

## Light Questions

1. Would life be able to exist on Earth in the absence of light? How does light affect living things on our planet?
2. Why does a stick or any other straight object appear to be slightly bent when observed under water? How does the medium through which light passes affect how it reaches our eyes?
3. Scientists argued for hundreds of years over whether light traveled as particles or waves. How did the concept of photons settle this argument?
4. The source of light, such as the sun, is visible and the light reflected off an object is visible. Why don't we see light as it travels through the air from the source to the object?
5. How would our lives be different if we could only see light as black or white, but no other colors? Do humans need color to survive?
6. Vision, the act of seeing, consumes 40% of the brain's volume – more than any other skill that we possess as humans. What does this fact tell us about the relationship between light and our eyes? Between light and our brains?
7. How would you design an experiment to determine if light can bend around corners? If light can pass through different types of materials?
8. How is the electromagnetic spectrum like a piano? How does it provide a connection between microwaves, visible light, and x-rays?
9. How do lenses change light? Why do different types of lenses exist? If you had to choose between a concave or convex lens as the only type you could use in daily life, which one would you pick?
10. If the sun disappeared, could artificial light take its place?

### More questions: