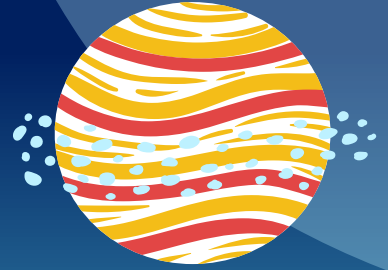


Welcome

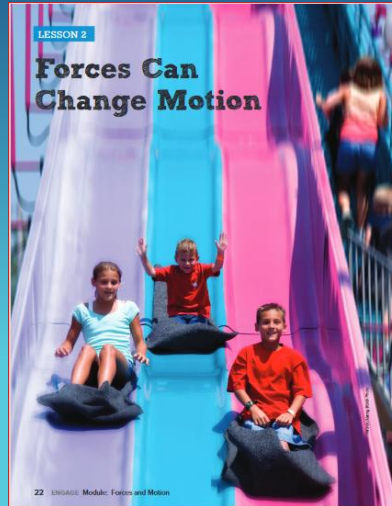
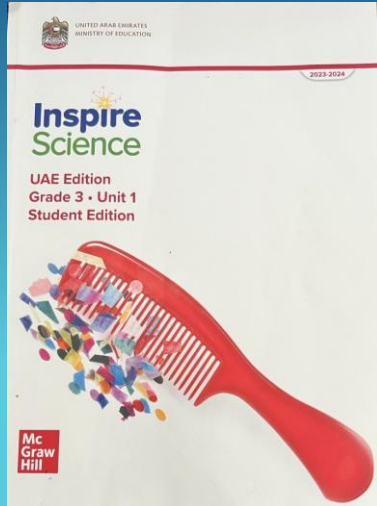


Welcome Grade 3



Review

Lesson2 :Force can change motion



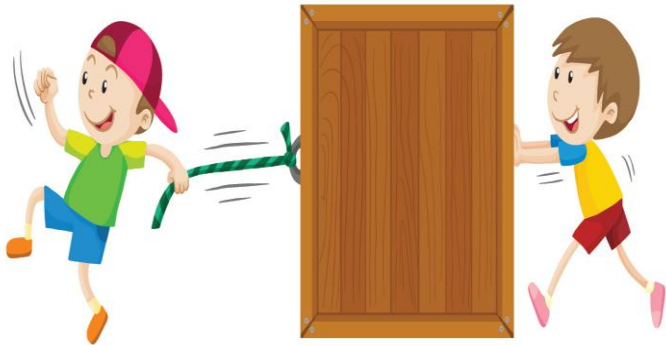
I can say

- **What is Force, Friction, Gravity
Balanced and Unbalanced forces**
- **How can force change motion ?**

What we learned

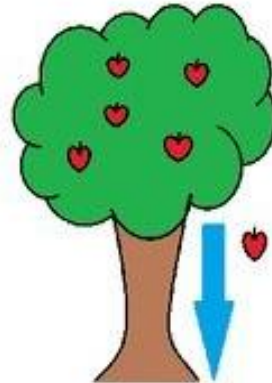
Force

A force is a push or a pull.



Gravity

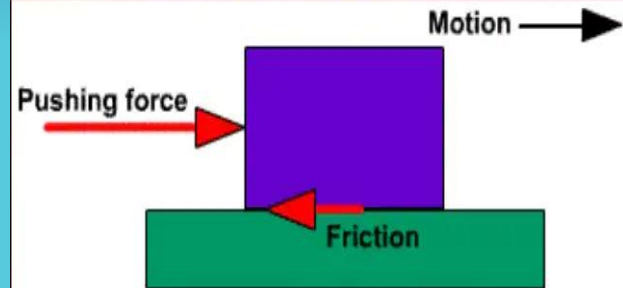
Gravity is the force that pulls objects towards each other



Friction

What is Friction?

Friction is a force that opposes motion between two surfaces touching each other.



What we learned

**A force can change the
direction of the moving object**



© forceinphysics.com



A footballer
uses a force
to change the
direction of
motion of a ball.

