

Optical Illusions

Work against your eyes. Trick your brain with lines and coils. Discover how mirrors and their reflections can play tricks on what you see. Make a Periscope to see above and beyond.

SUMMARY:

This topsy-turvy class challenges children to see the physics of optical illusions. Children discover optical illusions as a twisting coil climbs up and down without moving, and when a towel turns into a dog! Children manipulate flexible mirrors and explore the world with inversed vision. Hands-on laminates provide children the opportunity to create their own illusions. Children construct a classic mirror illusion, the periscope as their **TAKE-HOME PRODUCT**.

EDUCATIONAL VALUE:

This class uses engaging demonstrations and activities to introduce children to the concepts of refraction, the science of optics, and the biology associated with sight. The instructor uses a wide variety of optical illusions like the mirror mirage, twisting copper coils, and convex and concave mirrors to demonstrate how physics can trick our eyes. Children use erasable markers to create a series of laminated paper illusions and explore the reflections of various mirror forms. The children build and take home a Periscope.

TAKE-HOME MESSAGE:

- 1 Optical illusions trick our brain with what we see.
- 2 A mirror can distort a reflection.
- 3 Lines can make optical illusions.

TAKE-HOME PRODUCT:

Periscope

NORTH CAROLINA ESSENTIAL STANDARDS:

- 4.P.3.2 Recognize that light travels in a straight line until it strikes an object or travels from one medium to another, and that light can be reflected, refracted, and absorbed.

