BARTLESVILLE SCHOOLS - SCIENCE DEPARTMENT

9th Grade Physical Science

Curricular Objectives

Revised Spring 2010

9th Grade Physical Science Quarter: 1
Objective PHYSCI-1-A Duration: 4 ½ week

Abacus number 01-SCPS-05

Methods of Science and Measurement

(Local, State, National)

 $\boldsymbol{A}.\;\; Use a systematic approach to identify, formulate, and solve problems via the scientific method.$

Suggested Teaching Strategies – CPO Ch. 1

Students will define related vocabulary terms; use pre-reading guides to introduce them to the text; and fill in guided outline during class discussion.

Use various observation tools and techniques in the laboratory.

Observation/inference: demonstrate differences between observations and inferences using Styrofoam cups and acetone. See Aligned Resources list below.

Use a sample experiment to identify the dependent and independent variable, constant, and control.

Use various worksheets and activities compare and contrast hypothesis, theory, and scientific law.

Aligned Resources

Core Lab 1: Investigations and Experiments (CPO Investigation 1.2)

Other Labs and Activities:

- a) Mystery Jar Activity
- b) Time and Distance Lab (CPO Investigation 1.1)
- c) Styrofoam Cup / Acetone Observation Activity
- d) Candle Observation Activity

Videotape: Scientific Method with corresponding worksheet. Various worksheets and activities available.