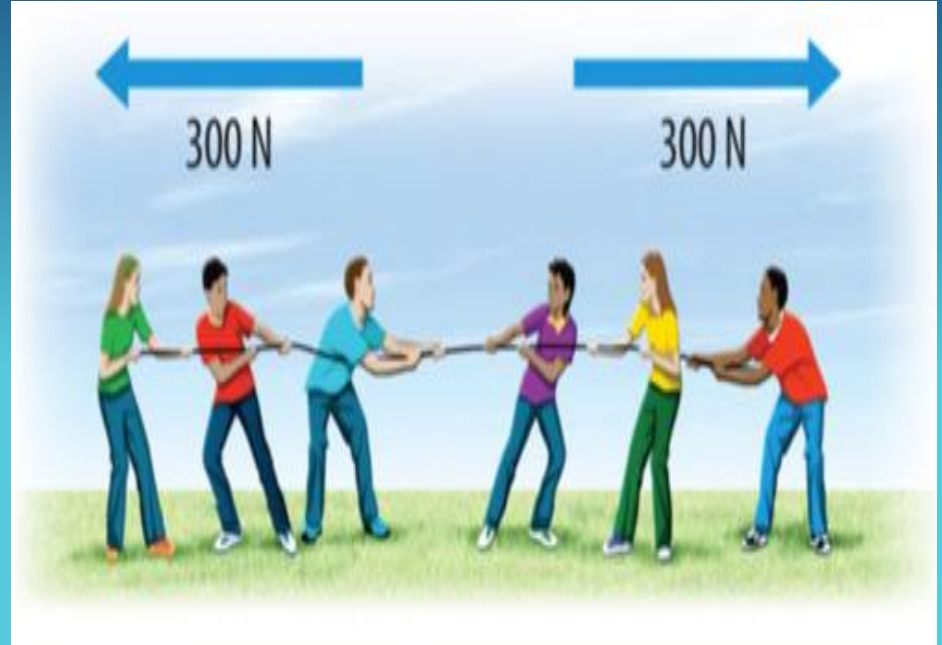
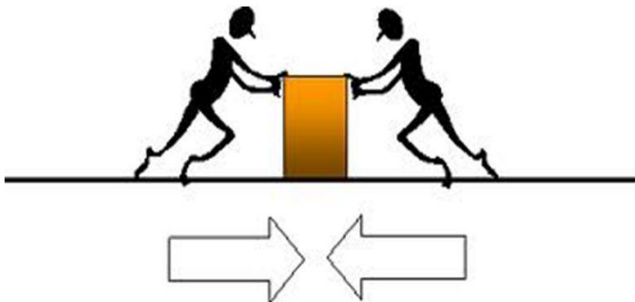
What we learned

Balanced forces

Forces that cancel each other out when acting together on an object

Balanced Forces

- Equal forces acting on one object in opposite directions.
- Do not change the object's motion.

