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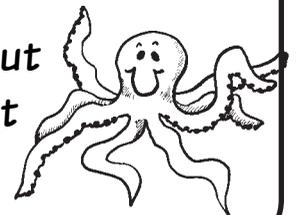
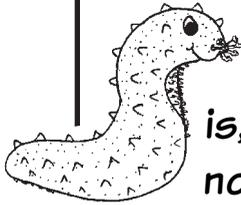
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For my notebook

FIVE KINGDOMS OF LIVING THINGS

You are about to learn about many different kinds of living things. You will also learn how to find, gather and investigate some common ones. To learn and share information about living things, scientists decided they needed to be able to group them somehow. To understand how important this is, imagine going to a store with no groupings. If there was no specific area for meat or bread you would have to search the whole store to find what you wanted. One loaf of bread might be next to a steak while the kind you want is under some broccoli. There are many more living things than there are items in a grocery store, so organizing them is vital. Most scientists agree that all living things can be split into 5 main groups called kingdoms. The two kingdoms we are going to learn about this year are the Plant Kingdom and the Animal Kingdom. Every kind of animal from a worm to an eagle is in the animal kingdom. Each kingdom can be split into smaller and smaller groups until you get to each species, (*spee-sheez*) like a dog, a bald eagle or a person. "Species" is a grouping, like kingdom but living things of the same species are very much alike. Bald eagles are one species. Every living thing has a scientific name which tells scientists what species it is. Tyrannosaurus rex is a scientific name that means "tyrant lizard." The scientific name of a person is Homo sapiens. That's you. The scientific name of an octopus is easy to remember. It's Octopus.

We will learn about many incredible living things, but first let's learn how scientists put all these different things into order.



Five Kingdoms Lab #1: CLASSIFYING CRITTERS - instructions

Material:

copy of lab sheets (3 pages), pencil
scissors
colored pencils (optional)

Aloud: *Classifying animals is not as easy as it looks. Scientists do their best, but there are plenty of mistakes made and there will be plenty still left to discover when you are grown. Some animals look very much alike but are not the same species of animal. Other times animals that are the same species, don't look alike at all. Does a caterpillar look at all like the butterfly it will grow up to become? Male and female animals of the same species often look very different. Imagine a friend, exploring the planet Blobonia sends you Blobonian life forms in separate containers and it is your job to pair up the male and female of each species. You will struggle to do your best but luckily, your friend has since had time to study the creatures in their natural habitat. Just in time, he sends along a classification key to help you in your quest. Use the key to learn how scientists divide animals into groups based on their characteristics.*

Procedure:

Lab Day:

1. Carefully cut around each of the Blobonian life forms on page 1 of the lab. Make sure not to cut off the number near each one.
2. Go to lab page 2 and complete the hypothesis. Pair up the creatures as best you can and write your guesses down on the sheet.
3. Lo and behold the "Classification Key to Blobonian Life" arrives in your lab. Using one creature at a time, start on the left and follow the path that leads to the identity of each creature. When you get to where the creature belongs, write his/her number in the circle provided.
4. Complete the lab sheet.

Possible Answers:

- #2. Animals pair as follows: 2 and 10; 8 and 9; 4 and 11; 1 and 6; 7 and 12; 3 and 5
- #4. By studying nature scientists can find out what animals eat, how they live and which animals are really the same species. They can find out how animals live with each other, how they find food and how they avoid becoming food.

Conclusion / Discussion:

1. How important is it to observe living things in order to study them? People used to shoot things and study the bodies. What were they missing?
2. Without some system of grouping animals we wouldn't even have names like "bears" or "birds." Try to describe an animal like a beaver without using its name or any group names. How about describing a moose without using any group names (even names like horse or deer)?
3. How difficult would it be for people to share information about animals if we didn't have a classification system?

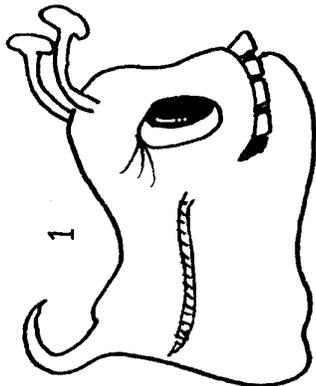
For More Lab Fun:

1. Imagine what the Blobonian world might be like. Color the Blobonians and then glue them to a decorated background.
2. Spread a big piece of butcher paper on the floor or table. Using the key as a guide, make your own classification key for several shoes. Start with all shoes together. Choose a characteristic to divide them in about half. Split each group further, writing down the characteristic you have chosen. Continue until you have each shoe in its own place. Bring in a "guest," give them a partner of one of the shoes and see if the key leads them to the correct shoe.

