

# Waves and Their Applications in Technologies for Information Transfer: Grades 9-12

Adopted 2013

## Waves and Their Applications in Technologies for Information Transfer HS-PS4

- HS-PS4-1.** Use mathematical representations to support a claim regarding relationships among the frequency, wavelength, and speed of waves traveling in various media. HS-PS4-1

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- HS-PS4-2.** Evaluate questions about the advantages of using a digital transmission and storage of information. HS-PS4-2

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- HS-PS4-3.** Evaluate the claims, evidence, and reasoning behind the idea that electromagnetic radiation can be described either by a wave model or a particle model, and that for some situations one model is more useful than the other. HS-PS4-3

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- HS-PS4-4.** Evaluate the validity and reliability of claims in published materials of the effects that different frequencies of electromagnetic radiation have when absorbed by matter. HS-PS4-4

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- HS-PS4-5.** Communicate technical information about how some technological devices use the principles of wave behavior and wave interactions with matter to transmit and capture information and energy. HS-PS4-5