Pre-Kindergarten

Shapes, Forms, and Colors

NYS Standard 4 (Science): Physical Setting (PS)

✓ Key Idea 3: Matter is made up of a particle whose properties determine the observable characteristics of matter and its reactivity.

NYS Standard 4(Science): Living Environment (LE)

✓ Key Idea 3: Individual organisms and species change over time.

Major Understandings	Learning Experience/Objectives	Supporting Terms
PS 3.1c Objects have properties that can be observed, described, and/or measured: length, width, volume, size, shape, mass or weight, temperature, flexibility, reflectiveness of light. PS 3.1f Objects and/or materials can be sorted or classified according to their properties.	Getting Started: Students will use their background knowledge to contribute to a class discussion on shapes. Circles and Spheres: Students will identify circle and spheres shapes around the classroom and provide a description of a circle's and sphere's appearance. Squares and Cubes: Students will identify square and cubes shapes around the classroom and create a model of a square and a cube. Rectangles: Students will describe the attributes of a rectangle in comparison to a square and find samples of rectangles around their classroom. Triangles and Pyramids: Students will describe the attributes of a triangle and pyramid and will create a model of a triangle and a pyramid. Review of Shapes: Students will identify and describe a circle, square, triangle, and rectangle using their sense of touch and create patterns with shape beads. Other Shapes: Students will describe the attributes of five new shapes and create a shape book using pictures from magazines and newspapers. Different Temperatures-Different Colors: Students will measure the temperature of thermometers encased in envelopes of different colors and use the data to explain that darker colors absorb light and lighter colors reflect light.	shapes, attributes, circle, curved, straight, corner, sphere, square, corner, size, cube, measure, rectangle, side, triangle, pattern, hexagon, trapezoid, rhombus, ellipse, pentagon, booklet, temperature, thermometer
PS 3.1b Matter has properties (color, hardness, odor, sound, taste, etc.) that can be observed through the senses. PS 3.1f Objects and / or materials can be sorted or classified according to their properties. LE 3.1c In order to survive in their environment, plants and animals must be adapted to that environment. • Animal adaptations include coloration for warning or attraction, camouflage	Colors of the Classroom: Students will identify various colors around the classroom and create patterns/classify objects of various colors. Seasons of Color: Students will observe picture of the various seasons to pick out colors found in nature during that season and will describe how animals camouflage in nature due to their color. Color Mixing: Students will identify the primary colors and mix colors together to create secondary colors on the color wheel. Color Tints: Students will describe and explore the creation of colors of different tint. Shades of Color: Students will describe and explore the creation of color of different shades. Helpful Colors: Students will describe the shapes and colors of traffic signs and identify the similarities and differences between the traffic signs. Color Booklet: Students will review what they learned about the various tints and shades of color and create a booklet displaying their knowledge.	color, rainbow, season, camouflage, primary colors, secondary colors, chromatography, tint, shade, sign, yield, caution, booklet