

GRADE 7 - NATURAL SCIENCE

GRADE 7 (YEAR)

| OBJECTIVES | APPROACH | EVALUATION/ASSESSMENT | RESOURCES |
|---|---|---|---|
| Unit: Basic Science Skills | | A variety of interdisciplinary projects, covering the objectives. | |
| Identify lab equipment. Define the proper use and care of lab equipment. Describe lab safety. | Discussion/lecture on laboratory equipment and guidelines/procedures for safety skills. <u>Student Activities:</u> Small group, hands-on laboratory investigations (ex. practice using and identifying lab equipment). Teacher-generated worksheets and student studyguides on lab equipment and safety. | Jeopardy quizzes. Teacher observations during lab. investigations. Group presentations to the class. | Resource text: <i>Life Science The Challenge Of Discovery</i> , L. Bierer et. al. Chapter 1, pp.10-30. <i>Life Science: The Challenge of Discovery Study Guide</i> Worksheet, p. 9. <i>Life Science: The Challenge of Discovery Laboratory Manual</i> Worksheet, pp. 1-12. Science World Magazines. Teacher-generated handouts. |
| Distinguish between length, mass, volume, temperature and time. Calculate measurements in metric units. | Discussion/lecture on metric system and differences between types of measurements. Cooperative/hands-on group lab investigations (ex. Gum Elastics lab, teacher-generated measurement labs). Worksheets and student studyguides on measurements and metric system. | Jeopardy quizzes. Teacher observations during lab. investigations. Group presentations to the class. Laboratory write-ups. | Resource text: Ch. 1, pp. 22-25, Activity 1.4. Study Guide Worksheet: p. 4. Science World Magazines. <i>Science Mind Stretchers</i> , I. Forte & S. Schurr, pp. 51-54. Teacher-created handouts. |
| Identify the steps in the scientific process. Record and describe observations accurately. Formulate a hypothesis. Assemble and analyze data and research. | Discussion/lecture on scientific process (observations, formulate hypotheses, design a procedure, collect and analyze data, evaluate results, formulate conclusion, report results). Cooperative group work. | Jeopardy quizzes. Teacher observations during lab. investigations. Group presentations to the class. Laboratory write-ups. | Resource text: Ch. 1, pp. 14-20. Science World Magazines. <i>Oobleck</i> , LHS GEMS. <i>Paper Towel Testing</i> , LHS GEMS. |