Kindergarten Exploration Tubs

Reflection Center

Books: *The Magic Mirror Book* (Scholastic)

Materials: Collect a variety of mirrors (flat, flexible, hinged) spoons, and Christmas balls

Students enjoy looking at their distorted reflections and seeing themselves upside down. Students will also explore the Magic Mirror Book using a mirror to perform amazing tricks such as making a puddle disappear, or mending the broken plate. Later on, add pattern blocks or other items to arrange in front of the mirrors. Students especially enjoy block building on top of a large mirror placed on a low table. (Essential vocabulary developed: above, below, behind, beside, equal, same, pattern, repeat, reflection.)

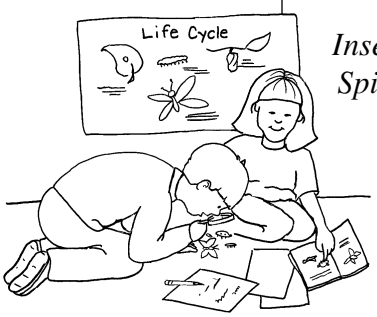
Sight Boxes

Materials: sight boxes, flashlight, blank books

Create a sight box by creating a scene in a shoe box, then cutting a peep hole in the side to view the scene, and a hole in the lid just above the scene to allow light.

Students are amazed to look inside the box by lifting the flap.At first they find the scene dark and details undetectable. Then the student opens the little flap to let in the light and the scene magically appears. For extra fun, provide a flashlight so the student can turn on additional light and see every detail in the scene. Students record what the scene looks like without light on one side of the paper, and what it looks like with light on the other side of the paper.

Insects



Books: Scholastic Learning Center Books on Insects (*What is an Insect; What Do Insects Do?; Bug, Bug, Bugs!; Where Do Insects Live?; Spider Names*)

Materials: plastic insects, spiders, butterflies, and worms

Students sort insects and count legs and body parts. Students count the number of each kind of insect. Blank books enable students to record insect tub data. Students also enjoy making real graphs with insects and then reproducing the graph on paper.

Animal Tracks

Books: *Animal Feet* by Scholastic; *Tracks* (Wright Group/McGraw-Hill); *Animal Tracks* (Wright Group/McGraw-Hill); *Footprints in the Sand*, Hello Reader Level 1 (Scholastic)

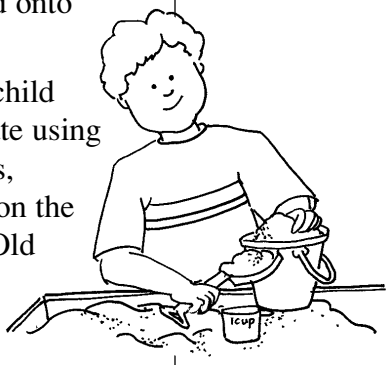
Materials: blank paper, peeled crayons, tub of sand, animal tracks, flashcards with picture of animal on the back

Students remove one shoe, wrap the bottom of the shoe with paper, and make a rubbing of the sole of their shoe by rubbing the paper with a horizontal peeled crayon. They cut out the sole rubbing, glue it to a blank sheet and add it to the class book called "Tracks." Make reproductions of the animal tracks in the suggested books and invite students to try identifying which animal made each track. Students try to recreate the imprints of animal tracks in the tub of sand. Another enriching activity is for a small group of students to sit around the tub of sand with their eyes closed. One of the students makes a track in the sand with his shoe. Students open their eyes and attempt to identify which person made the track by examining the shoes of classmates.

Measuring

Books: *Amazing Animals* by National Geographic

Materials: measuring feet, patterns of life-size animals traced onto plastic tablecloths, counting bears, teddy bears, antennae, etc.



This book has pictures comparing the size of a six-year-old child standing beside a variety of life size animals. Students investigate using nonstandard measure to see how many teddy bears (unifex cubes, shoes, etc.) tall each animal is. Students also enjoy lying down on the tablecloth animal and to see how tall they are by comparison. Old antennas make wonderful measuring devices for comparing height because students can carry them around and see how other objects compare in height or length. A set of number feet (one foot in length) facilitates numeration skills as students lay them down end to end to measure.

Marble Machine

Materials: foam pipe insulation, marbles, blank paper and pencils

This activity promotes early mapping skills. Purchase foam pipe insulation (about $1.29 per six feet in length) It is already sliced down one side; slice it down the opposite side to create chute slides for marbles. Let students explore the correlation between height and marble

speed. Let them compare the speed of plastic beads and marbles. Let students have races, build new tracks by combining lengths of insulation, and draw maps of their marble machine to share with others.

Gadgetry

Materials: screw drivers, old appliances, blank paper, and pencils

Pair up prediction skills with fine motor skills. Students draw a picture of what they think a radio (phone, clock, etc.) might look like inside. Then students use screwdrivers to take apart old appliances. Students sort parts, talk about shapes, colors, and tools. Students enjoy drawing what the object actually does look like inside and comparing it with their prediction. Ask parents to donate broken appliances or purchase them for approximately two dollars at thrift stores. Speakers are especially fun because of the magnets (stereos, radios, tape players, etc.—avoid TVs or computer monitors)

Ramp Races

Materials: wooden boards for ramps, matchbox cars to race, unifex cubes, paper, and pencils

Use a long board as a ramp to race toy cars. Students line up two cars side by side in back of a ruler. They predict which car will travel the farthest distance. Students count backwards from ten, then lift the ruler to release the cars. Then they put together unifex cube trains to measure how many cubes the car traveled after leaving the ramp. Students repeat the experiment and compare the unifex trains. Did they get the same results? What happens if the adjust the height of the ramp? Which car travels the farthest? Why?