





# Newton's Notions Practice



Match each object with its type of simple machine.

^ Instructions

			
Inclined plane	Pulley	Lever & wedge	Pulley & Lever

## Matching Pairs

# Quiz

## Section 2

Trinity ran down the sidewalk to school with her empty backpack. After school Trinity's backpack was loaded with books. Which best describes the force required to carry her book bag home?

- It took the same amount of force to carry the loaded book bag home.
- It took a greater amount of force to carry the loaded book bag home.**
- It took a lesser amount of force to carry the loaded book bag home.

## How does friction affect speed?

- more friction decreases speed
- less friction decreases speed
- more friction increases speed

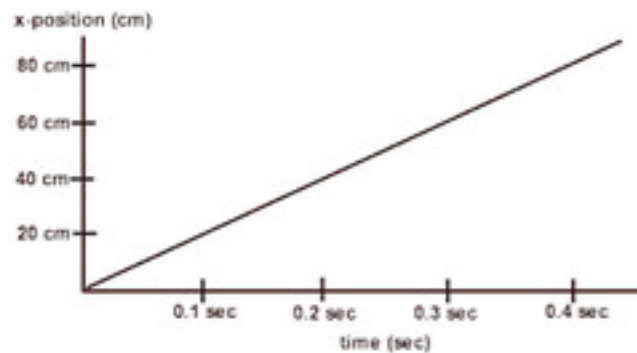
## Which best describes the force of gravity?

- a **pulling force**
- a change in mass
- a pushing force
- a change in speed



Look at the picture. Which best describes what is occurring?

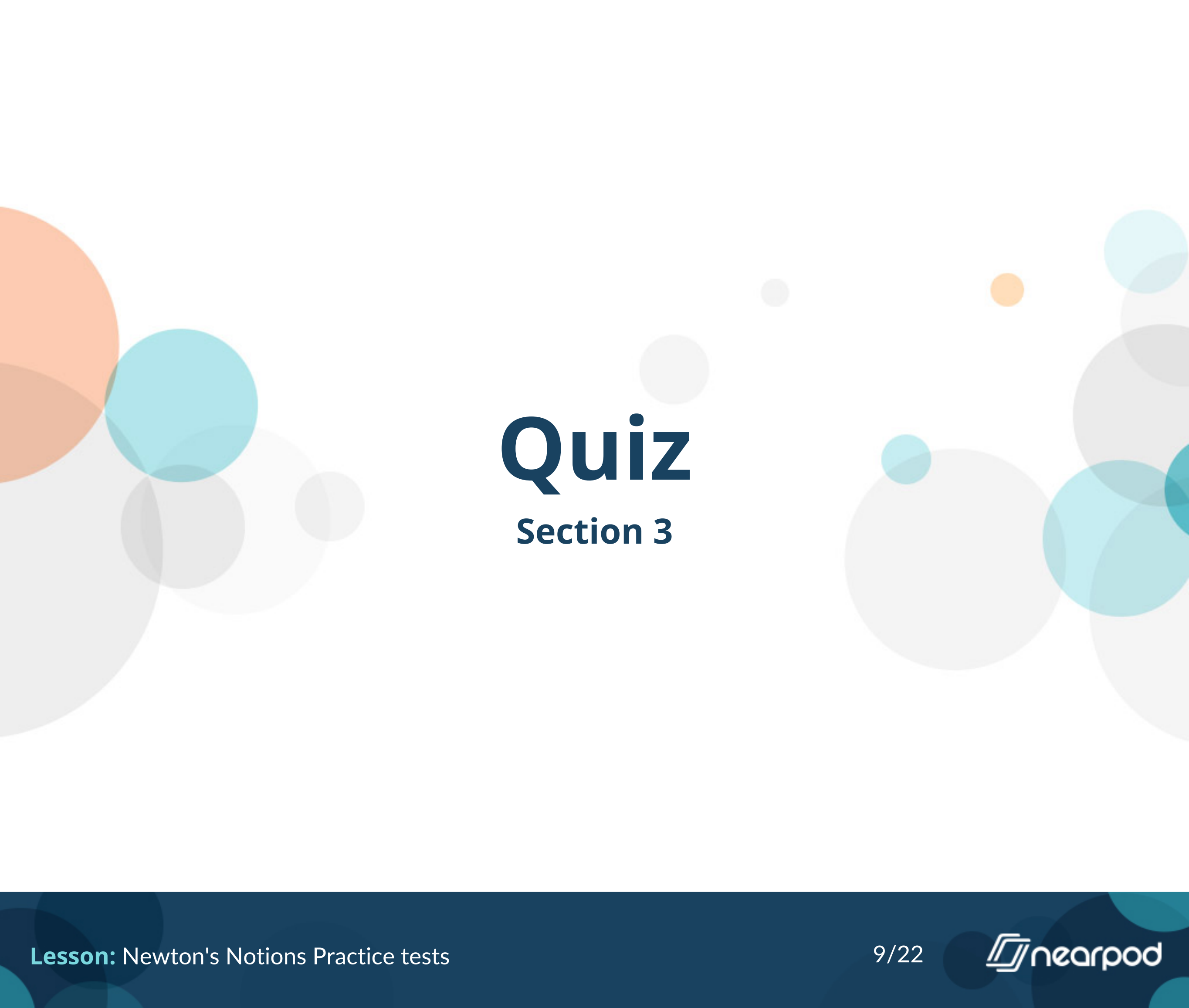
- Mass is being applied to the lawnmower.
- There is no friction acting on the lawnmower.
- Force is being applied to the lawnmower.**
- There is no gravity acting on the lawnmower.



