

## **Achievement Level Descriptors – Physical Science**

### **Achievement Level I**

Students performing at this level do not have sufficient mastery of knowledge and skills of the course to be successful at a more advanced level in the content area.

Students performing at Achievement Level I show limited knowledge in the areas of forces and motion, energy and conservation, electricity and magnetism, structure and properties of matter, and regularities in chemistry. Students understand some components of the scientific inquiry process and may be able to conduct a simple experiment.

### **Achievement Level II**

Students performing at this level demonstrate inconsistent mastery of knowledge and skills of the course and are minimally prepared to be successful at a more advanced level in the content area.

Students performing at Achievement Level II utilize some graphing and mathematical skills to solve problems in the areas of forces and motion, energy and conservation, electricity and magnetism, structure and properties of matter, and regularities in chemistry. Students show basic understanding of the scientific inquiry process by conducting simple experiments.

### **Achievement Level III**

Students performing at this level consistently demonstrate mastery of the course subject matter and skills and are well prepared for a more advanced level in the content area.

Students performing at Achievement Level III utilize graphing, mathematical, and interpretive skills to solve problems in the areas of forces and motion, energy and conservation, electricity and magnetism, structure and properties of matter, and regularities in chemistry. Students show understanding of the scientific inquiry process by designing and conducting simple experiments, then interpreting the results.

### **Achievement Level IV**

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient in the course subject matter and skills and are very well prepared for a more advanced level in the content area.

Students performing at Achievement Level IV can interpret and analyze charts, graphs, data and mathematical formulas. Students replicate and evaluate scientific investigations and generate alternative interpretations related to the areas of forces and motion, energy and conservation, electricity and magnetism, structure and properties of matter, and regularities in chemistry.