Ch 13-5: What is Newton’s 2nd Law of Motion? Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Basic Physical Science Notes 2018

Key Terms:

1. Newton: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Newton’s 2nd Law of Motion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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EX w/object starting at rest:

EX w/object starting in motion:

Short Answer:

1. What effect does an unbalanced force have on a moving object?
2. The amount by which an object accelerates depends on three things. What are they?
3. Review time….What is acceleration?
4. In this picture, the same force is applied to two different wagons. One wagon holds a small mass, while the other wagon holds a larger mass. How will these two wagons ***accelerate*** compared to each other? Why?
5. This picture shows a boy walking with a cart and then running with a cart. The carts have the same mass. How will these two carts ***accelerate*** compared to each other? Why?
6. How much force would you have to apply to a 10-kg object to make it accelerate at a rate of 45 m/s2?
7. A force of 10 Newtons is applied to a 5-kg mass. What is the object’s acceleration?