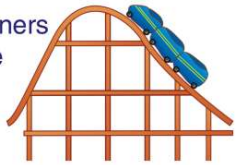
Newton's Laws of motion

Sci E

Name _____ Class _____ Date _____

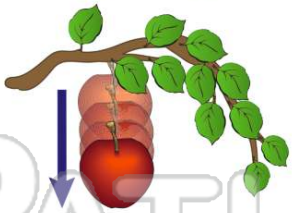
1 In what way do designers of roller coasters use **friction** to their **advantage**?



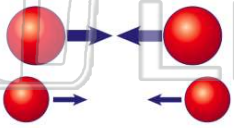
A to slow down roller coasters
B to make roller coaster speed up
C to keep roller coasters is motion
D to help roller coasters sound louder

2 _____ is an **attractive force** that attempts to pull two objects **together**.

A Work
B Friction
C Gravity
D Inertia



3 **Mass** and **distance** affect _____.



A an object's speed
B an object's color
C the strength of gravity
D the strength of momentum

4 Objects in motion tend to **stay in motion**. Motion only changes if an unbalanced outside force causes change. This **resistance to change** of motion is called _____.

A inertia

5 A a a w d u T

A
B

7 W e N c

A its height added to its speed
B its weight divided by its acceleration
C its mass times its acceleration
D its width times its speed

A the book
B the pencil
C the paper clip
D the crayon

9 According to **Newton's third law of motion**, what does every action have?

A no reaction
B an equal and opposite reaction
C the same reaction
D a larger reaction

10 When object A exerts a force onto object B, object B exerts a force of **equal strength in the opposite direction** on object A. Which of **Newton's laws** does this example support?

A Newton's gravitational law
B Newton's third law of motion
C Newton's second law of motion
D Newton's first law of motion

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ANSWER KEY

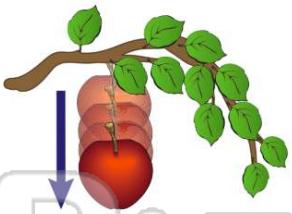
In what way do designers of roller coasters use **friction** to their **advantage**?

A to slow down roller coasters
B to make roller coaster speed up
C to keep roller coasters is motion
D to help roller coasters sound louder

a

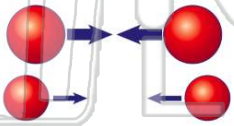
_____ is an **attractive force** that attempts to pull two objects **together**.

A Work
B Friction
C Gravity
D Inertia



c

Mass and **distance** affect _____.



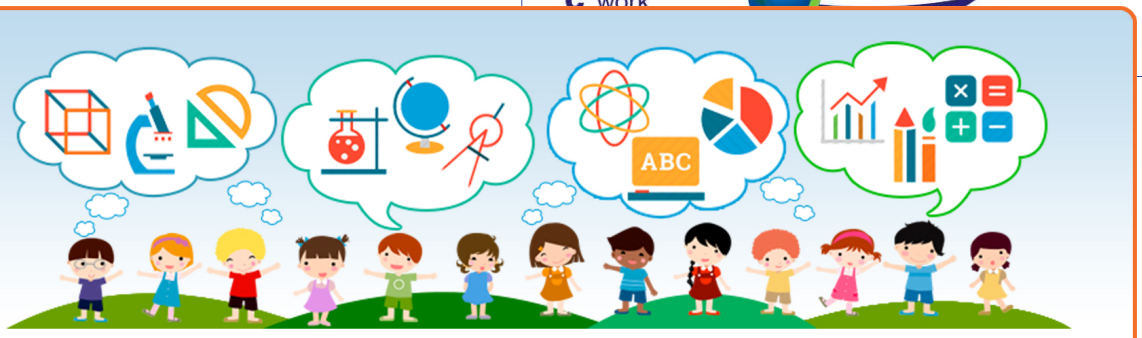
A an object's speed
B an object's color
C the strength of gravity
D the strength of momentum

c

Objects in motion tend to **stay in motion**. Motion only changes if an unbalanced outside force causes change. This **resistance to change** of motion is called _____.

a

A inertia
B gravity
C work

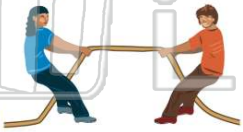


B its weight divided by its acceleration
C its mass times its acceleration
D its width times its speed

B the pencil
C the paper clip
D the crayon

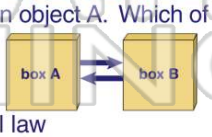
According to **Newton's third law of motion**, what does every action have?

A no reaction
B an equal and opposite reaction
C the same reaction
D a larger reaction



b

When object A exerts a force onto object B, object B exerts a force of **equal strength in the opposite direction** on object A. Which of **Newton's laws** does this example support?



A Newton's gravitational law
B Newton's third law of motion
C Newton's second law of motion
D Newton's first law of motion

b