Soil Sam/Samantha

**Project Skills:**
Understanding what plants need to grow.

**Life Skills:**
Solving problems—Predicts outcomes

**Academic Standards:**
NS.K-4.1 Science as Inquiry

**Grade Level(s):** 3-5

**Time:** 30 minutes/2 weeks to germinate

**Supplies Needed:**
- Copy of *Acres of Adventures*
- Knee-high nylon stocking
- Grass seeds
- Soil
- 6 oz. Styrofoam cup
- Water
- Jiggle eyes
- Fabric
- Scissors
- Lace/ribbons
- Glue

**Advance Preparation:**
Follow Soil Sam Activity 2 weeks prior so children can see end product.

**BACKGROUND**
Soil anchors the plants and provides nutrients. Soil does not provide food to plants. Plants are amazing because they make their own food using sunlight, water, nutrients, and carbon dioxide in a process known as photosynthesis. Plants use carbon dioxide to live and give off as waste oxygen. Humans need oxygen to live and give off as waste carbon dioxide. We help each other!!!

**INTRODUCTION**
Refer to *Acres of Adventures* (page 90).

**WHAT TO DO**
1. Turn to page 90 in Acres of Adventures.
2. Ask youth the questions at the top of the page.
3. Review with the children the background information above.
4. Show children your germinated soil Sam so they can see what they are working towards.
5. Follow the activity directions

**TALK IT OVER**

**Share**
- Have youth share their creations with each other

**Process**
- Ask youth how they made their Soil Sam/Samantha to get what he/she needs to grow.

**Generalize**
- How do plant outside get water? Sunlight? Carbon dioxide?
- What happens when they do not get what they need?

**Apply**
- How can you better take care of your plants, your pets and yourself?

**EXTENSION IDEA**
See More Challenges page 91.