

## **Lines**

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### **Synopsis**

This curriculum unit is a math unit on math and art for third graders. The unit is written to be taught in a regular elementary education classroom and contains background information and lesson on seven topics involving lines and art. The math lessons are suitable for third grade through fifth grade. The first lesson is on the different types of lines used in art as well as angles, and intersecting and parallel lines. The second lesson is on hatching, which is a technique that uses lines drawn close together in order to give the appearance of dimension to a drawing. The third lesson is on perspective, both one point perspective and two point perspective. Perspective is another technique that artists use to give their work the appearance of three dimensions. The fourth lesson is on symmetry with emphasis on the tessellation drawings done by M.C. Escher. The fifth lesson is on knot theory, which is a branch of topology that is interested in the mathematical properties of knots. The last lesson is on graph theory, which is very similar to knot theory, in which our world is studied from a geometrical perspective that does not account for distance.