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CLASSWORK - Wile E. Coyote and Sir Isaac Newton

We will be watching some Warner Bros. cartoons and looking for evidence of Newton's laws of motion. Sometimes the laws are correctly portrayed, and sometimes events happen that defy the laws.

Newton's First Law of Motion - An object at rest will remain at rest, and an object in motion will remain in motion at constant velocity, unless acted upon by an unbalanced force. For example, a bowling ball will continue to roll unless it is acted upon by a force (friction).
Newton's Second Law of Motion - force = mass x acceleration. An object will be accelerated more by a large force than by a small force. A given force will accelerate a more massive object to a lesser extent than it will accelerate a less massive object. For example, a bullet is accelerated more than the more massive gun which fires it.
Newton's Third Law of Motion - Every force has an equal and opposite reacting force. Or, forces work in pairs. For example, when a cannon is fired, the cannon ball is accelerated in one direction, and the cannon recoils in the opposite direction.
We will also be looking for evidence of the force of friction, and the force of gravity.

In the spaces below, describe the motion events and then explain which law of motion is illustrated and why it is correctly or incorrectly portrayed. The first one is done for you.

CARTOON #1 - "Stop, Look and Hasten"
Law # 1 How it is illustrated: CORRECTLY *Wile E. Coyote is walking along the road. This part correctly illustrates the first law. He is applying a force (the effort of his muscles) to continue forward motion, which would stop without the effort of his muscles due to the force of friction between his feet and the road.*

Law # _____ How it is illustrated: _____

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Law # _____ How it is illustrated: _____

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Law # _____ How it is illustrated: _____

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Law # _____ How it is illustrated: _____

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CARTOON #2: _____

Law # _____ How it is illustrated: _____

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Law # _____ How it is illustrated: _____

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Law # _____ How it is illustrated: _____

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Law # _____ How it is illustrated: _____

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