



**science**

**FRIDAYS**

AT WADE THOMAS

Week 2  
August 24 - 28



# FOOL THE EYES



## Materials:

Water  
Glass container  
Penny  
Drinking straw

## Procedure:

1. Place a penny on a flat surface. Place an empty glass on top. Note that you can see the penny through the glass from various angles.
2. Pour water into the glass. Look at the jar from a side. The penny seemingly disappears! The light waves bend as they go from traveling through air to traveling through water and through the glass bottom, creating an optical illusion.
3. Make a hypothesis what would happen if the penny were to be placed inside the glass.
4. Pick up the penny and place it inside the glass in the center, on the bottom. Look at the jar from the side. Note if the penny is visible again or not. Was your hypothesis correct?

## Skills learned:

Observation  
Constructing a hypothesis

## Further study:

Place a straw in the glass. Note how it looks “broken” above and below the surface.

OPTICS, ANGLE OF REFRACTION