Action for Children

Preschool Age Science Activities

Shadows

The next time there is a sunny day head outside with your kiddo and have fun with some shadow science. Have your child do different movements and have them watch their shadow, have a "puppet show" using your hands, the ground and the shadows you make!

Five Senses

Set up a 5 senses table, tray, or plate for your child. Talk to your child about their five senses, when they use, if they use more than one at a time. To set up the activity, find objects that will cover the 5 senses; Sight, Smell, Taste, Touch and Hear. Have your child explore each object by asking them open ended questions like "Tell me, what you are doing?, How does that feel?, What does it sound like?, How does it taste?, Where did you think it came from?" You can have child close their eyes and guess the object or just talk about the characteristics or each object with your child. Examples for each category are:

- Sight: hand held mirror, small flashlight
- Smell: cinnamon sticks, perfume, candles, soap
- Taste: honey, popcorn, lollipop
- Touch: pine cone, soft scarf, bubble wrap
- Hear: bell, whistle salt shaker

Exploring Mirrors

Using a small compact mirror or a hand held mirror will work best for this activity. Have your child put small objects onto of the mirror and talk about the reflection. Put a shiny object onto of the mirror and shine a flashlight on it, talk about how the light reflects from the object to mirror and back.

Magic Milk Experiment

Ingredients:

Milk
Food coloring
Cotton Swab
Dish soap or detergent
A bowl or a plate
A small recipient for the detergent

Directions:

1. Pour milk into bowl so the bottom of the bowl is covered.
2. Put in drops of food coloring of different colors into the milk.
3. Put dish soap or detergent onto q-tip/ cotton swab and dip into the food coloring and watch the magic happen!

Watch a plant grow

"Plant" a seed, bean, corn kernel in a glass or clear jar. Use dirt from outside, have child involved in planting the seed and taking care of it by watering the seed. With the plant in a glass jar your child will be able to see the seed growing roots and sprouting. Talk to your child about the parts of the plant once it begins to grow; roots, steam, leaves.

Make a volcano

Have child construct a volcano or mountain shape around a small paper cup, add plastic animals or trees if you want to make it look more like a volcano, leave the top of the volcano open and don't cover with play dough. This activity is best to do outside because it could become messy. Add baking soda to the paper cup, have child pour vinegar into the cup on top of the baking soda. You can add red food coloring to vinegar to make it look more like lava.

Wonder Wall

Ask your child about what they wonder about and record their answers on a paper you post on the wall. You can encourage this kind of questioning by modeling these questions yourself. For example "I wonder why it gets dark at night?" "I wonder why when most babies learn to walk? Etc. Pick one topic to research. Look online, interview adults, make a guess. Attack questions one at a time.

Weather Watch

Have your child observe and chart the weather for a designated period of time (e.g. one week, one month, etc.). List the date on a chart and have your child draw a picture of the weather that day (cloudy, sunny, rainy, mixed). At the end of the week (month) discuss your observations. How many days had each kind of weather? What is the weather most often, least often? Do you see any patterns?

Simple tools make work easier and faster!

Make the following simple machines using household items:

- Lever (place a ruler on top of a block) Wheel (a wheel from a Lego set) inclined plane (a book propped up on one end with a cup) Explain that simple machines make work easier and faster you are going to test this.
- Pick up a heavy object with two fingers vs with the lever which was easier and/or faster
- Place a Lego without wheels and one without on top of your inclined plane. Let them go and see which travels down the ramp easier and/or faster
- Use two wheeled cars. Put one on top of the ramp and the other on the ground. Blow on each of them and see which was easier and/or faster

Will the sound change?

String a rubber band across a shoe box. Put various different fillers (marbles, stones, blocks etc.) inside the box. Pluck the string. Record whether the sound is higher or lower than the empty box. Which is higher? Which is lower? Try to guess why it might be so.