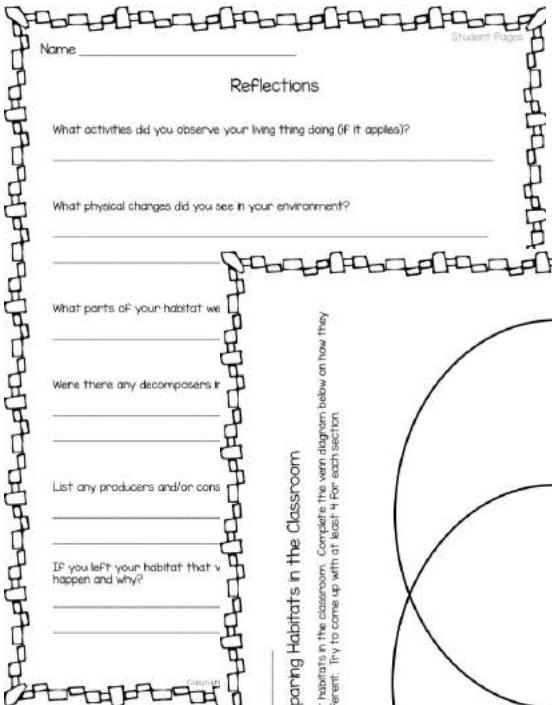
Record your Observations

Write below what occurred in your habitat over the last five days. Based on what you thought would happen, did it? Explain why you think it did or did not.

Illustrations

Illustrate what your habitat now looks like five days later.

Reflections


Name _____

Reflections

What activities did you observe your living thing doing (if it applies)?

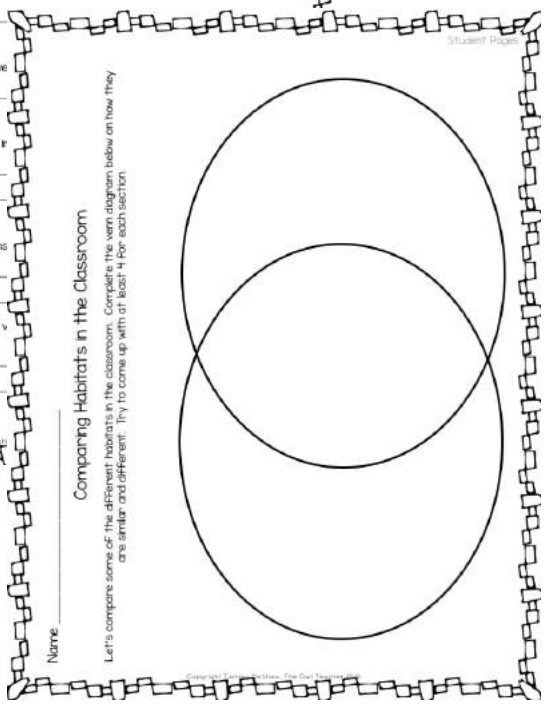
What physical changes did you see in your environment?

What parts of your habitat we

Were there any decomposers ir

List any producers and/or cons

If you left your habitat that v
happen and why?


Name _____

Comparing Habitats in the Classroom

Let's compare some of the different habitats in the classroom. Complete the venn diagram below on how they are similar and different. Try to come up with at least 4 for each section.

Questions &
Comparing Habitats