

WORKSHEET  
9<sup>TH</sup>  
PLANCK'S CONSTANT

1.

⚙ Identify how early scientists knew something was wrong with the theories about the energy of the electromagnetic spectrum.

☐ Experimental scientists did not understand the theory.

☐ Scientists could not generate any experimental results.

☐ The theoretical and experimental graphs did not match.

2.

⚙ Identify the key idea about energy that Max Planck introduced in November 1900.

☐ All electromagnetic radiation is visible light.

☐ Light is a form of energy.

☐ Energy is emitted in discrete units.

3. The approximate value of Planck's constant is \_\_\_\_\_.

**$6.63 \times 10^{-34}$  joule-seconds.**

**$5.63 \times 10^{-34}$  joule**

4.

Planck's constant is a fundamental constant that relates the \_\_\_\_\_ of light.

☐ frequency and amplitude

☐ amplitude and energy

☐ energy and frequency