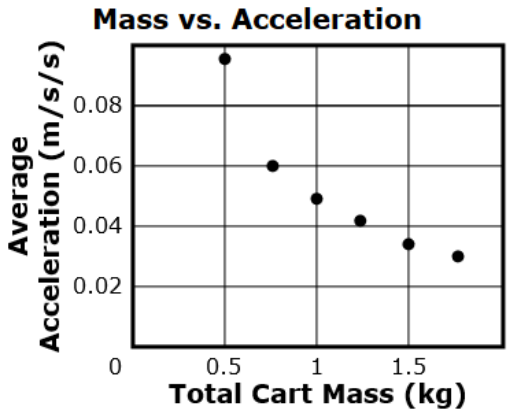
Item	Grade	PE	SEP	DCI	CCC	DOK
11	High School	HS-PS2-1	4. Analyzing and Interpreting Data	PS2.A Forces and Motion	2. Cause and Effect	2

ILCS: Identify the relationship between mass and acceleration.

A student performs an experiment in which a cart is pulled across a table by exerting a net force of 0.05 N on the cart. Different amounts of mass are added to the cart for each trial. The graph shows data from the experiment.



Based on the results from the experiment, what claim can the student make about the relationship between net force, acceleration, and mass?

Ⓐ Objects with smaller mass experience a larger acceleration and therefore a larger net force.

Ⓑ Objects with larger mass experience a smaller acceleration and therefore a smaller net force.

Ⓒ Objects with larger mass experience a smaller acceleration when the net force is the same.

Ⓓ Objects with smaller mass experience a smaller acceleration when the net force is the same.

Key: C (1 point)