

Energy Swing

Procedure

- 1. Collaborate** Work with a partner. Tie one end of a string around five washers. Tape the other end of the string to the edge of a table so the bottoms of the washers hang down 5 cm above the floor. Use masking tape to mark the spot on the floor just beneath the washers.
- 2. Measure** Hold the string tight as you pull the washers to one side until the distance between the bottom of the washers and the floor is 10 cm. Have your partner place a paper cup on the marked spot.
- 3. Observe** Let go of the washers and observe what happens to the cup. Record your observations.

- 4. Ask Questions** Ask a question about how the cup will move if you pull the washers farther away before letting go of them.

- 5. Experiment** Repeat steps 2 and 3, but raise the washers 20 cm above the floor.

Conclusion

Write the answers to the questions below.

- 1. Analyze Data** Based on your data, describe the relationship between the height of the washers and how the cup moved.

Name _____ Date _____

2. **Infer** Why do you think the height of the washers affected how the cup moved?

Investigate More!

Ask Questions Repeat the investigation using 10 washers. Ask a question about how the number of washers will affect the cup's movement when the washers swing. Experiment to find the answer.

