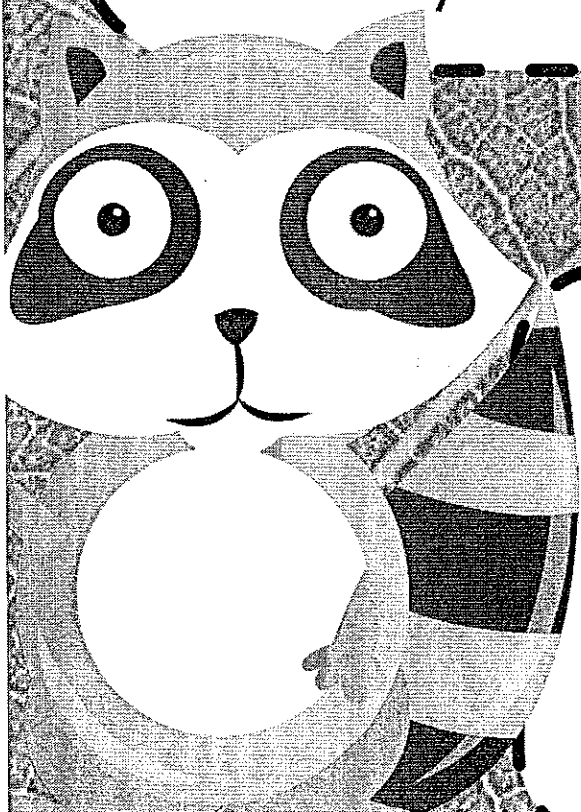
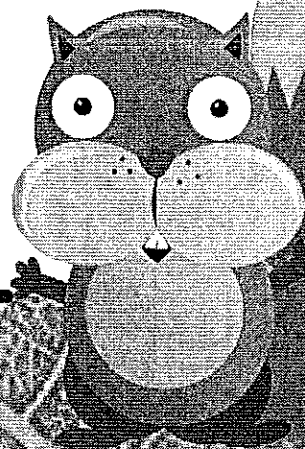


Plant and Animal Body Parts

a first grade inquiry into
organisms!

By Phyllis Sprangel



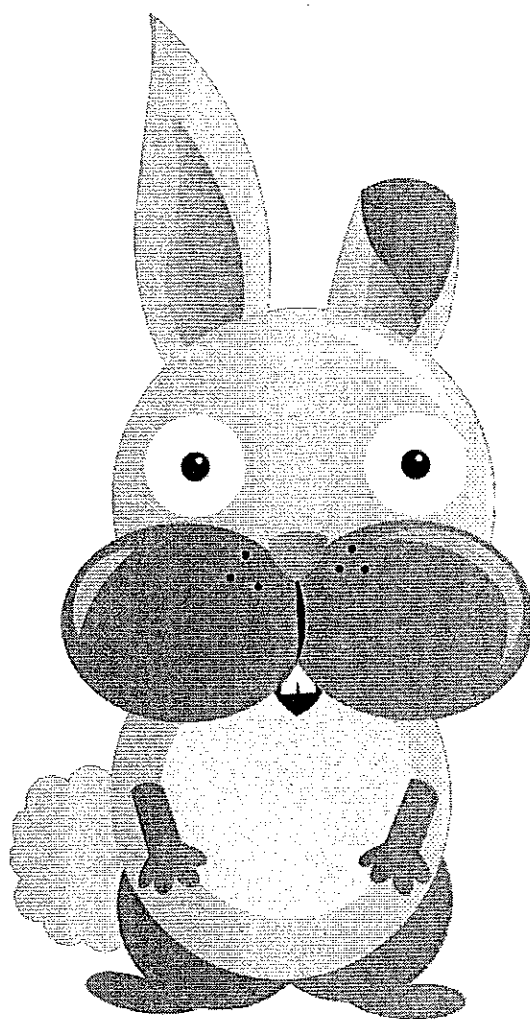
Aligned to the
Next Generation
Science
Standards!

Plant and Animal Body Parts

a first grade inquiry into organisms!

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Introduction and Explanation

This unit is aligned to the Next Generation Science Standards for First Grade.

Students who demonstrate understanding can:

1-LS3-1.	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. [Clarification Statement: Examples of patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.] [Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.]
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Students who demonstrate understanding can:

1-LS1-2.	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. [Clarification Statement: Examples of patterns of behaviors could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).]
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Students who demonstrate understanding can:

1-LS1-1.	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.* [Clarification Statement: Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structures by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills; and, detecting intruders by mimicking eyes and ears.]
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Introduction and Explanation

I taught these three standards together because they all are about living things. This is just a start into the exploration of these standards. As you go along in your lessons, I'm sure you will find many more resources and activities to go into depth with your students.

I have included a set of vocabulary cards that go along with the unit. Use them as you see fit.

