U46 ACADEMIC SUCCESS FOR ALL

OFFICE OF K-12
SCIENCE & PLANETARIUM

SCIENCE PARENT NEWSLETTER

FIFTH GRADE | UNIT 2 | LIFE SCIENCE

IN SCHOOL...

In Unit 2, students develop an understanding of the idea that plants get the materials they need for growth chiefly from air and water. Using models, students can describe the movement of matter among plants, animals, decomposers, and the environment and that energy in animals' food was once energy from the sun.

STUDENTS WILL KNOW...	**STUDENTS WILL BE ABLE TO...**
● Environment for survival ● Matter and energy are cycled throughout ecosystems	● Support an argument with evidence, data, or a model ● Develop a model to describe phenomena.

AT HOME...

ASK YOUR STUDENTS...	**ENGAGE YOUR STUDENTS...**
● What helps us maintain life? ● Where does the energy in food come from and what is it used for? ● How is energy transferred? ● How do things interact with one another? ● How does matter cycle through ecosystems? Where does the energy in food come from and what is it used for?	● Plants acquire their material for growth chiefly from air and water ● Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. ● Decomposition eventually restores (recycles) some materials back to the soil. ● A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. ● Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die.

IN THE COMMUNITY…

- Grow plants! It doesn't take a lot of space to grow plants. If you don't have space for a garden try a small pot. You can manipulate the growing requirements to find the optimum your plant needs to grow.
- Explore different local ecosystems. What do you notice about the plants in those ecosystems. In a wetland for example, you may not find trees as large as the oaks in a forest. Why don't wetland species grow well in a yard that is well drained? Why don't prairie plants do well in a woodland?
- Create a compost pile in your yard and record the various stages of decomposition. How long does it take? Document the decomposers like fungi or insects. Can you use these concepts to help you describe how matter cycles through geosphere, biosphere, hydrosphere and atmosphere.
- Go to a local natural area and document a food chain or food web.

STEM Expo…

- Grow plants and manipulate their growth requirements.
- Document a compost pile to document decomposition, recycling of nutrients or the matter compartments of the Earth.
- Conduct a study on biotic and abiotic factors that disrupt a local food chain. Propose solutions to the disruption as well.