Name _____ Date _____



# Balancing Air

## Procedure

1. **Collaborate** Work with a partner. Tie a string around the center of a dowel. Hold the string while your partner slides the knot along the dowel. The dowel should be balanced so that it stays exactly level.

2. **Experiment** Use a metric ruler to help you. Tape two deflated balloons exactly the same distance from the center of the dowel. Slide the knot of the string until the dowel is balanced.

3. **Predict** Use a pencil to mark the dowel at the exact place where one balloon is attached. Then remove that balloon and blow it up. Tie a knot in the neck so that no air escapes. Predict what will happen when you reattach the balloon to the dowel.

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4. **Compare** Reattach the balloon to the dowel at the marked place. Compare how the dowel balanced before and after you inflated the balloon.

5. **Record Data** Record your observations below.

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**Use with page D5**

Name _____ Date _____

## Conclusion

**Write the answers to the questions below.**

1. **Compare** Which weighs more, an inflated balloon or a deflated balloon?

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2. **Hypothesize** Write a hypothesis about what caused the change in the way the dowel balanced.

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## Investigate More!

**Design an Experiment** Find out how much salt you would need to put inside the deflated balloon to balance the dowel. What conclusion can you make about the weight of the air and the weight of the salt?