UP AND DOWN, SIDE TO SIDE

LYRICS AND CHORDS

Intro

D7#9 G7 D7#9 G7
Move up, move down, then pass the movement around,
D7#9 G7 D7#9 A7aug5
Move side to side, spread the movement out wide. x2

Chorus

D7#9 G7 D7#9 G7
Up and down or side to side,
D7#9 G7 D7#9 G7
Waves are how vibrations spread, whether seismic, sound or light,
D7#9 G7 D7#9 G7
Up and down or to and fro,
D7#9 G7 D7#9 G7
Transferring energy and information as they go.

Verse 1:

D7#9
If you want to send energy, without matter being sent too,
Get a substance vibrating and watch the ripple spread through,
Seismic waves go through the Earth, sound can ripple through air,
Light don't need no medium, that's why it's everywhere.

Repeat intro

Verse 2:

Vibrations in a transverse wave are perpendicular to the,
Direction that the wave will go, peaks and troughs occur,
Seismic s waves, light and water waves are examples
But sound waves and seismic p are longitudinal,
F7 G7
They have vibrations parallel to the direction they go,
Ab7 A7 A7aug5
Compressions, rarefactions form as they're shaking to and fro.

Chorus

D7#9 G7 D7#9 A7aug5
Move up, move down, spread the movement around

Verse 3:

The period's the time for one vibration to complete,
And the number of waves that pass a point each second's, frequency,
The amplitude is the middle to the vibration's maximum,
Wavelength is the distance moved when a period is done,
Wavelength times by frequency will give the ripple's speed,
And if you are describing waves, they're all the words you need.

Chorus

D7#9
Make the frequency high, make the frequency low,
A7aug5
Turn up the amplitude, now take it down low.
D7#9
When a wave hits a boundary, what's it gonna do?
It might refract and get transmitted yeah, it bends then goes right through?
It might be reflected; bats use echoes to locate
G7 A7aug5
It might be absorbed, and then the temperature will escalate.

Chorus x 2