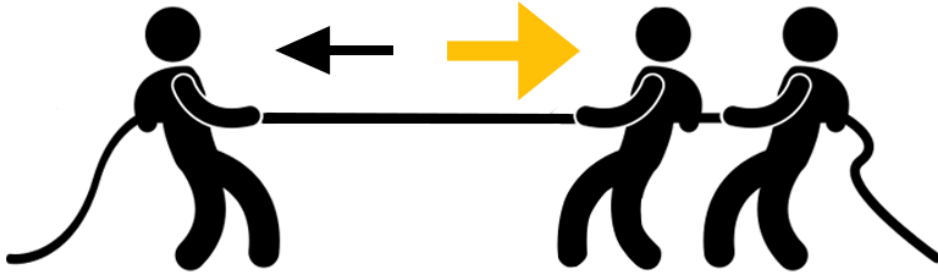


What we learned

Unbalanced forces

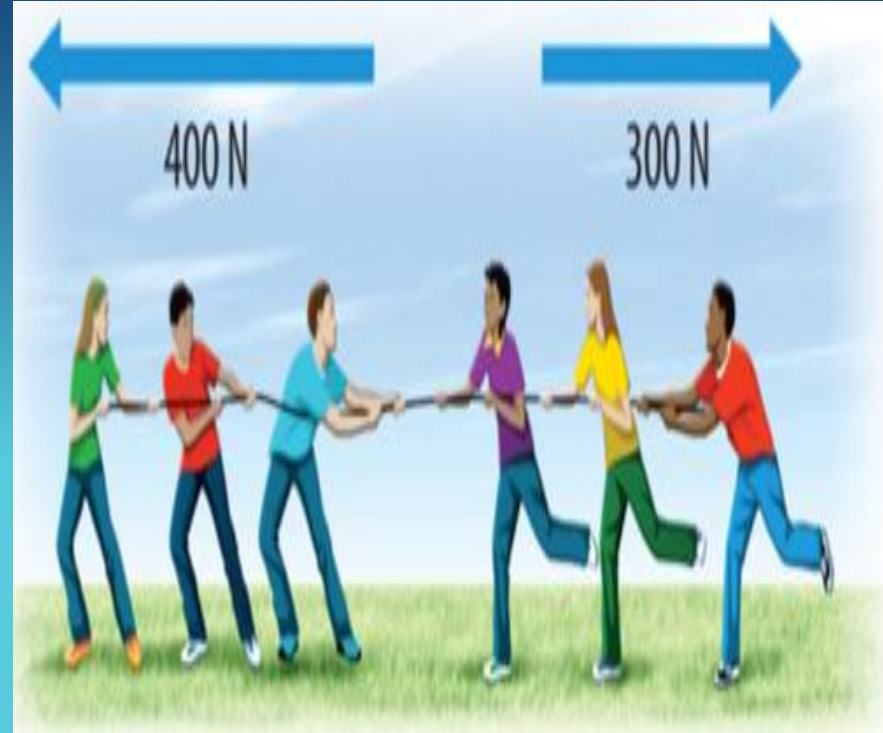
Forces that are not equal to each other

forces acting on an object to
cause a change in motion



unbalanced force

Game Smartz flashcard



Starter Activity

Share your
answer in the
whiteboard

01:00
HR. TIMER

SCIENCE LEARNING

Golf Ball



Three friends are playing golf. They each have different ideas about the forces that act on a golf ball. They asked you these questions:

Finn: Forces act on the golf ball only when the golfer hits the ball.
Pete: Forces act on the golf ball only when the ball is on the tee.
Tad: Forces act on the golf ball when it is on the tee and when the golfer hits the ball.

Who has the best idea about forces?

Explain why you think it is the best idea.

You will need the Page Keeley Science Probe Idea by the book.

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Who has the best idea about forces?

A

Finn: Forces act on the golf ball only when the golfer hits the ball.

B

Pete: Forces act on the golf ball only when the ball is on the tee.

C

Tad: Forces act on the golf ball when it is on the tee and when the golfer hits the ball.

Write answer
in the
Textbook

Page No: 23

Talk About It

Look at the photo and watch the video of the kids going down the slide. What questions do you have about the phenomenon? Talk about your questions and observations with a partner.



How do they go down so fast ?

ENCOUNTER THE PHENOMENON

How are they going down the slide so fast?

GO ONLINE

Check out Slides to see the phenomenon in action.

Talk About It

Look at the photo and watch the video of the kids going down the slide. What questions do you have about the phenomenon? Talk about your questions and observations with a partner.

Did You Know?

London has the longest and tallest slide in the world. It takes about 40 seconds to go down!



ENGAGE: Lesson 2 Forces Can Change Motion 23

Page 26

02:00

PER: TAYLOR



22 ENGAGE Module: Forces and Motion



Write answer
in the Textbook

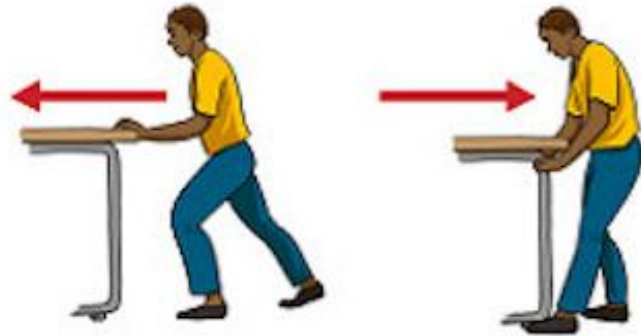
Page No: 38

Summarize It

Explain the effects of a force acting on an unmoving object.



The unmoving object will
move in the direction of
force.



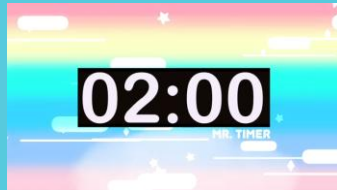
LESSON 2
Review

EXPLAIN THE PHENOMENON How are they going down the slide so fast?