**What does this position vs. time graph shows about the speed of the object? You can click the picture to make it bigger.**

- The object is accelerating/speeding up.
- The object is moving at a constant speed.**
- The object is not moving.
- The object is decelerating/slowning down.





# Quiz

## Section 3



Look at this tug of war picture, with the forces that each side is pulling listed above their heads. What will happen in this game?

- The left hand side will win.
- The right hand side will win.
- They will not move at all.**
- Everyone will fall down.



Look at this tug of war picture, with the forces that each side is pulling listed above their heads. Which of the following statements is true?

- The forces are balanced.**
- The forces are unbalanced.
- You cannot determine if the forces are balanced from the information given.

**Which of these objects takes the most force to push 1 meter?**

- bicycle
- skateboard
- scooter
- car



If you went to the moon, you would weigh less. Why would you weigh less on the moon?

- There is less air on the moon.
- There is no water on the moon.
- There is less gravitational pull on the moon.**
- There is less friction on the moon.

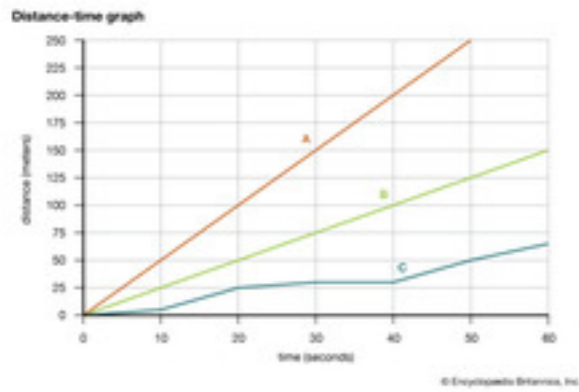


**Are the forces in this picture balanced or unbalanced?**

- Balanced
- Unbalanced**

# Quiz

## Section 4



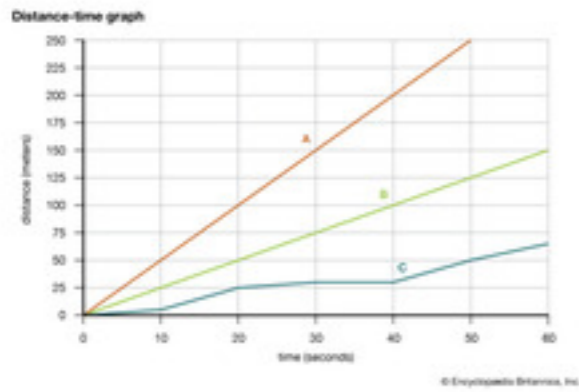
**Look at the graph, you can click it to make it bigger.  
Which object was moving the fastest?**

A

B

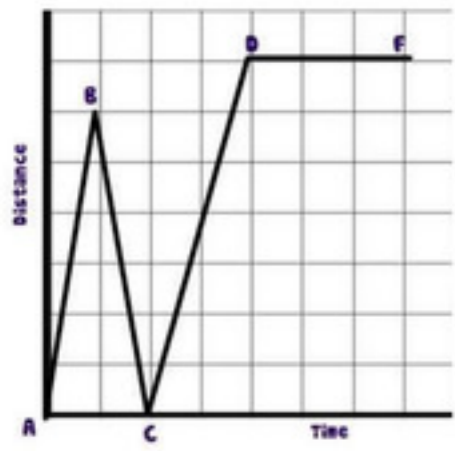
C





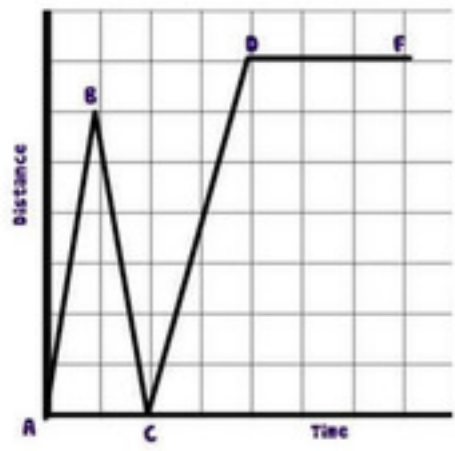
**Look at the graph, you can click it to make it bigger.  
Which object changed speeds several times?**

- A
- B
- C



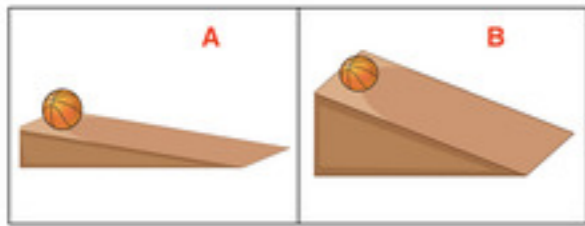
Look at the graph. You can click it to make it bigger. Blakely left for school and then realized she forgot her bookbag and went home for it before going back to school for 3 hours. During which piece of the graph was Blakely driving home?

- AB
- BC
- CD
- DF



Look at the graph. You can click it to make it bigger. Blakely left for school and then realized she forgot her bookbag and went home for it before going back to school for 3 hours. During which piece of the graph was Blakely driving all the way to school?

- AB
- BC
- CD
- DF



**Which ball will roll faster?**

A

B

# Open Ended Question

**Why is it easier to roll a ball down the hill than up a hill?**