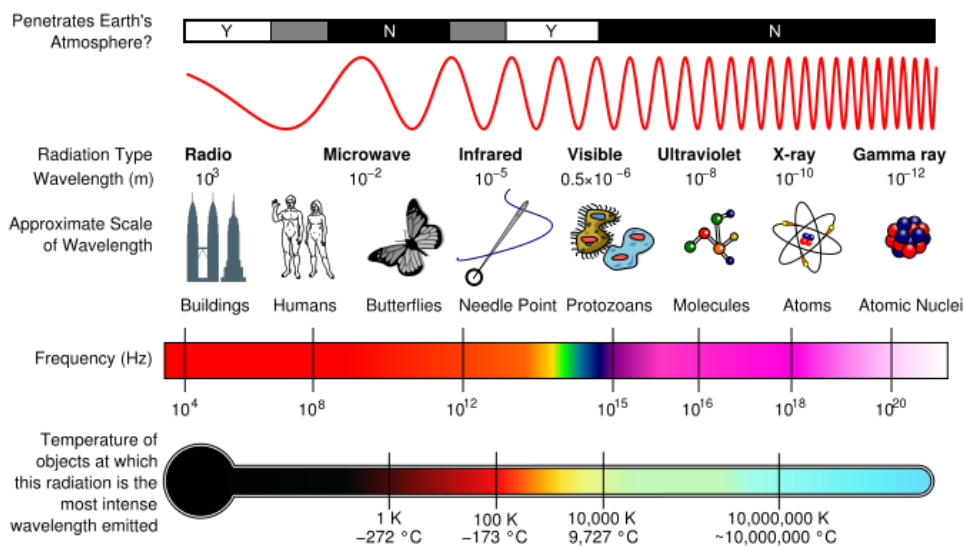
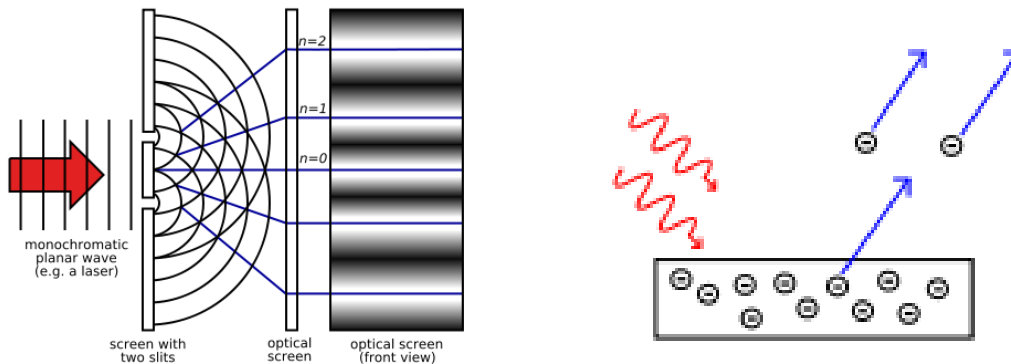


# Light Properties Worksheet **Answers**

1. **Energy** travels through water to create waves.
2. The energy of light waves is known as **electromagnetic** radiation.
3. The picture below represents the electromagnetic **spectrum**.

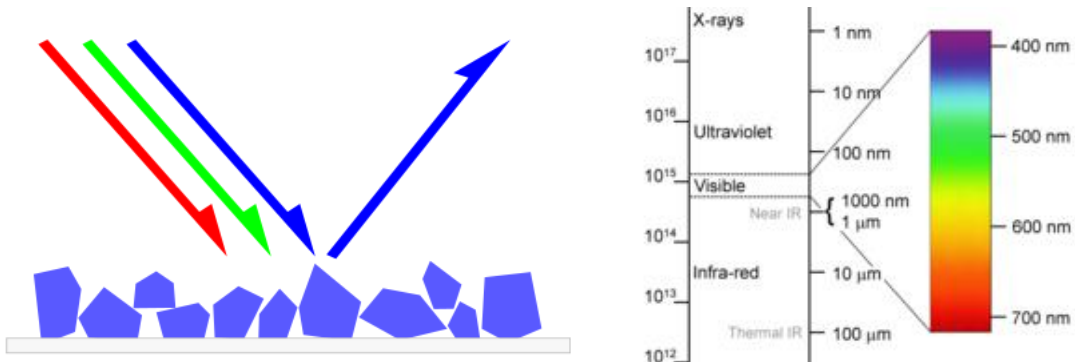


4. Young's two-slit experiment demonstrated the **wave** theory of light. This theory is known as classic physics.



5. The photoelectric effect demonstrated the **particle** theory of light. These results are considered the foundation of quantum physics.

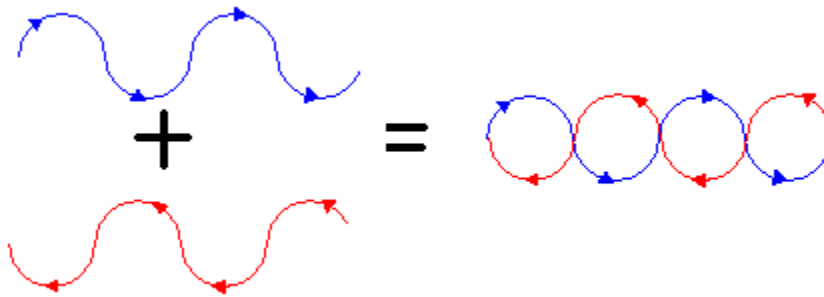
6. What frequency of light is reflecting off the rocks? ~430 nm
7. What is the natural vibrating frequency of the electrons in the rocks? ~430 nm



8. To the naked eye it looks as if this pencil is bent, which demonstrates what property of light? refraction



9. The image below represents superposition of the red and blue waves.



10. As the following two waves propagate towards one another, the result will be constructive interference.