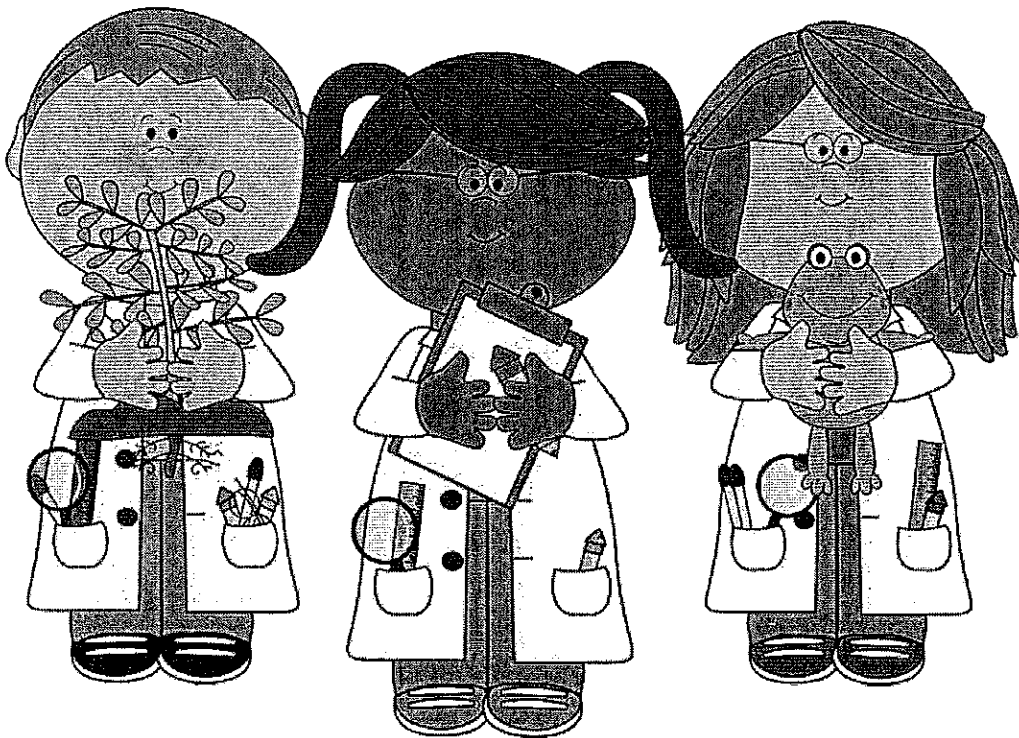
I begin the unit with a study of young animals and plants and their adult counterparts. (1-LS3-1) We begin by learning what an organism is. Then we make observations of young plants and animals and their parents. We use books and videos to as a basis for discussions. There are a few explorations and an formative assessment for this standard.

Next we explore how adult animals and their offspring communicate with each other. (1-LS1-2) We define what communication and how animals might communicate. We use books and videos to front load information. As we go along, we chart the different ways animals communicate. There are a few activities and an assessment after we finish this standard.

Finally we go into the use of plant and animal parts. (1-LS1-1) There is so much frontloading in this unit. I'm sure you will add to your sources! I have provided a few activities leading up to the summative assessment. I provided "My Organism Log" for students

Introduction and Explanation, con't.

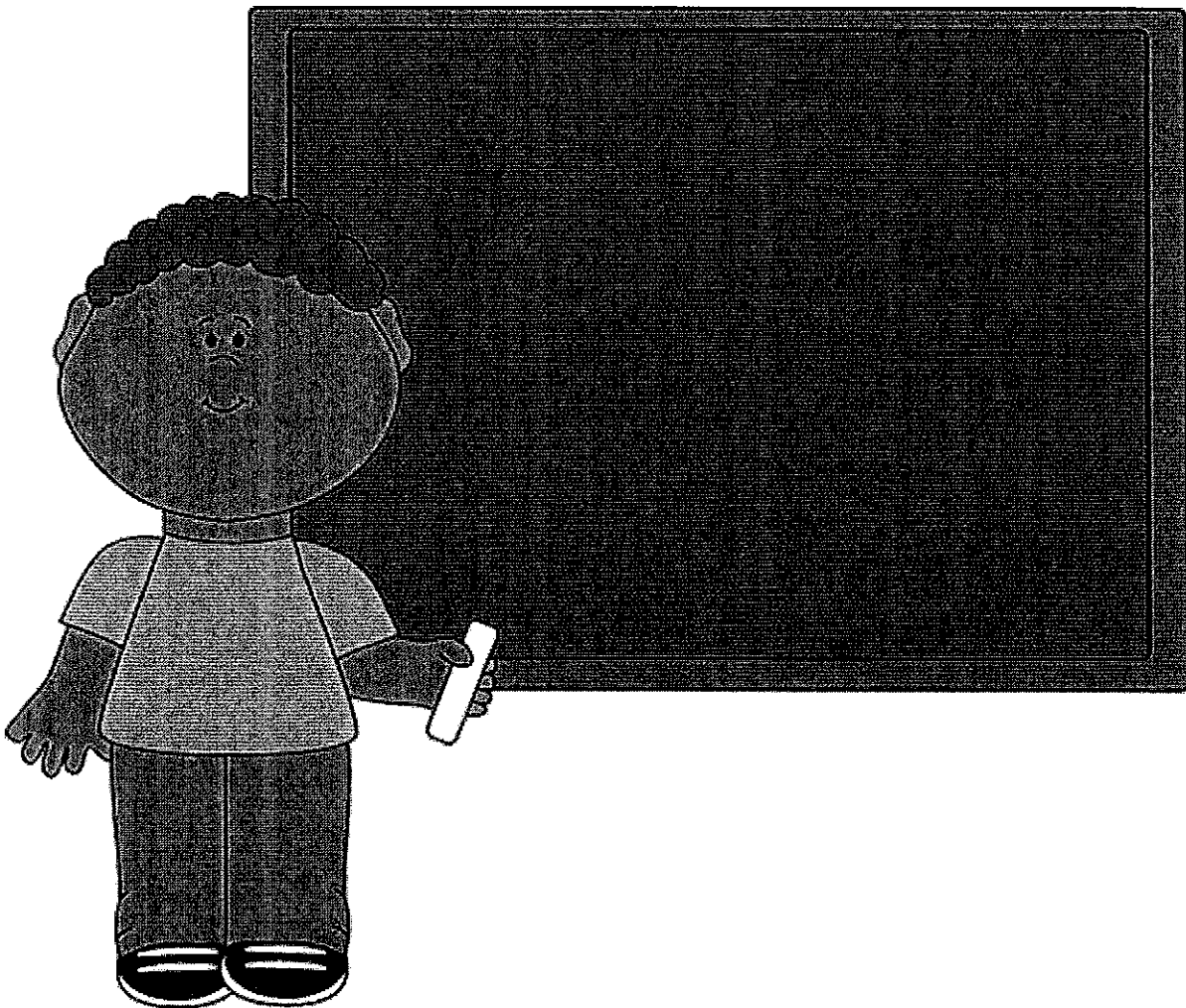
to use. They can write about different plant and animals as they go along. I provided a cover. You will have to print off many pages of the log to make a booklet for each student. The journal will be very helpful when they get to the final assessment. There are a few activities included. As we went along, we charted the plant and animals body part or structure, the function of the structure and the human invention or design that mimics it. This will help students make connections when they design their own solutions to a human problem!



