

## Waves, Lenses and Mirrors Vocabulary

Match the terms with the definition

|          |                              |  |                                                                                                                                                                                                                                      |
|----------|------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | <b>Reflection</b>            |  | States that the angle of incidence of a light ray is equal to the angle of reflection                                                                                                                                                |
| <b>B</b> | <b>Refraction</b>            |  | Substance through which mechanical waves travel                                                                                                                                                                                      |
| <b>C</b> | <b>Diffraction</b>           |  | The angle at which a light ray strikes a surface                                                                                                                                                                                     |
| <b>D</b> | <b>Resonance</b>             |  | The angle at which a light ray bounces off of a surface                                                                                                                                                                              |
| <b>E</b> | <b>Interference</b>          |  | The bouncing of waves off a surface                                                                                                                                                                                                  |
| <b>F</b> | <b>Angle of Incidence</b>    |  | A surface that caves in, <b>reflects</b> light and produces a large, upright image up close and a small, inverted image from far away                                                                                                |
| <b>G</b> | <b>Angle of Reflection</b>   |  | When two media vibrate at the same frequency causing a sound to amplify                                                                                                                                                              |
| <b>H</b> | <b>Law of Reflection</b>     |  | A surface with slits that disperses or splits up visible light into the visible light spectrum                                                                                                                                       |
| <b>I</b> | <b>Convex Lens</b>           |  | A transparent piece of glass or plastic that is thinner on the edge; when light passes through it; the lens produces a large, upright image when viewed close up and produces a smaller, inverted image when looked through far away |
| <b>J</b> | <b>Concave Lens</b>          |  | A surface that bulges out, <b>reflects</b> light and produces a smaller, upright and wide image                                                                                                                                      |
| <b>K</b> | <b>Concave Mirror</b>        |  | When a light ray passes from one substance through another substance and changes direction or bends                                                                                                                                  |
| <b>L</b> | <b>Convex Mirror</b>         |  | When two waves cross through each other either canceling each other out or adding together                                                                                                                                           |
| <b>M</b> | <b>Medium</b>                |  | When a wave passes by an edge or through an opening and spreads out                                                                                                                                                                  |
| <b>N</b> | <b>Diffraction Grating</b>   |  | A transparent piece of glass or plastic that is thicker on the edge; produces a small and upright image when light passes through it                                                                                                 |
| <b>O</b> | <b>Converge</b>              |  | When light rays spread out                                                                                                                                                                                                           |
| <b>P</b> | <b>Diverge</b>               |  | When light rays <b>come together</b>                                                                                                                                                                                                 |
| <b>Q</b> | <b>Why things look black</b> |  | Because blue light waves are reflected while all other color waves are absorbed                                                                                                                                                      |
| <b>R</b> | <b>Why things look blue</b>  |  | Because all waves of visible light are absorbed by the surface                                                                                                                                                                       |