

# A STEM in the Park Take Home Activity

## STEM in the PARK

Science, Technology, Engineering, and Mathematics

# The Lazy Coin-Newton's First Law of Motion



### ***What You Need***

- A glass
- An index card
- A coin

### ***What To Do***

1. Put the index card across the top of the glass.
2. Place the coin in the middle of the card.
3. Can you make the coin fall straight down into the glass without touching the coin?

***Continued on back***

## **Learn...**

Newton's First Law of Motion-An object at rest tends to stay at rest, and a moving object tends to keep moving in a straight line until it is affected by a force. Inertia is the name for this resistance to change of motion. This "Lazy Coin" trick uses inertia. If you flick the card forward, the coin has too much inertia to move and should fall neatly into the glass.

## **Investigate: Presenting the Amazing Newton!!!!!!**

Magicians use Newton's first law when they pull a tablecloth out from under cups and saucers. You can try your own version of this trick by standing a mug of water on a piece of paper (make sure the mug is completely dry). Can you pull out the paper without spilling the water in the mug?

***This activity comes from West Side Montessori Center***



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