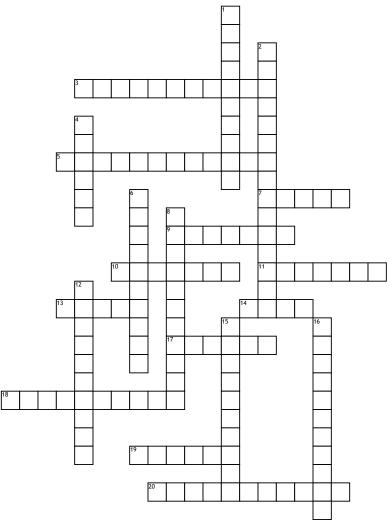
Name: _____ Date: _____

Light and Shadows



<u>Across</u>

- 3. Curved in like the inner surface of a sphere. Concave lenses turn to spread light out.
- **5.** A tube through which can be seen symmetrical patterns caused by reflections from mirrors.
- **7.** A three-sided length of glass. Light passing through it is refracted separating the colour of white light into a spectrum of colours.
- **9.** To bounce off of a surface, as in light bouncing off a mirror
- **10.** To make small things look bigger by looking at them through one or more convex lenses.
- 11. Nature's display of the spectrum of colours produced by the dispersion of colours as light passses through droplets of water falling through the sky during a rainstorm. Droplets producing specific colours lie in arcs of a circle across the sky which is why the rainbow takes the shape of an arc.

- **13.** A form of energy. That energy emitted by the sun or by a chemical reaction to which the eye is
- $\begin{tabular}{ll} \bf 14. \ To \ give \ off \ something \ as \ in \ the \ sun \ giving \ off \ light. \end{tabular}$
- **17.** A property of an object produced by the wavelength of light that the object reflects.
- **18.** Light that contains all the wavelengths of colour in the visible spectrum from red to violet.
- **19.** A material that does not let light pass through. Wood, some plastic, and metal objects are opaque.
- **20.** A material that lets light pass through it so that objects can be seen clearly on the other side.

Down

 To spread or scatter. The separating out of different wavelengths of white light into a spectrum of colours as it passes through a prism or drop of water or similar transparent object.

- 2. A band of colours that makes up visible light. Each colour is generated by a different wavelength of light, the longest being red and the shortest being violet.
- **4.** A dark image or figure cast on the ground or some surface by an object blocking incoming light.
- **6.** The bending of a light ray as it passes from one medium to another.
- **8.** A material that allows some light to pass through it but scatters the light in the process so that images are not clear. Frosted glass is one such material.
- **12.** Instrument that measures the intensity of light in a particular area.
- **15.** Curved out, like the back of a spoon. Convex lenses concentrate light by bending the rays to a common point once they pass through the lens.
- **16.** To glow or to give off light at low temperatures, as in fireflies.

Word Bank

translucent Colour luminescent prism rainbow reflect light opaque convex lens emit shadow refraction Light meter. transparent kaleidoscope white light concave lens dispersion visible spectrum magnify