Vocabulary Cards

Ways to use Vocabulary Cards!

1. Copy cards back to back on cardstock and use as flashcards!
2. Print Cards on cardstock and use as a match up game!
3. Print cards. Put on a bulletin board for an interactive bulletin board. Place words on one side and definitions on the other side. Attach yarn or string to each word. Students can pin the yarn or string to the correct definition!



communicate

Express, share,
exchange an
idea.

change

To make
different.

living

Need food,
water and air
to grow.

offspring

Child or baby
animal.

survive

To live.

structure

The way
something is
put together.

organism

Any living
thing.

nonliving

Does not need
food, water, or
air. Does not
grow.

adult

Fully grown.

seed

What most
plants grow
from.

flower

The part of a
plant that
makes seeds.

leaves

The plant part
that makes
food for the
plant.

stem

Plant part that
helps hold up
the plant and
moves water
to the leaves.

roots

Plant part that
holds plants in
soil and takes
in water.

seed coat

Covering a
seed may
have.

gills

Body part that
helps a fish
take air from
the water.

insect

An animal that
has three body
parts and 6
legs.

mammal

An animal that
has hair or fur
and feeds its
young milk.

camouflage

To cover-up
or disguise.

mimic

To imitate or
copy
something.

label

To mark or
identify
something.

Adult Organisms and Their Offspring

Students who demonstrate understanding can:

1-LS3-1.

Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. [Clarification Statement: Examples of patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and, a particular breed of dog looks like its parents but is not exactly the same.] [Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.]

Inquiry:

How are young plants and animals like and not like their parents?

1. First we defined what is an organism by doing the "Living and Nonliving Sort." We learned that an organism is a living thing.
2. Organism Sort
3. Mealworm Exploration: What is living and nonliving?
4. Frontload with books, videos and games.
5. Nature Walk
6. Animal Babies Activity
7. Adult Organism and Offspring Sorting Cards
8. Compare and Contrast Assessment

Sources for Organisms and their Offspring

Books

Animal Babies by Harry McNaught

The Baby Animals Book by Shannon Jones

Baby Animals, A Kids Look at Amazing Pictures and Fun

Facts About Baby Animals by John Yost

Animal Dads by Sneed B. Collard III

Tender Moments in the Wild: Animals and Their Babies by
Stephanie Maze

Videos

Concepts in Nature: Animal Families, United Streaming

Animals and their Babies (22:35) You Tube

Animals A to Z-Baby Animals (8:06) You Tube

Games

Matching games with Adult/Offspring Cards

Living and Nonliving Sort

Inquiry:

What is an organism?

Materials:

- 2 bins labeled Living and NonLiving
- Objects to be sorted (plant, wooden ruler, stone, leaf, dead leaf, ant in a jar, toy car, can of soup, crayon, pencil, piece of candy, weed pulled from the ground, dirt, cell phone, coin, stuffed animal, pictures of plants and animals, pictures of nonliving things,...etc.)

