

Wave Signal Review

1. What do waves transfer from one place to another?

- A. Matter
- B. Energy
- C. Air
- D. Sound only

2. Which type of wave needs a medium, like air or water, to travel through?

- A. Electromagnetic
- B. Digital
- C. Mechanical
- D. Static

3. Which type of wave can travel through space?

- A. Mechanical
- B. Electromagnetic
- C. Analog
- D. Surface

4. Which statement best describes an analog signal?

- A. A wave that switches between 1s and 0s
- B. A wave that varies smoothly and continuously
- C. A signal that never changes
- D. A signal that moves in straight lines

5. How does an analog signal usually represent information?

- A. Through packets of binary code
- B. By changing its amplitude or frequency
- C. By using only 1s and 0s
- D. With bursts of light energy

6. Which is an example of analog technology?

- A. Cell phone
- B. Computer
- C. Vinyl record player
- D. Text message

7. What is a main advantage of digital signals compared to analog signals?

- A. They have a natural sound quality
- B. They are faster and easier to store
- C. They travel slower but farther
- D. They are unaffected by technology

8. What is one disadvantage of digital signals?

- A. They are easily affected by noise
- B. They can lose detail when converted from analog
- C. They cannot be stored electronically
- D. They require sound waves to travel

9. Which statement correctly matches the signal with its description?

- A. Analog – made of 1s and 0s
- B. Digital – continuous signal
- C. Analog – can degrade with distance
- D. Digital – always uses sound waves

10. Which is an example of a digital technology?

- A. AM/FM radio
- B. Cassette tape
- C. Wi-Fi signal
- D. Record player