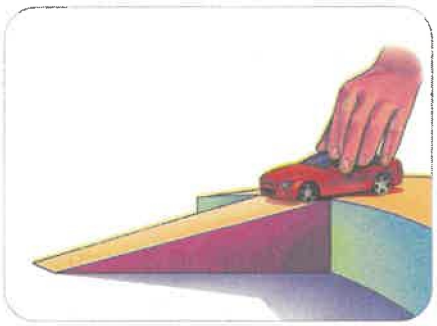
Lesson Review

Investigate Motion

1. This illustration shows a toy car placed on a ramp. When the car is let go, it will begin to roll down the ramp. What can be concluded about the forces acting on the toy car as it is rolling? SC.5.P.13.1 SC.5.P.13.4



- o A. The force pulling the car down the ramp is equal to the force of friction with the ramp.
- o B. The forces of both gravity and friction pull the car down the ramp.
- o C. The force of gravity is acting on the toy car, but the force of friction is not acting on it.
- o D. The force pulling the car down the ramp is greater than the force of friction on the ramp.

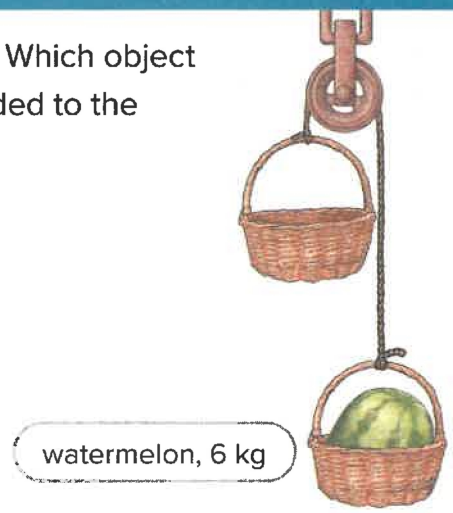
2. How do the properties of a ramp affect the force on a car on the ramp? SC.5.P.13.2

- o A. The steeper the ramp, the greater the force of friction on the car.
- o B. The longer the ramp, the greater the force of gravity on the car.
- o C. The steeper the ramp, the greater the force of gravity on the car.
- o D. The longer the ramp, the weaker the force of friction on the car.

GO ON

3. In the illustration, a pulley is holding a 6 kg watermelon. Which object will lift the watermelon to the top of the pulley when added to the second basket? SC.5.P.13.3

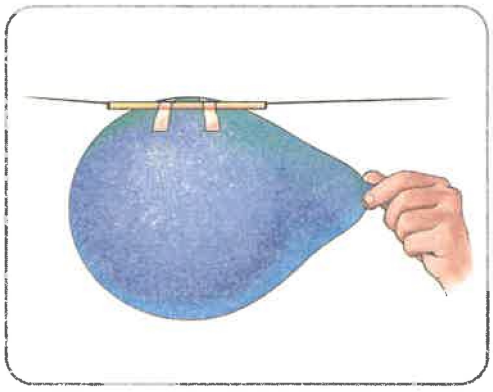
- o A. bowling ball, 7 kg
- o B. brick, 3 kg
- o C. barbell, 5 kg
- o D. pineapple, 1 kg



4. Gene forms the hypothesis that the strength of a push affects the motion of an object. Plan an experimental investigation that could test this hypothesis. SC.5.P.13.2

5. In the illustration, Elaine has designed an experimental investigation on the forces that affect the motion of a balloon rocket.

How could she test the effect of gravity on the motion of the balloon? SC.5.P.13.1 SC.5.N.2.1



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