I did this whole group. I gave them the definition of Living and Nonliving. We discussed what we thought was living and what was nonliving. We sorted a few objects. We came to a wooden ruler and we discussed the fact that it was made of wood and that it came from a plant. We debated whether it was living or nonliving. We decided that since it no longer is growing and does not need air, food or water to live, that it is nonliving. We came across several debatable items!

Next I introduced the word *organism*! We defined the word organism as a living thing. Then they did the "Organism Sort" on their own. (I enlarge it on Ledger size paper.)

Name: _____

Organism Sort



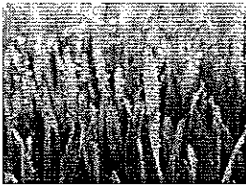




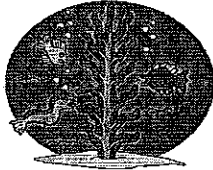


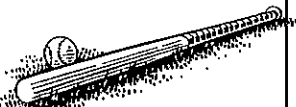

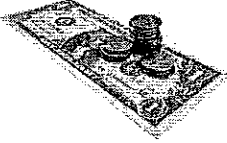







Organism

Not an Organism

--	--

Organism Sort

Cut and glue onto the correct column.

 <p>dog</p>	 <p>rocks</p>	 <p>grass</p>	 <p>shoe</p>
 <p>teddy bear</p>	 <p>lizard</p>	 <p>flower</p>	 <p>seaweed</p>
 <p>water</p>	 <p>tree</p>	 <p>bat</p>	 <p>fish</p>
 <p>money</p>	 <p>tv</p>	 <p>computer</p>	 <p>frog</p>
 <p>dirt</p>	 <p>cartoon</p>	 <p>person</p>	 <p>insect</p>

Nature Walk!

What organisms are around us?

Materials Needed:

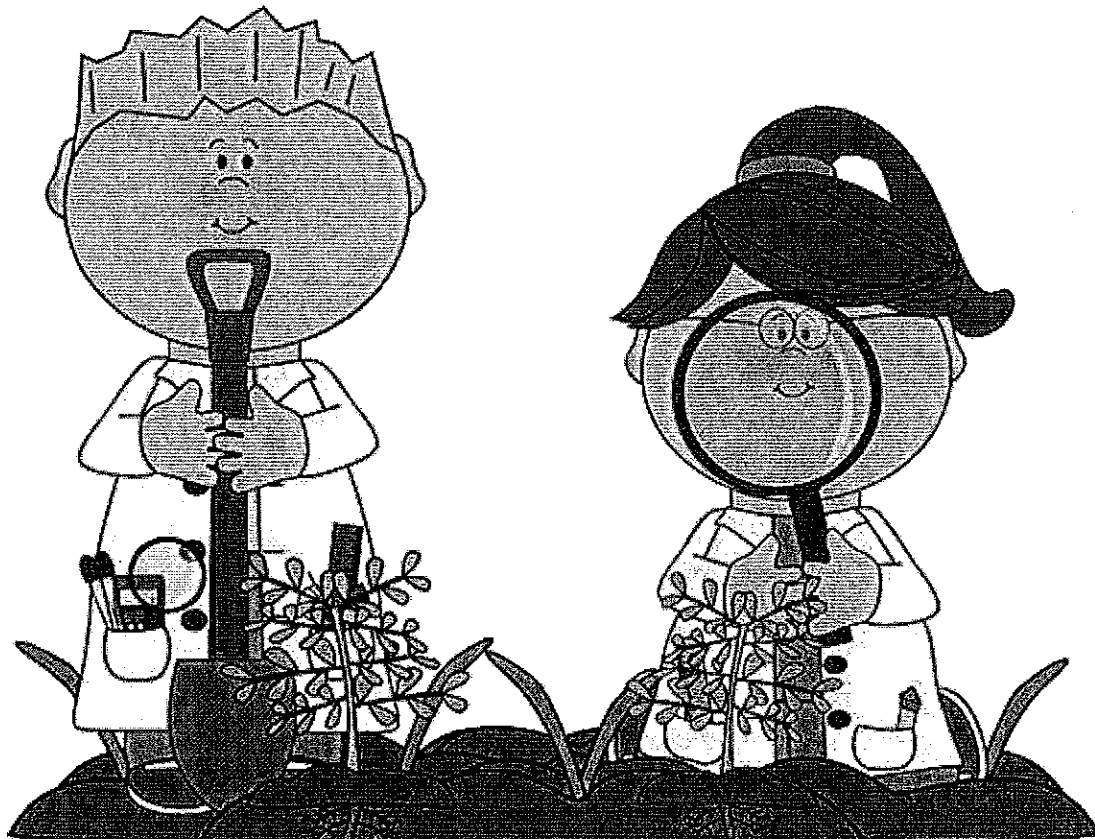
Hand out

Clipboard & pencil

Great outdoors!

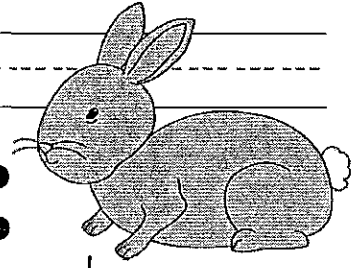
Magnifying glasses

What organisms are around us? Take students on a nature walk around your school. Have them draw and record the living organisms around them!



