Infant Toddler Science/Sensory Activities

Rainbow Ice (6 months - 3 years old)
Fill ice cube trays with water and food coloring. Mix primary colors to create new colors. Freeze until hard, and put in a large container with a smaller container containing warm water. Also include tongs, hammers, tongs and turkey basters. As the ice cubes melt discuss what is happening, colors mixing, and temperature of the water. Compare if warm or cold water melts the ice cubes faster. To add a gross motor activity; ask children if they know how water moves, it dances, and when it stops dancing it freezes. Do a quick round of freeze dance before or after this activity.

Colorful Fizz (1 ½ - 3 years old)
Fill a small container with approximately half a box of baking soda, keeping the area smooth and even. Put white vinegar in 3 squirt bottles or bowls with pipettes or spoons, and add red, yellow, and blue food coloring to the vinegar. The use of primary colors will encourage color mixing of the vinegar in the baking soda. Encourage child to squirt or dump vinegar into the baking soda. Once the fizzing is done and the baking soda can’t be seen carefully dump out liquid to show the next layer of baking soda, can be repeated about four times.

Rainbow in a Bag (4 months - 3 years old)
Combine 1 cup cornstarch, 1/3-cup sugar, and 4 cups cold water in a large pot. Heat and stir constantly. Once the mixture begins to thicken (consistency of Vaseline), remove it from the heat and continue to stir for another minute. Divide the mixture into 2 bowls and set aside to cool. Add a few drops of food coloring to each bowl. (If you want to create a rainbow divide into 7 bowls.) Put some of each color mixture into a Ziploc gallon bag (and seal with duct tape if necessary). You can hang it in the window or tape to the table for your child to squish and move the colors together

Nature Walk (newborn - 3 years old)
Go for a nature walk in your neighborhood, back yard or a local park. In addition to enjoying the fresh air talk to your child about using their five senses (sight, sound, smell, touch and taste). While on your walk talk to your child about what you are seeing (blue sky, pink flowers, green grass, yellow flowers) As you continue walking try a game of I Spy; name a color and see how many different objects can be found with that color. Talk to your child about what they are hearing while you are walking (leaves crunching, birds chirping, cars driving). You could also point out birds, animals or cars and ask your child what sounds they think they make? Talk about how the smells you are smelling (flowers, leaves) and if your child enjoys those smells, if you enjoy those smells. As you are walking look around for different textures for your child to explore (tree bark, green grass, dried leaves, flowers, pinecones) Talk to your child about how those feel (smooth, bumpy, rough, crunchy, sharp) and if they enjoy how they feel. While you are outside enjoy a snack and use descriptive words to describe what you are eating or drinking (crunchy, sweet, red apples or crunchy, salty brown pretzels or cold, wet water). A way to extend your nature walk is to collect some items and make a collage by either gluing on a piece of paper or sticking to a piece of contact paper. You can also make a masking tape bracelet for your child (sticky side out) to create a nature bracelet while walking.
Bubbles (2 months - 3 years old)
Using pre made bubble solution or a homemade solution (1/2 C. water, 1/4 C. detergent, 1 teaspoon sugar) bubbles provide an engaging sensory experience for your child. Bubbles are a great tummy time activity for your child that encourage your child to move their head to follow the bubbles, and as infants get older, they may reach out or even chase the bubbles. Toddlers can help make bubble solution or use a wide range of materials for wands/blowers: empty straws, plastic bottles with the bottoms cut off (can add an old sock at the bottom of the bottle to create “elephant trunks,” cookie cutters, paper towel tube, empty berry baskets, any kitchen utensil with slots/holes.

Sensory Bottles (2 months - 3 years old)
Create a sensory bottle for your child by using objects around the house. Take an empty plastic bottle fill it with whatever you choose. Some ideas: colored water and oil, rice, beans, small bells, pom-poms or cotton balls, small toys, beads, glitter, or popcorn kernels. Once you have the items in your bottle add some glue to the lid to ensure it is not taken off by curious hands. You can place bottles near baby during tummy time so they have something interesting to look at. You can extend this activity by creating a bowling game (line up bottles and roll a ball to knock them over) for your toddler and talking about the sounds that you hear as they fall over.

Sink vs. Float (2 - 3 years old)
With your child collect about ten items from around the house. Fill a medium sized container with water, and ask your child to make a hypothesis (guess) about which items will sink (go to the bottom of the container) or float (stay near the surface). Then test each hypothesis by placing items one at a time in the water. Allow your child time to analyze what is happening with each object, and ask questions about what they think is happening. Sort the objects into a sink and a float pile, and count how many sank vs floated.

Magnet Exploration (1 ½ - 3 years old)
Make a collection of random items be sure to include items that are magnetic, as well as, not magnetic. Place items on a magnetic cookie sheet or pie pan with a strong magnet. Show your child how some objects will stick to the magnet and others will not. Allow them to explore the materials. This activity can be extended by exploring magnets on metal surfaces such as cookie sheets, pie pans or doors (garage or front doors).

Sensory Exploration (4 months - 3 years old)
Fill a mediums sized container with a variety of materials for your child to explore. Examples: Tissue or wrapping paper, water and spoons/cups, soapy water, washcloth and baby dolls or other plastic toys to be washed, shaving cream, plastic Easter eggs and rice, dried bean or small animals, sand and scoops, Easter grass and animals. Sensory activities facilitate exploration and naturally encourage children to use scientific processes while they play, create, investigate and explore. Sensory activities allow children to refine their thresholds for different sensory information helping their brain to create stronger connections to process and respond to sensory information.

Plant a Garden (1 - 3 years old)
Planting a garden with your child can be a very rewarding experience. Decide where you will be creating your garden (a spot in your yard, flower beds, or a container garden on the patio) what you want to plant (flowers, herbs, fruit, vegetables) and get your plants or seeds. When you are ready to plant; make
sure your soil is ready before heading outside with your toddler. Help your child dig a hole for the plant, and gently place the plant or seed in the hole and cover with dirt. Talk to your child about what they are doing (scooping brown dirt, how the dirt feels or smells, placing the plant inside the hole, what the plant looks like (short or tall, leaves or no leaves, flowers or no flowers, how the flowers smell) and how helpful they are being. Once all the plants have been planted encourage your child to water the plants. Throughout the summer, have your child help you weed and water the garden, as well as, enjoying the new fruits or vegetables they help harvest from the garden.