# Curiosity Guide #201 Vision



Accompanies Curious Crew, Season 2, Episode 1 (#201)

Bulls-Eye Drop Investigation #2

Description Another one-eye challenge! Is it easier with a friend?

## Materials

- 3 to 5 pennies
- Clear plastic cup
- Table

## Procedure

- 1) Position a friend about 2 feet away from a table.
- 2) Place the empty cup on the table.
- 3) Have the friend cover one eye.
- 4) Take one penny in your hand.
- 5) Hold your arm about 18 inches above the cup. Move the penny slowly from side to side.
- 6) Challenge the friend to say, "Drop it," when your hand is over the cup. What happened?
- 7) Try it several times with the remaining pennies.
- 8) Have the friend keep both eyes open and repeat the investigation with several pennies. What did you notice?

### My Results

### Explanation

The human eye is separated by about six centimeters. People use both eyes to establish two perspectives of the same object. This is called binocular vision. When the object is closer than 100 feet, people use the dual image to determine depth, distance, and position within its surroundings.

By closing one eye and performing a task with monocular vision, it is much harder to see how far away things are from each other, and to line them up. As a result, it was difficult to see when the pennies were above the empty cup.

Parents and Educators: use #CuriousCrew #CuriosityGuide to share what your Curious Crew learned!



Curious Crew is a production of Michigan State University. Learn more at WKAR.org. © MSU Board of Trustees. All rights reserved.