**Noteguide for Point Potentials - Videos 16K Name**



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| Vg = Potential at distance rm = mass (kg)r = distance (m) | Ve = Potential at distance rQ = charge (C)r = distance (m) |
| Example 2: What is the gravitational potential on the surface of the moon? Mass = 7.35x1022 kg, radius = 1.74x106m  | Example 1: A van de Graaff generator has an 18 cm radius dome, and a charge of 0.83 μC. What is the voltage at the surface of the dome? |

Whiteboards:

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| Lauren Order is 3.45 m from a -150. μC charge. What is the voltage at this point? (-3.91x105V) | Alex Tudance measures a voltage of 25,000 volts near a Van de Graaff generator whose dome is 7.8 cm in radius. What is the charge on the dome? (0.22 μC) |
| What is the gravitational potential on the surface of the earth?m = 5.97x1024 kg, r = 6.38x106 m (-6.24x107 J/kg ) | At what distance from the center of the moon is the gravitational potential -1.00x106 J/kg? Mass = 7.35x1022 kg(4.90x106 m ) |