Name: _____

Nature Walk



Draw and record the organisms around you!

Organism: _____

Organism: _____

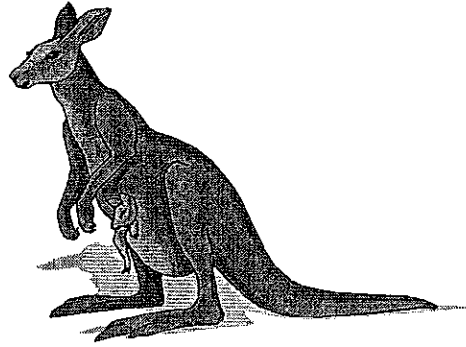
Organism: _____

Organism: _____

Animal Babies

Materials Needed:

- Animal Babies by Harry McNaught
- Several books on animals
- Comparison chart

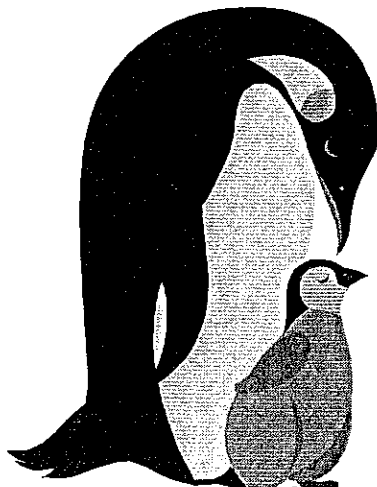


Read Aloud: Animal Babies by Harry McNaught

Read Story and make observations about the animal adults and the animal babies. Compare the physical similarities and differences.

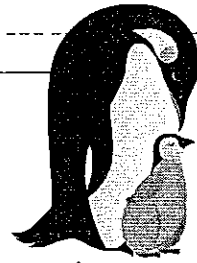
Discuss and define the words adult and offspring. Have students complete the comparison chart provided. Students can refer back to the story, Animal Babies or use other books on animals. You might have to model the first animal to ensure that they know how to use the chart.

Share out the information gathered. Were there any surprises? Were any patterns discovered?



