

Human Wave K-12



Key Points:

- An earthquake causes different types of energy to radiate from the epicenter
- The P and S waves are the first two to arrive at any specific point
- P waves and S waves have different motions and shake the earth differently as they travel through it
- S waves do not travel through liquid

Notes:

SOLID

P wave:

- Compressional motion is parallel to direction of propagation
- shoulder to shoulder with arms around shoulders because solid molecules are tightly bound
- took time for motion to propagate
- each person was subjected to a brief deformation, but no one moved from their original position
- motion of each person was in the direction of wave propagation

S wave:

- Shear motion is perpendicular to direction of propagation

LIQUID

- Arms not around each other because liquid molecules are not tightly bound
- P wave propagates, but S wave does not because loose bonding of molecules does not support shearing motion