Name Period Date

You can think of independent and dependent variables as the "cause" and the "effect" in scientific experiments. Identify the possible independent and dependent variables in the following statements. Notice in each case that there is no one correct cause-and-effect relationship. The first one is done for you.

Example: Students with higher levels of stress and anxiety study more.

Independent variable: Stress and anxiety level

Dependent variable: Time spent studying

These variables can also be reversed to study a different cause-and-effect relationship.

Independent variable: Time spent studying

Dependent variable: Stress and anxiety level

3. Fashionable students are popular.

Independent variable: _____

Dependent variable: _____

4. Highly coordinated people make good athletes.

Independent variable: _____

Dependent variable: _____

5. More algae grows in water that has less dissolved oxygen.

Independent variable: _____

Dependent variable: _____

**Challenge** Do you think that confusion between a "cause" and "effect" can occur in a scientific investigation? Explain your answer.

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