

# Science at Home

## Seed Necklace

### What You Need

Small Ziploc bag	Scissors	Hole punch
Yarn or string	Cotton balls	Seeds

### What You Do

1. Punch a hole in the top of the small Ziploc bag.
2. Carefully tug at the edges of a cotton ball to make it light and fluffy.
3. Press a few seeds into the center of the fluffed cotton ball. Add water.
4. Tuck the cotton ball and seeds into the Ziploc bag.
5. Cut a piece of yarn or string long enough to make a necklace. String through the hole in the Ziploc bag and tie the ends together. Children can wear the necklace around for the rest of the day and hang up in a window later to watch the seeds germinate.

### Questions to ask

- What do you think a seed needs to help it grow?
- What do you need to help you grow strong and healthy?
- What will the seed need in order to keep growing once it sprouts?

### What's the Science?

Seeds are made up of three parts: a protective seed coat, a tiny plant embryo and starchy stored food from the parent plant. When a seed is provided with **water, warmth and air** it begins to germinate – or grow a young plant. Water helps to swell the seed, soften and split the seed coat to make room for the embryo to grow. Air can then get into the seed, carrying oxygen to help the embryo burn the stored food and produce energy to grow. The embryo grows roots downwards to reach deep into soil and a shoot upwards toward sunlight. Over time, the shoot will grow tiny leaves and begin photosynthesis to produce its own food.

### Try This

**Use science vocabulary:** Use related science words such as seed coat, embryo, oxygen, sprout, germinate and photosynthesis as you talk and play together. Children learn new vocabulary words when they hear grown-ups use them in context.

**Extend your experiment:** Once your seeds have germinated, you can plant them in soil to help them continue to grow. *What else does a plant need to grow? Where does it get food? How does it take in water?*

### Keep in Mind

- Children are natural scientists; let them lead the way in their experimentation!  
Encourage them to ask questions and make suggestions only when they are stuck/discouraged.
- The order suggested is not the only right or perfect way. Adjust the activity based on the age, ability, and interests of the children.

### Additional Resources

*From Seed to Plant* by Gail Gibbons

*One Bean* by Anne Rockwell

*The Dandelion Seed* by Joseph Anthony

Scholastic StudyJams! Plants with Seeds

<http://studyjams.scholastic.com>

