Lesson 1 Gravity and Friction

Scan *Lesson 1. Write three questions that you have about gravity and friction in your Science Journal. Try to answer your questions as you read.*

Main Idea

Types of Forces

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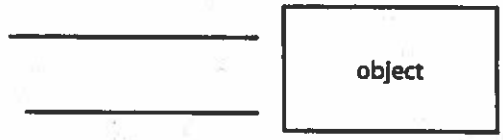
Details

Model forces *on an object. Change the lines to arrows, and label them "push" or "pull."*



Contrast *types of* forces, *and give an example of each.*

Contact Forces	Noncontact Forces
Description:	Description:
Example:	Example:

Draw *arrows to represent the described* forces.

Description	Drawing
A slight downward force on the object	object
A greater upward force than the downward force illustrated above	object

Main Idea

What is gravity?

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I found this on page _____.

Details

Distinguish mass *and* gravity.

Mass	Gravity

Cite *the law of universal gravitation.*

Illustrate *the relationship between gravitational* force *and* mass. *Draw arrows in the diagrams to indicate the size and direction of the attractive* force *of each object.*

Description	Diagram
Objects with smaller masses	
Objects with larger masses	
Objects with different masses	

Main Idea

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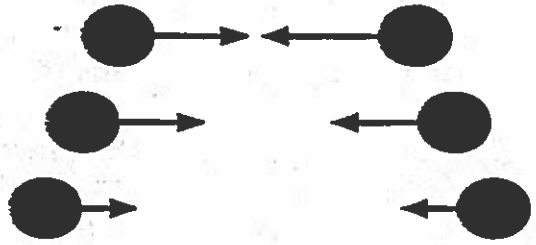
Details

Describe *the relationship between gravitational* force *and distance as shown in the diagram.*



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_____

Assess *the information about* gravity, mass, *and* weight. *Read each statement. If it is true, write T in the center column. If it is false, write F in the center column and replace the underlined words to make the statement true.*

Statement	T or F	Corrected Statement
Mass is a gravitational force exerted by an object.		
An object's weight is proportional to its mass.		
Mass is measured in newtons.		
If an object has twice the size of another object, it has half the weight.		
An object's mass decreases the farther it gets from Earth's surface.		

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Main Idea

Friction

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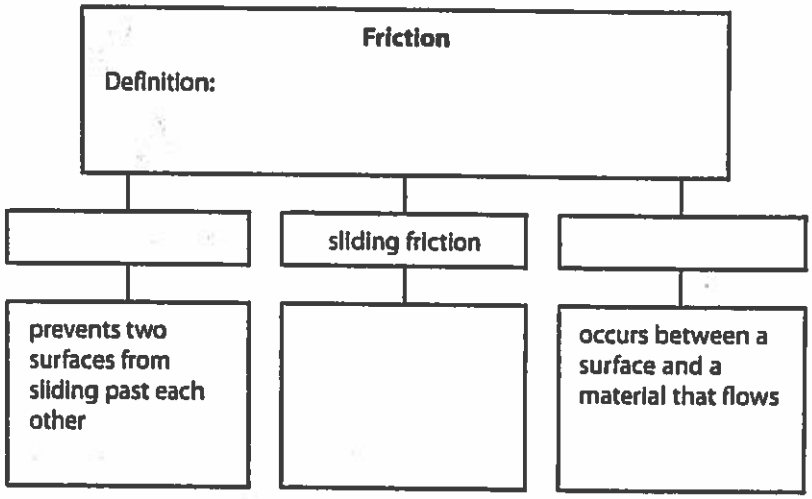
Details

Complete *the concept map about* friction.



Cite *two reasons* friction *occurs between surfaces.*

1. _____

2. _____

Explain *how lubricants reduce* friction.

_____

_____

Connect It Describe how the forces of gravity and friction affect the motion that occurs as you write on this page.

_____

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