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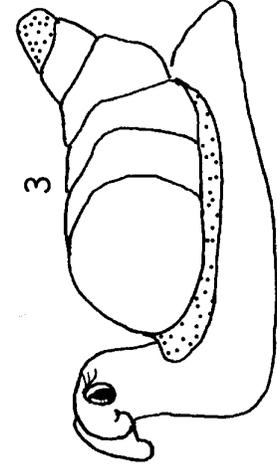
Five Kingdoms #1: CLASSIFYING CRITTERS -pg. 1



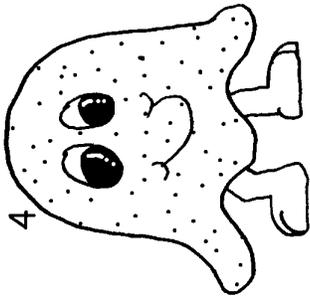
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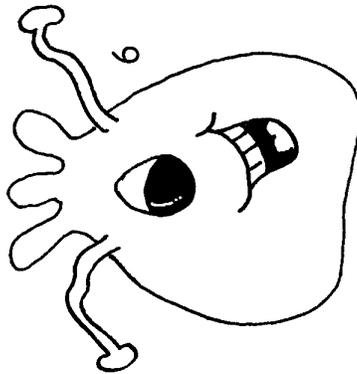
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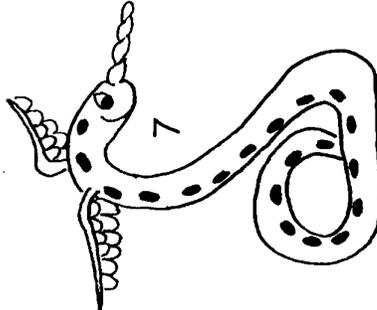
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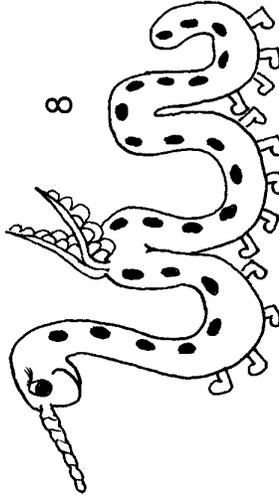
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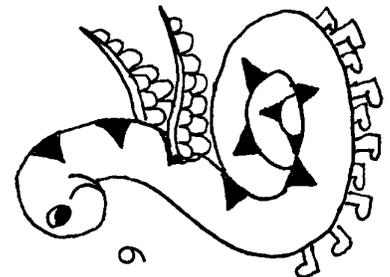
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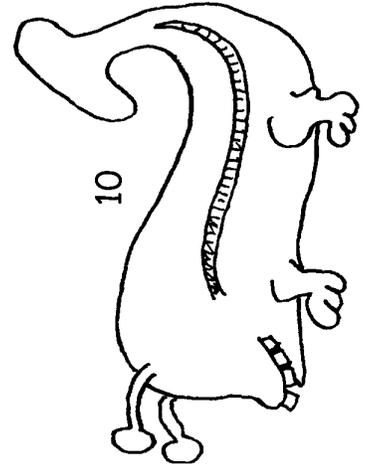
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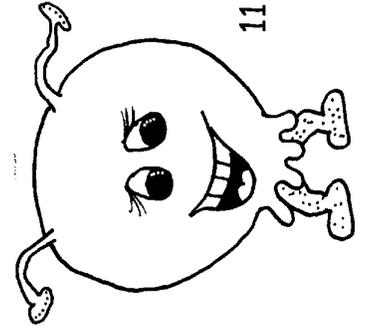
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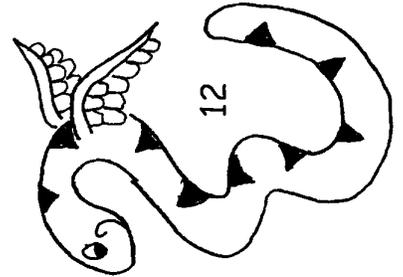
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NAME _____ DATE _____

Five Kingdoms Lab #1: CLASSIFYING CRITTERS - pg. 2

HYPOTHESIS:

1. By looking at the specimens sent to me I would pair them up like this:

Pair #1: Number _____ and _____ Pair #2: Number _____ and _____

Pair #3: Number _____ and _____ Pair #4: Number _____ and _____

Pair #5: Number _____ and _____ Pair #6: Number _____ and _____

RESULTS:

2. In reality, the critters should be paired up like this:

Pair #1: Number _____ and _____ Pair #2: Number _____ and _____

Pair #3: Number _____ and _____ Pair #4: Number _____ and _____

Pair #5: Number _____ and _____ Pair #6: Number _____ and _____

CONCLUSION:

3. My pairing was **ALL RIGHT** **NOT ALL RIGHT**

4. These are some things a scientist can learn by observing living things in their own homes:

Five Kingdoms Lab #1: CLASSIFYING CRITTERS - pg. 3

CLASSIFICATION KEY TO BLOBONIAN LIFE:

Use the key below to classify your critters. Once you know where each critter belongs, put its number in the circle provided. Each circle should have a different number in it. The two critters that end up together are the male and female of one species.

