

Special Theory of Relativity

– Questions from the Reading



Use the QR Code to link to the reading or get the reading from the website. Answer the questions below from that reading.

1. How did James **Maxwell** describe light? And what was the **speed** he said this wave moved at?
2. Scientists thought there was a **medium** through which these waves must travel. What is the **ether** and what **two** main properties would it have?
3. What experiment was performed in 1887? Describe the intent of this experiment briefly in the space below.
4. What was the **importance** of the experiment? What did it say about the speed of light?

5. What are the **two postulates** that **Albert Einstein** proposed about the Special Theory of Relativity based on the results the experiment?

6. What did Einstein's theory state about what two observers would measure for the speed of light if they are moving towards it or away from it?

7. State the **precise value** for the **speed of light in a vacuum**. Also, what is the symbol used for the speed of light? Research why this symbol is used.