**SECTION 5: BASKETBALL ARCS**

## LAB

**INTRODUCTION**



**Westminster College**

Students take for granted the path of a tossed ball. This activity shows students that gravity is always pulling down on a tossed ball. This downward force changes a thrown ball’s horizontal path to a downward curve. This curve is called parabola. This word is not used on the activity sheet but may be introduced to the class after students draw the path of a tossed ball. In baseball, the steep arc of a pop fly ball and the gentle arc of a line drive are both parabolas.

# ASSESSMENT ANCHORS ADDRESSED

**S4.A.2.1** Apply skills necessary to conduct an experiment or design a solution to solve a problem.

**S4.C.1.1** Describe observable physical properties of matter.

**S4.C.2.1** Recognize basic energy types and sources, or describe how energy can be changed from one form to another.

**S4.C.3.1** Identify and describe different types of force and motion, or the effect of the interaction between force and motion.

# PURPOSE

In this activity, students apply what they have learned about falling objects to playing basketball.

# MATERIALS

## For Each Pair of Students For Each Class

1 ball and hoop Masking tape

Activity Sheet 5 VCR

Videotape­ Toys in Space

*Teacher provides items marked with \**

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