Teacher Information
6th Grade Unit. Activity 7: “Under Pressure”

Suggested time period:
One-two 45-minute periods or 90 minute block

Concepts and skills to review with students before activity:
• Scientific process, designing and carrying out an experiment
• Anatomy of heart and blood vessels

Prerequisite math skills:
• Finding the mean or average
• Addition and subtraction

Math activities that correlate with this activity:
• Finding the Mean – see supplemental activities
• Calculating the Mean – see supplemental activities

Materials:
Blood pressure monitors

Optional extensions and substitutions:
• Have students listen to sounds in the artery of the arm using a stethoscope. Have them try to take the blood pressure by listening to when the sounds in the artery start and stop. The pressure of the cuff when you first sounds in the artery is the systolic bp. The pressure in the cuff when the sounds stop is the diastolic pressure.
• Have students interview a friend or family member who has high blood pressure.
• Have students research on the Internet about causes of high blood pressure and long-term health effects.

Learning goals:
After completing this exercise students should be able to:
• Explain what blood pressure is.
• Explain how exercise affects blood pressure.
• Form a simple hypothesis.
• Make a conclusion based on data.

Additional Resources:
National Institutes of Health Guide to High Blood Pressure
http://www.nhlbi.nih.gov/hbp/
Information on high blood pressure from the American Heart Association
http://www.americanheart.org/presenter.jhtml?identifier=2114