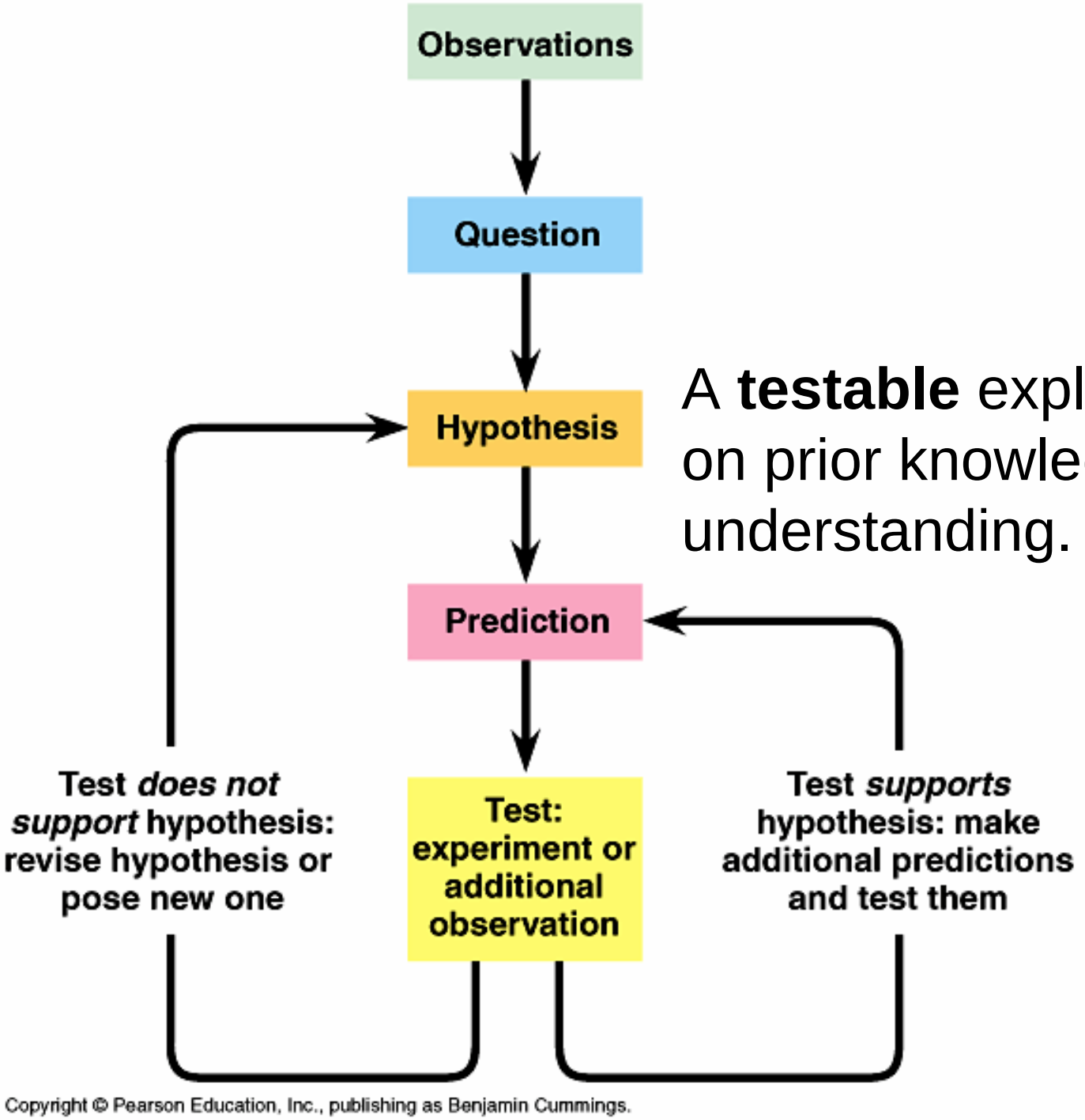
Scientific Methods

Chapter 1.2



A **testable** explanation based on prior knowledge and understanding.

Candle-flask Phenomenon

Observation	Inference
1. Bubbles produced from the flask if placed over candle quickly.	Air is pushed out of flask (high pressure).
2. Bubbles stop and water starts rising into flask.	Less air in the flask created a vacuum (low pressure).
3. Water rose faster after the candle went out.	Eliminating the source of heat made the vacuum stronger.

Temperature and Pressure

Heating Air —Expansion→ Higher Pressure

Cooling Air —Contraction→ Lower Pressure