Name: _____

Animal Babies

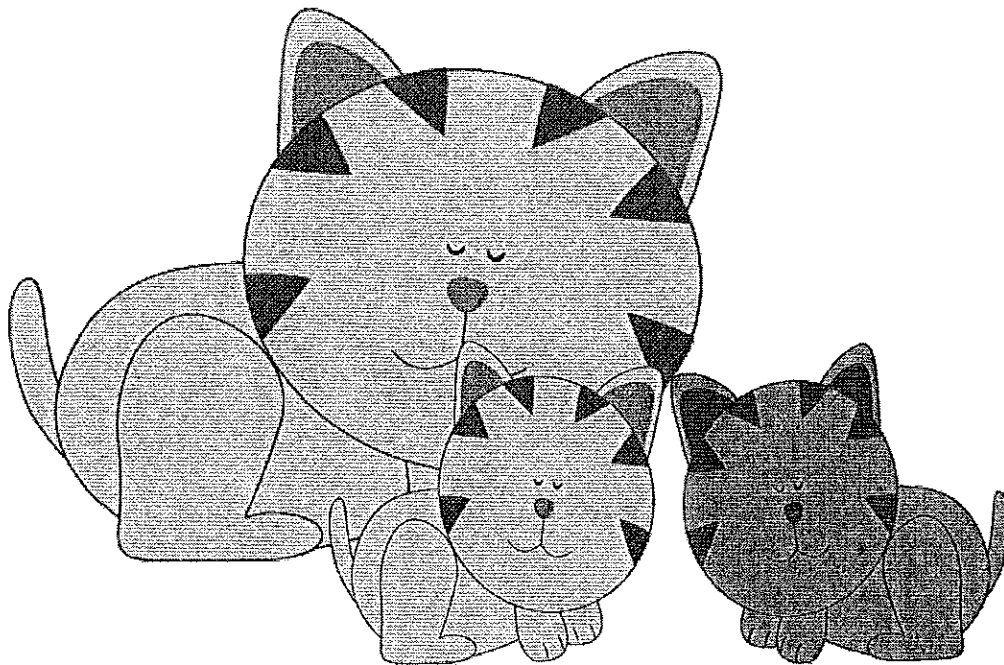


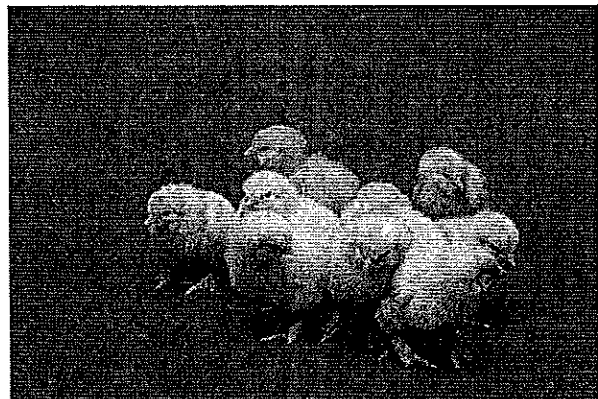
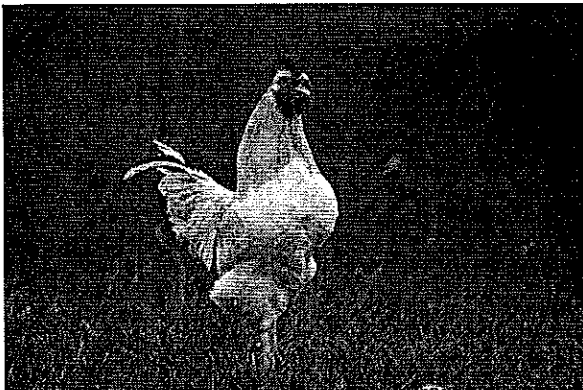
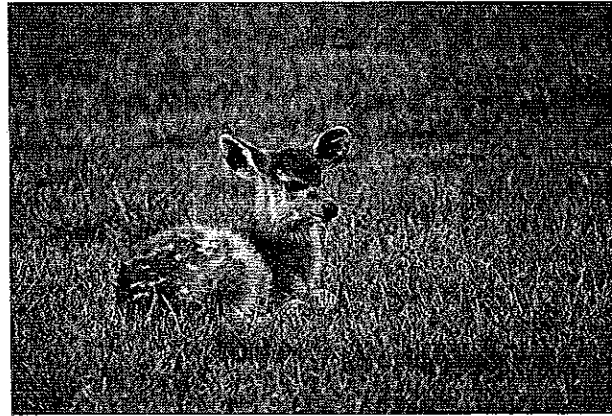
Compare adult animals and their offspring by filling in the chart. Look in books to find animals to use.

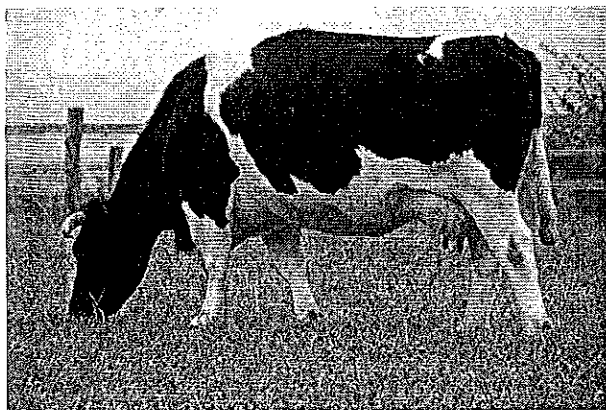
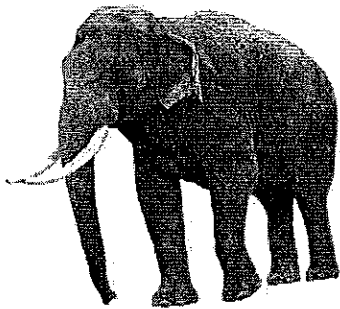
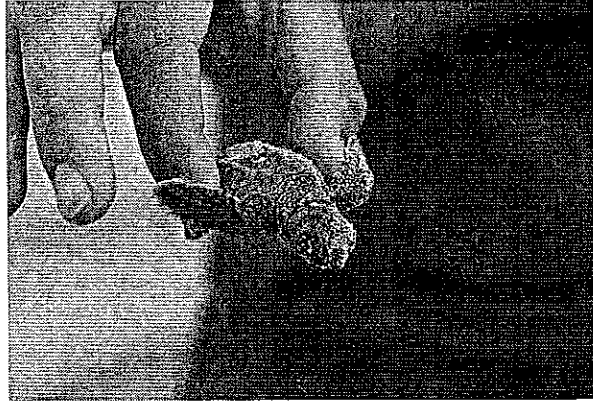
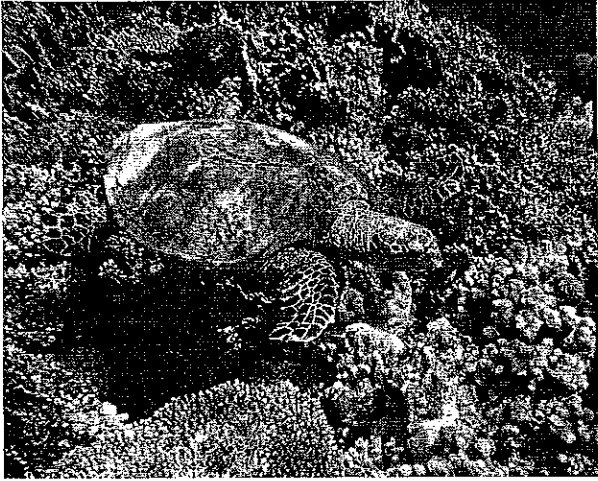
Animal Name	Adult	Offspring

