$\qquad$ Date $\qquad$ Class $\qquad$

## School to Home

## Acceleration

Directions: Use your textbook to answer each question.

1. Speed, velocity, and acceleration describe how an object's position and motion change over time.

What is acceleration, and what are two conditions that can change when an object accelerates?
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2. Acceleration can be positive or negative.

What type of motion would produce positive acceleration in an object? What type of motion would produce negative acceleration?
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3. Acceleration of an object can be calculated if the initial speed, final speed, and total time the object is in motion are known.

What is the acceleration of a car during a 5 minute interval in which it goes from $10 \mathrm{~m} / \mathrm{s}$ to $15 \mathrm{~m} / \mathrm{s}$ ?
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4. Motion can be described with speed-time graphs.

How would a speed-time graph represent the motion of an object that is speeding up? How would it represent the motion of an object that is moving at a constant speed?
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