## LETTER TO FAMILY

### SCIENCE NEWS \_

#### Dear Family,

Our class is beginning a science unit on animals. We will be observing and comparing four pairs of animals over the next several weeks: two kinds of fish (guppies and goldfish), two kinds of snails (water snails and land snails), two kinds of earthworms (redworms and night crawlers), and two kinds of isopods (pill bugs and sow bugs). We will learn how to handle these interesting animals carefully and will all participate in the care and feeding of our animal visitors. So be prepared; your child might come home with lots of questions and stories about animals. Visit the FOSS website for more information on our module *Animals Two by Two* (www.FOSSweb.com).

You can help your child learn about animals by taking walks in your neighborhood to look for animals and by talking about animals in and around your home—everything from pets to insects. We will be discussing differences and similarities in the structures and behaviors of the animals we



investigate and starting to develop the important attitudes of respect for life and a sense of responsibility for living organisms.

If you are interested in seeing how we introduce animals in our class, please come by for a visit. The children will be more than happy to share their enthusiasm for life.

Sincerely, \_\_\_\_\_

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# HOME/SCHOOL CONNECTION Investigation 2: Water and Land Snails

Students have had several experiences closely observing animals' behaviors at the science center in the last few weeks. Play a game of animal "charades" with your child at home. Each person takes a turn at imitating the behavior of any animal he or she chooses. The rest of the family guesses what the animal is. If hints are required, guessers may only ask questions that can be answered by simple yes or no answers.

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## HOME/SCHOOL CONNECTION Investigation 1: Goldfish and Guppies

The pictures below will make two fish-in-a-bowl twirlers, one with a goldfish and one with a guppy. Cut on the solid lines, so that you have two strips, each with a bowl on the left side and a fish on the right. Color the bowl and the fish. Fold each strip in half along the dotted line, so that the pictures

are back to back. Push a straw or pencil up between the two picture backs and securely tape it in place. Be sure the straw or pencil spans the full length of the picture.

Hold the straw or pencil between your palms with the pictures up, spin the straw back and forth, and watch the picture. An optical illusion makes the fish look as if it were in the bowl.







## HOME/SCHOOL CONNECTION Investigation 3: Big and Little Worms

Earthworms are often thought of as very lowly and unappealing creatures. But in fact, earthworms are very important creatures in many ways. The tunnels that earthworms make help keep soil loose, and make growing conditions better for garden plants. Water can travel through the soil better, and plants can grow their roots deeper.

To learn more about earthworms, have your child cut out the questions and answers below. Read aloud all of the questions, then read each answer and work together to decide which question it answers. Have your child glue the questions and answers on another sheet of paper, matching each answer to its question.

Q: How big can earthworms get?	A: As earthworms burrow, they produce a covering of mucus. This helps them move through the soil. As the mucus is rubbed off, it cements the walls of the tunnel. The mucus also helps the earthworm slip away from animals that would like to eat it for dinner.
Q: Why are earthworms so moist?	A: Earthworms don't have eyes, but they are sensitive to light.
Q: How do earthworms breathe?	A: The smallest earthworm is barely 2 centimeters long (less than an inch). One of the largest is a 2.5 meter giant that lives in Australia (that's about 100 inches).
Q: Do earthworms really eat dirt?	A: As earthworms make their tunnels through the soil, they take in food that is mixed with dirt. Some of the sand in the soil acts as grinding stones in the worm's gizzard. The soil that is not good for food passes through the earthworm. It is left behind as a casting.
Q: How do earthworms see?	A: Worms need to breathe, just like people, but they don't have noses. The air goes right through their skin.