









LIVE WORKSHEET

Space

Hierarchy of the Universe

Rank from largest to smallest. 8 (largest) 1 (smallest)


 Milky Way <input type="text"/>	 Solar System <input type="text"/>	 Earth <input type="text"/>	 METEOR <input type="text"/>
 UNIVERSE <input type="text"/>	 Moon <input type="text"/>	 STAR <input type="text"/>	 Virgo Super Cluster <input type="text"/>

Law of Gravity

Compare the gravitational force between the objects.



Gravitational Force Depends on Mass

The gravitational force between objects **INCREASES** as the masses of the objects **INCREASES**.

A		A <input type="text"/>
B		B <input type="text"/>



Gravitational Force Depends on Distance

The gravitational force between objects **DECREASES** as the distance between objects **INCREASES**.

A		A <input type="text"/>
B		B <input type="text"/>

Mass vs Weight in Space

Click the [space calculator](#) to determine the correct answer.

<p>Mass = 120 pounds Weight = 120 pounds</p>  <p>Earth</p>	<p>Mass = <input type="text"/> Weight = <input type="text"/></p>  <p>Mars</p>
<p>Gravity affects weight NOT mass!</p>	

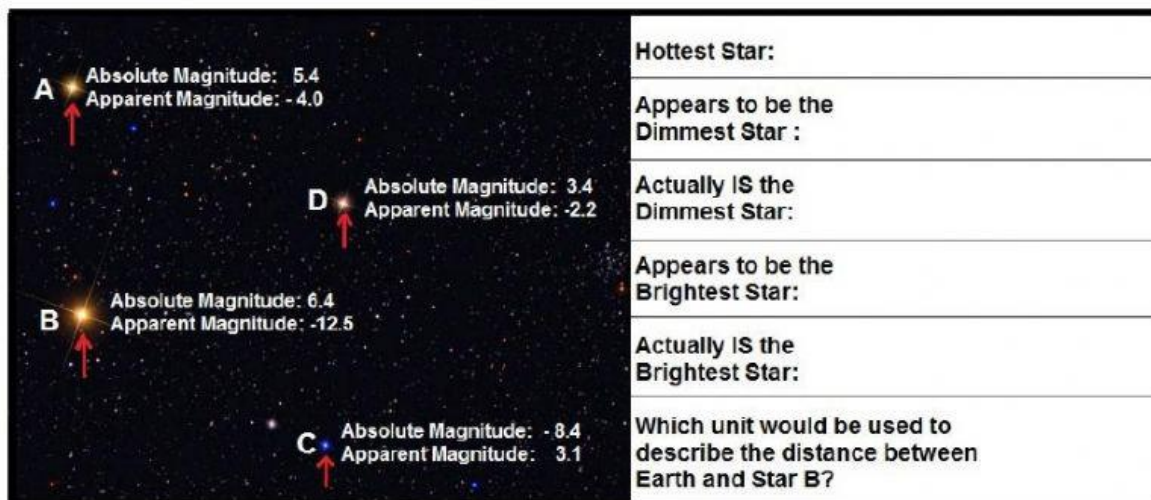
Distance in Space

Compare astronomical units and lightyears.

5.9 Trillion Miles	Sun-Earth Distance	Used for vast distances between stars and galaxies
93 Million Miles	Used for distances between objects in a solar system	Distance light travels in ONE year

Apparent Magnitude vs Absolute Magnitude

- Apparent Magnitude: how bright a star appears from Earth
- Absolute Magnitude: the actual brightness of a star at a standard distance of 10 parsecs
- Negative values represent brightest stars; positive values represent dimmest stars



Star Classification

The Hertzsprung–Russell Diagram