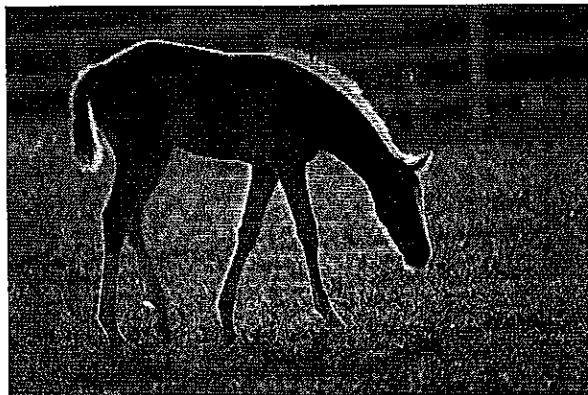
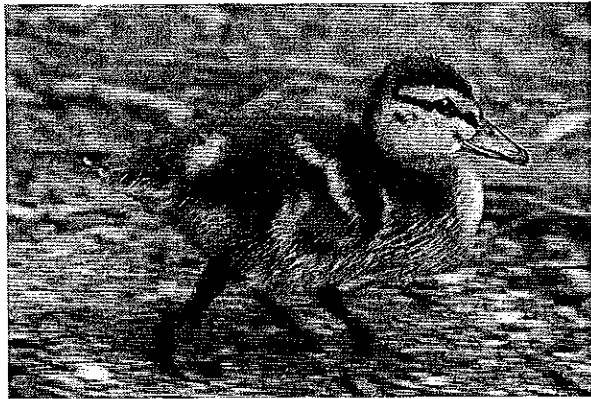
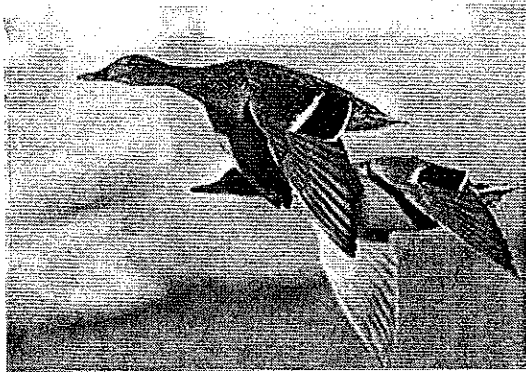
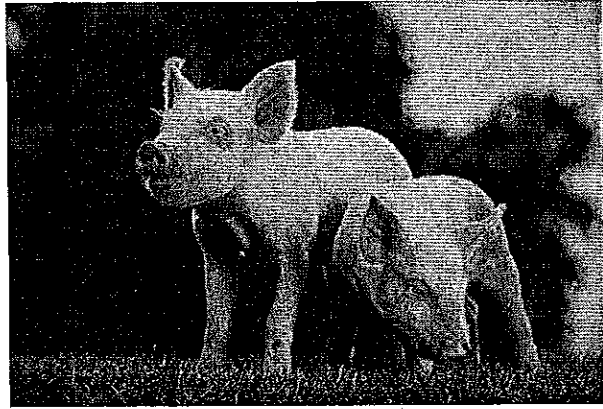
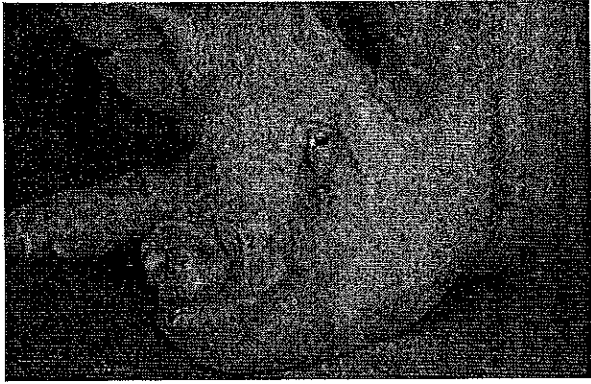
Organism and Offspring Sort Cards