Summarize It
Explain the effects of a force acting on an unmoving object.

REVISIT Revisit the Page Keeley Science Probe on page 21. Has your thinking changed? If so, explain how it has changed.

Page 41



Write answer
in the Textbook

Page No: 39

Share your
answer in the
whiteboard



Three-Dimensional Thinking

1. How do forces change the motion of objects?

- A. Forces can change the speed or direction of an object's motion.
- B. The size of the force affects the speed of the object.
- C. The direction of the force affects the direction of the object's motion.
- ☒ D. All the above
- E. None of the above

Three-Dimensional Thinking

1. How do forces change the motion of objects?

- A. Forces can change the speed or direction of an object's motion.
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- C. The direction of the force affects the direction of the object's motion.
- D. All the above
- E. None of the above

2. An egg is about to roll off the counter. How can you get the egg to stop without picking it up?

3. Explain why the amount of friction would be different on an icy surface and a dry, concrete surface. How does the amount of friction affect the movement of an object across both surfaces?

EVALUATE Lesson 2 Forces Can Change Motion 39

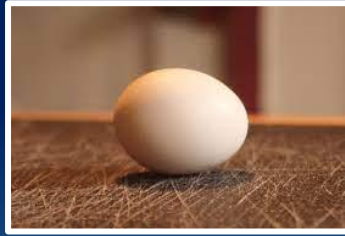
Page 42

01:00

PER. TIMER

Write answer
in the Textbook

Page No: 39



Force



Three-Dimensional Thinking

1. How do forces change the motion of objects?
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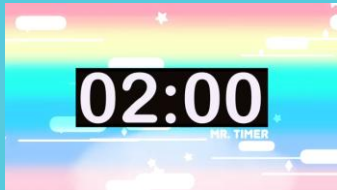
3. Explain why the amount of friction would be different on an icy surface and a dry, concrete surface. How does the amount of friction affect the movement of an object across both surfaces?

EVALUATE Lesson 2 Forces Can Change Motion 39

Page 42

2. An egg is about to roll off the counter. How can you get the egg to stop without picking it up?

Apply a force in the
opposite direction of the
egg's motion.



Write answer
in the Textbook



Page No: 39

Three-Dimensional Thinking

1. How do forces change the motion of objects?
- A. Forces can change the speed or direction of an object's motion.
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EVALUATE: Lesson 2 Forces Can Change Motion 39

Page 42

3. Explain why the amount of friction would be different on an icy surface and a dry, concrete surface. How does the amount of friction affect the movement of an object across both surfaces?

A smooth surface has less friction than a rough surface.

An object can move faster and farther if there is less friction.

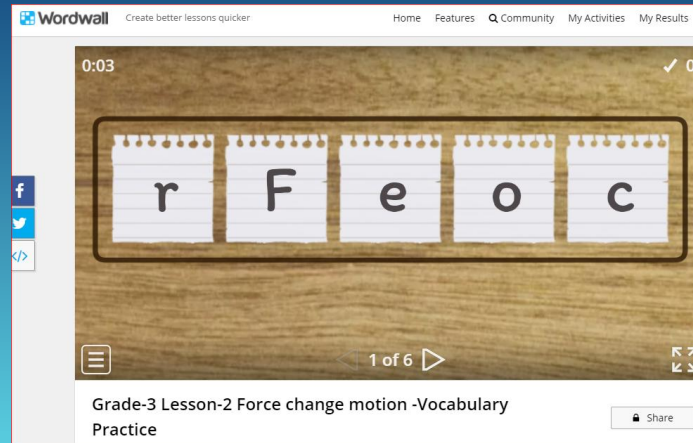


Exit Ticket

Vocabulary practice

Write answer in
the whiteboard

<https://wordwall.net/play/21874/099/316>



Help box

Force
Motion

Gravity
Balanced

Friction
Unbalanced

3:00

AFL Exit Ticket

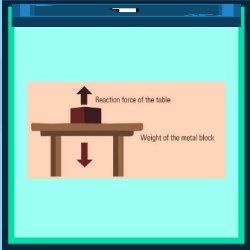
Write answer in
the whiteboard

<https://wordwall.net/resource/21873346>

Wordwall Create better lessons quicker

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0:26 0



A

**Balanced
forces**

B

**Unbalanced
forces**

Grade-3 Balanced and unbalanced forces

Share

3:00