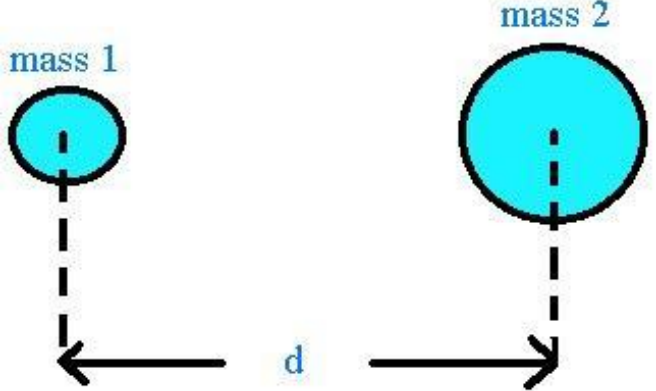
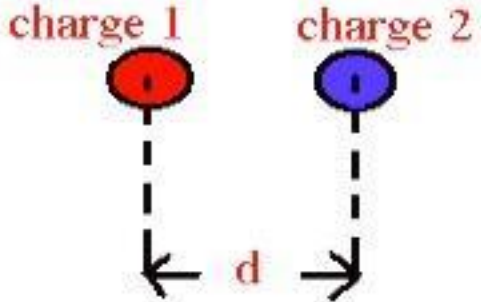


Physics Guided Notes
Module 3 Lesson 4

Fundamental Forces	Strength (highest to lowest)	Between ...	Responsible For...	Range
	Strong Nuclear Force			
	Gravitational Force			

Newton's Law of Universal Gravitation	Definition: "every _____ in the universe attracts every other _____ in the universe with a force that is _____ proportional to the _____ of the two _____ involved and is _____ proportional to the _____ of the _____ separating them."	
	If Mass Increases	Force _____ (increases/decreases)
	If Distance Increases	Force _____ (increases/decreases)

	<p>Formula:</p> <table border="1"> <tr> <td>F_g</td> <td></td> </tr> <tr> <td>G</td> <td></td> </tr> <tr> <td>m_1</td> <td></td> </tr> <tr> <td>m_2</td> <td></td> </tr> <tr> <td>d^2</td> <td></td> </tr> </table>	F_g		G		m_1		m_2		d^2		
F_g												
G												
m_1												
m_2												
d^2												
<p>Coulomb's Law</p>	<p>Definition: "for _____ that are _____ than the _____ between them, the _____ between two charges varies _____ as the _____ of the charges and _____ as the _____ of the separation _____. The force acts along a straight line from one _____ to the other."</p> <table border="1"> <tr> <td data-bbox="541 1185 1207 1242"> <p>If Charge Increases</p> </td> <td data-bbox="1207 1185 1879 1242"> <p>Force _____ (increases/decreases)</p> </td> </tr> <tr> <td data-bbox="541 1242 1207 1299"> <p>If Distance Increases</p> </td> <td data-bbox="1207 1242 1879 1299"> <p>Force _____ (increases/decreases)</p> </td> </tr> </table>		<p>If Charge Increases</p>	<p>Force _____ (increases/decreases)</p>	<p>If Distance Increases</p>	<p>Force _____ (increases/decreases)</p>						
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F_g												
G												
m_1												
m_2												
d^2												
<p>Compare the two</p>	<p>Similarities</p>	<p>Differences</p>										