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)

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<tr><td colspan="2">Formula:</td></tr>
<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>
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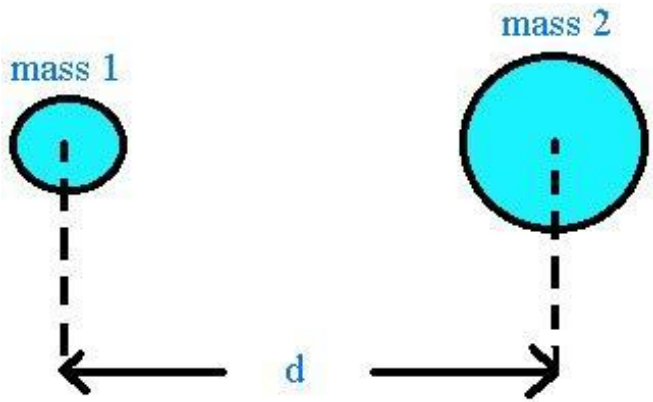
<td> 
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<tr>
<td>Coulomb’s Law</td>
<td colspan="2">Definition: "for _____ _____ that are _____ than the _____ between them, the _____ between two charges varies _____ as the _____ of the charges and _____ as the _____ of the separation _____. The force acts along a straight line from one _____ to the other."
<table>
<tr><td>If Charge Increases</td><td>Force _____ (increases/decreases)</td></tr>
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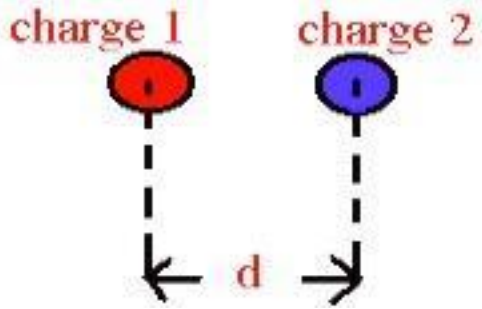
<td> 
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<td>Compare the two</td>
<td>Similarities</td>
<td>Differences</td>
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