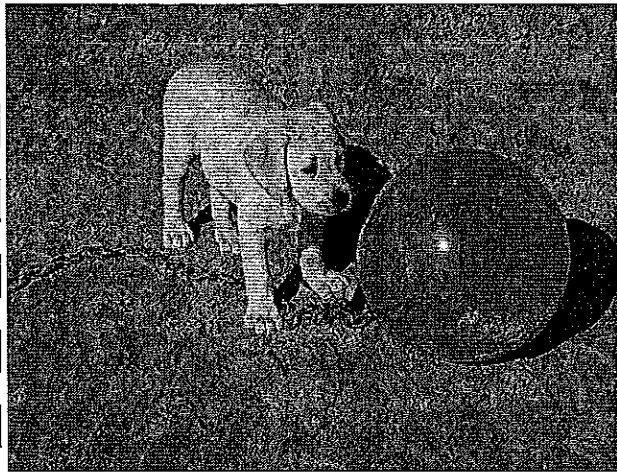
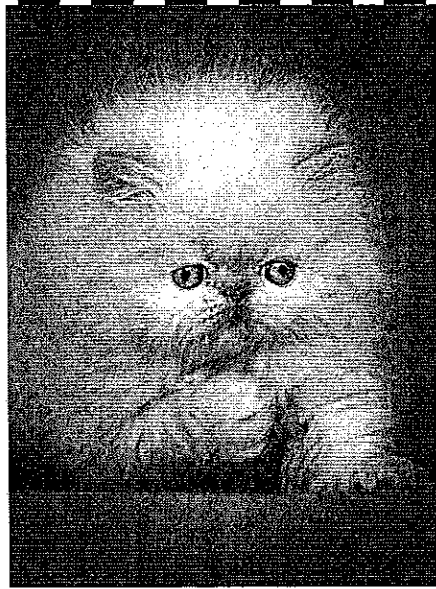
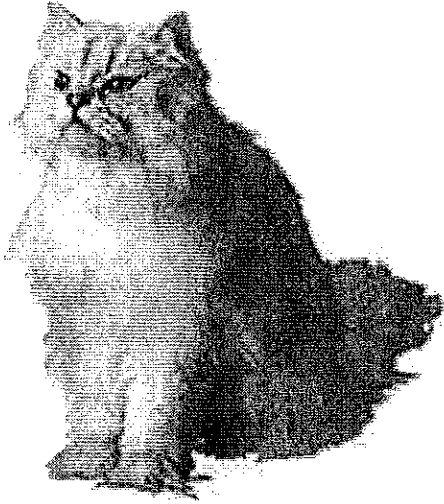
Use these cards to compare adults and their offspring. You can use it as a sorting game or a matching game!

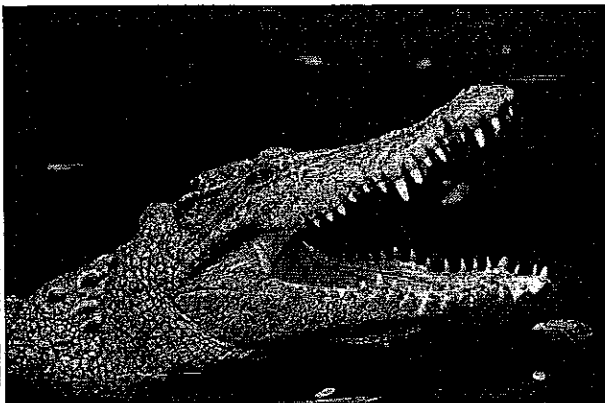
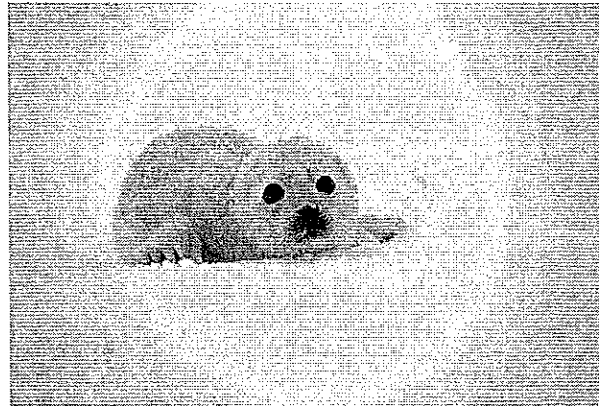


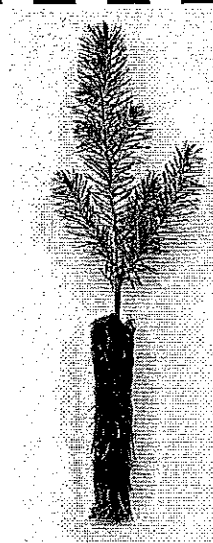
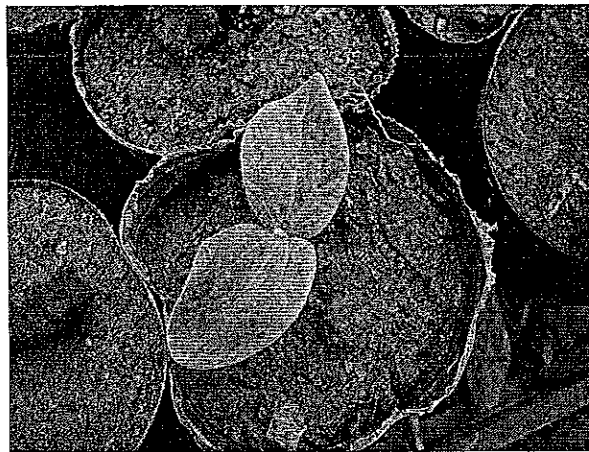









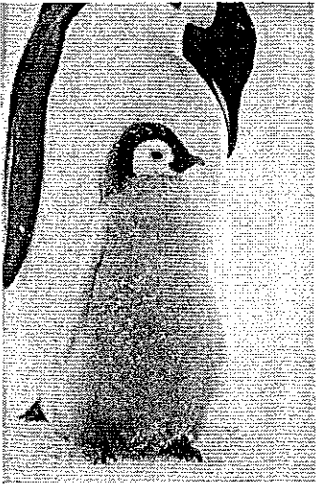




Name: _____

Compare

Compare the animals.

	Ways they are the same	Ways they are different
 <p>orangutan</p>		
 <p>penguin</p>		