



# Experiments and Enemies



This short script is a dramatisation of the dispute between Isaac Newton and Robert Hooke over Newton's theory of light and colour.

*Isaac Newton uses a prism to split a ray of light into the spectrum of colours.*

**Newton:** Finally! I have solved the celebrated phenomenon of colours! This surely proves that colour is in light.

*Robert Hooke writes a letter to Newton.*

**Hooke:** You are wrong! I cannot see any evidence or argument here to convince me with any certainty that there are colours in light! My own theories that I made after carrying out hundreds of experiments still make more sense. The colours are simply formed because the glass is corrupted and taints the white ray of light.

*Newton replies to Hooke.*

**Newton:** How can you believe this still? Can you not see how the prism bends the ray of light and separates the colours? They are present within light!

**Hooke:** I do agree the light has been refracted, yes. But why you persist in thinking that this means the colours are originally within the white light I do not understand! This makes no more sense than thinking that sound is already stored within a musical instrument! I will not believe you until I see more proof.

*Newton uses two prisms to conduct his 'crucial experiment', using one prism to split the white light into the spectrum, then another prism to bring the refracted rays back together, making white light again.*

**Newton:** This is the most considerable discovery that has ever been made! Because the colours can form white light once more, I have proven once and for all that white light is made up of the colours of the spectrum. Here is your proof!

