



Westminster College

SECTION 5: BASKETBALL ARCS

LAB

INTRODUCTION

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 **