

## APPENDIX 3: VOCABULARY BUILDING

To feel more successful at learning scientific vocabulary (often equated with learning a new language), students need a variety and a number of opportunities to engage scientific terminology. Some of this vocabulary is essential to operating comfortably within a science discipline (e.g., geology). To understand such particular vocabulary, students require knowledge that is both *definitional* (What does it mean?) and *contextual* (How is the term applied?).

The approach that is advocated in the *Senior Years Science Teachers' Handbook* (see *SYSTH*, Chapter 10: Building a Scientific Vocabulary) includes vocabulary-learning strategies at several levels:

- **Level 1 strategies** promote exposure to words using scientific dictionaries, word games, Word Cycle activities, suggested readings, and so on.
- **Level 2 strategies** require students to process words by creating their own definitions, creating Concept Maps using terms, using Compare and Contrast frames, Sort and Predict strategies, and so on.

The following learning strategies can be used in the science classroom to help students develop their vocabulary.

### **Sort and Predict** (See *SYSTH* 10.13, 10.23)

Given approximately 20 foundation words, students develop four categories and group the words into these categories.

### **Three-Point Approach** (See *SYSTH* 10.9, 10.22)

Students write the definition (in their own words), give a synonym or example, and draw a picture or a diagram of a word or concept.

### **Webs and Clusters** (See *SYSTH* 10.11, 11.6)

Both Word Webs and Word Clusters are used to establish relationships between words by looking for similarities and differences. Word Webs show linkages between terms, with relationships described on a connecting line. Word Clusters show clusters of related terms grouped together.

NOTES