**SCIENCE**

Instructor’s Name:

Student’s Name:

Course Name:

Due Date:

**Question one**

Light dispersion is the separation of visible light into its constituent colors when it passes through a medium. White light is split the colors of the rainbow, that is; red, orange, yellow, green, blue, indigo and violet.

Sound waves are longitudinal waves that travel through a medium. They are disturbances caused by movement of energy travelling from one source of the sound to another.

The law of reflection is the principle that states, when a ray of light is reflected on a smooth surface the angle of reflection is equal to the angle of incidence.

Selective reflection is the reflection that is emitted by a surface that reflects waves of different lengths and varying intensities.

Absorption is the process by which a substance is transferred from one state to a different state. In wave motion, absorption is transfer of energy waves as it passes through matter.

**Question two**

Sound is a form of energy that travels in form of waves. Sound is a longitudinal wave that consists of compressions and rarefactions. In sound, the particles are displaced parallel to the direction the wave travels.

Light is a transverse wave whose oscillations are perpendicular to the direction of the path of propagation. In light propagation, the particles are displaced perpendicular to the direction the wave travels. Particles in a transverse wave oscillate up and down about their individual equilibrium positions as the wave propagates.

**References**