

Name \_\_\_\_\_

## F. Activity Guide.

**Note: If you see \*\*\* that means do whatever the directions say and have a teacher, parent, chaperone, or explainer check and initial that you did it.**

### Go to the “Whisper Disk”

1. Follow the directions. Pick 3 numbers from 1 to 100. Say them in a whisper. Have another person listen at the other “Whisper disk”. How many of the numbers did they hear correctly?  
a. One      b. Two      c. Three      d. Four      e. none \_\_\_\_\_
2. The “Whisper disk” is like a big:    a. ear      b. mouth      c. nose      d. elbow \_\_\_\_\_

### Head over to the “Sand Pendulum”.

1. Use the brush and clean sand from the table. Follow the directions and make a design with both of the pendulums. Do they both produce the same design?    Yes/ No \_\_\_\_\_
2. These designs are made by the inertia of the pendulums. Who first explained inertia as produced in this activity?    a. Albert Einstein    b. Isaac Newton    c. Ben Franklin \_\_\_\_\_
3. What force slows the pendulum down and makes it eventually stop?  
a. gravity    b. electricity    c. magnetism    d. Atomic energy \_\_\_\_\_

### Find the “Gravity Racer” activity.

1. Set up the racetrack as shown on the instructions. \*\*\* \_\_\_\_\_
2. Predict (educated guess) which track will cause the ball to get to the bottom first.  
a. Red    b. Yellow    c. Blue    d. Silver \_\_\_\_\_
3. Move the lever and race the balls.  
Which one does win the race?    a. Red    b. Yellow    c. Blue    d. Silver \_\_\_\_\_
4. When the ball is at rest at the top before you move the lever, the balls have:  
a. kinetic energy    b. potential energy    c. no energy \_\_\_\_\_
5. When the balls are rolling down the track, they have:  
a. kinetic energy    b. potential energy    c. no energy \_\_\_\_\_