

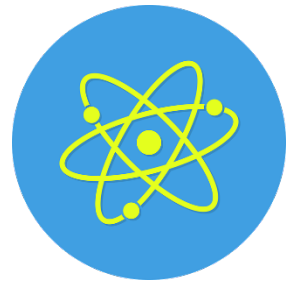
## 0.4 Student Activity Key

### Scientific Laws and Theories



**Penguin Bay Biology**

- Biology Class, Simplified -



**Choose the best answer for the following questions.**

**C** 1. What is the best way for a hypothesis to be proven correct or incorrect?

- A. make an educated guess
- C. test it experimentally
- B. ask other scientists
- D. create a graph

**A** 2. Which statement about theories is correct?

- A. theories can be modified
- C. theories are based on observations
- B. theories are based on untested data
- D. theories are statements of fact

**D** 3. Which statement about scientific laws is incorrect?

- A. laws are based on proven evidence
- C. laws are generally accepted to be true
- B. laws are based on observations
- D. laws must be proven correct or incorrect

**C** 4. Which statement about experimentation is incorrect?

- A. it may be quantitative or qualitative
- C. it does not require the scientific method
- B. it must include a control group
- D. it tests only one variable at a time

**B** 5. Why is graphing a good way to report experimental data?

- A. graphing omits qualitative data
- C. graphing solves practical problems
- B. graphing represents data in a clear way
- D. graphing is a step in the scientific method