**Grade 4 Tier 1 - Emerging**

A fourth-grade Tier 1 student performing at the **Emerging** Level demonstrates a growing academic awareness of some of the basic skills and concepts outlined by the Alternate Eligible Content in at least one of the Pennsylvania Science Reporting Categories.

Students performing at this level demonstrate these abilities by
- identifying common technologies by name
- matching animals to their specific habitat
- identifying weather conditions using weather symbols

**Grade 4 Tier 1 - Novice**

A fourth-grade Tier 1 student performing at the **Novice** Level demonstrates a growing academic awareness of the basic skills and concepts outlined by the Alternate Eligible Content in at least two of the Pennsylvania Science Reporting Categories.

In addition to the skills demonstrated by students performing at the **Emerging** Level, students performing at this level demonstrate these abilities by
- selecting the appropriate tool to perform basic measurement tasks
- identifying the basic needs of plant and animals
- identifying the solid and liquid states of matter
- matching objects based physical characteristics
- identify the position of an object relative to another
- distinguishing between pictures of Earth’s prominent geological features
- identifying groups of products that can be recycled or reused
- matching the appropriate measuring tool to measure temperature, precipitation and wind direction

**Grade 4 Tier 1 - Proficient**

A fourth-grade Tier 1 student performing at the **Proficient** Level solves simple tasks and demonstrates progressing academic awareness of most of the basic skills, concepts and vocabulary outlined by the Alternate Eligible Content in at least three of the Pennsylvania Science Reporting Categories.

In addition to the skills demonstrated by students performing at the **Novice** Level, students performing at this level demonstrate these abilities by
- identifying changes to objects and living things
- recognizing the observation that supports a scientific fact
- selecting the appropriate measuring tools to solve problems
- distinguishing between natural and human made systems
- identifying naturally occurring patterns in nature
- identifying the functions of specific structures of a plants and animals
- distinguishing between living and non-living things
- identifying how seasons affect trees and animals
- matching the impact of pollution with its source
A fourth-grade Tier 1 student performing at the **Advanced** Level solves routine tasks and demonstrates consistent academic awareness of the basic and some complex skills, concepts and vocabulary outlined by the Alternate Eligible Content across all four Pennsylvania Science Reporting Categories.

In addition to the skills demonstrated by students performing at the **Novice** and **Proficient** Levels, students performing at this level demonstrate these abilities by:

- sequencing stages of the life cycles of organisms
- determining the final position of an object given a specific force and direction