Wave Terminology Quiz Name: ……..

TOTAL: /15

Use the words below to complete each definition.

medium, displacement, amplitude, period, compression, rarefaction, crest, trough, transverse waves, longitudinal waves, frequency, wavelength, velocity

(a) A …….. is the substance through which a wave propagates.

(b) …….. is the distance a particle moves from its rest position.

(c) The greatest displacement of a particle in a wave is its ……..

(d) The …….. is the time it takes one wavelength to pass a fixed point.

(e) The …….. of a wave is number of waves passing a fixed point per second. It is usually measured in Hertz (Hz).

(f) The …….. of a wave is the shortest distance between two corresponding points on a wave (i.e.: the distance between adjacent crests, adjacent troughs, adjacent compressions or adjacent rarefactions). It has the symbol lambda (λ).

(g) The …….. of a wave is the speed that a waves transfers energy in a particular direction. Velocity or speed is the product of frequency and wavelength ($v = f\lambda$).

(h) The particles in …….. waves oscillate (vibrate) perpendicular to the direction of propagation.

(i) The particles in …….. waves oscillate (vibrate) parallel to the direction of propagation. (eg. the sound waves)

(j) Water ripples and light are examples of …….. waves.

(k) Sound is an examples of a …….. wave.

(l) The highest point on a transverse wave is called a ……..

(m) The lowest point on a transverse wave is called a ……..

(n) The region where particles in a longitudinal wave are closest together is a ……..

(o) The region where particles in a longitudinal wave are furthest apart is a ……..