



Transferring Information Through Different Types of Waves



Matching

Write the matching number to the types of waves with their corresponding examples.

- | | |
|------------------|---------------------------------|
| 1. Sound waves | _____ Cellular phone calls |
| 2. Light waves | _____ Earthquake waves |
| 3. Radio waves | _____ Fiber optic communication |
| 4. Seismic waves | _____ Listening to music |

Fill in the Blank

medium

electromagnetic

wind

microwaves

1. Light waves are a type of _____ wave.
2. Radio waves have longer wavelength than _____.
3. Sound waves need a _____ to travel through.
4. Ocean waves are caused by the _____.

True or False

Circle T if the statement is true or F if the statement is false.

1. T or F Sound waves can travel through outer space.
2. T or F In fiber optic communication, data is encoded into light signals.
3. T or F Microwaves are used for heating food but have no other applications.
4. T or F Infrared waves are used in TV remote controls to transmit signals to the TV.

Multiple Choice

Circle the correct answer.

1. Waves are disturbances that carry _____ from one place to another without transferring matter.

- a) energy
- b) sound
- c) light

2. Sound waves are _____ waves that require a medium, such as air or water, to travel through.

- a) mechanical
- b) electromagnetic
- c) radio

3. What type of waves are responsible for our ability to see?

- a) Sound waves
- b) Light waves
- c) Microwaves

4. How do sound waves transfer information? Sound waves transfer information through changes in _____.

- a) temperature
- b) air pressure
- c) color

Short Answer

1. Provide an example of how light waves transfer information in our daily lives.

2. Explain the difference between mechanical waves and electromagnetic waves.