**1.0 What is Light?**

Light is a form of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ that allows us to see. There are 2 sources of light (where light comes from):

1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| *Natural Light* | *Artificial Light* |
|  |  |

Section 1 will investigate theories about light and vision throughout history that led us to the way we think about it today. We will also look at how optical devices have changed over time based on our understanding of light.

**1.1 The Challenge of Light**

There are 4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of light that are agreed to be fact, which scientists have developed through many years of research and investigation:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In early times, many people were curious about how light worked. This curiosity led to many different experiments and theories.

Archimedes was particularly intrigued by light and attempted to harness it’s power for destruction. *Watch the video’s on Bruces Brainiacs and fill in information about Archimedes and his views:*

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***INTERACTIVE:*** Read through pages 177-181 in your textbook to describe how the following people theorized about light. Consider what technologies they may have developed and what was correct/incorrect about their theories.

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| --- | --- |
| **Pythagoras** | **Euclid** |
|  |  |
| **Al-Haytham** | **Descartes** |
|  |  |
| **Newton** | **Michelson** |
|  |  |