What is light?

If something has energy then it has the ability to do work (do something). A chemical reaction can move rocks out of the way (explosions) so chemicals have energy in them.

Answer the following questions:

1. Light is a form of energy….How do you know?

2. Light travels very fast …..how do you know?

3. Light travels in straight lines…. how do you know?

4. We can explain what Light is by using waves as a model. Sound is also modelled as a wave.

5. What is the relationship between wavelength and frequency?

Textbook questions Read 280-283

1. Page 280 - what is an electromagnetic wave?

2. What is kinetic energy?

3. If the water is moving up and down how is the energy moving in a wave?

4. Page 281 what is the most important characteristic of a wave?

5. What does the wavelength determine?

6. Page 282 what are the 7 common names for the different types of electromagnetic waves and what are they used for?

Common Name	Wavelength (m)	Use

7. What is the electromagnetic spectrum?

8. What color has the longest wavelength?

9. What color has the shortest wavelength?

Light can be produced many different ways

1. Page 278 what is the difference between incandescent and luminescent?

2. What is the problem around energy when dealing with incandescent light bulbs?

3. Describe the following terms using the internet:

Term	Meaning
Bioluminescence	
Incandescence	
Fluorescence	
Phosphorescence	
Chemiluminescence	
Triboluminescence	
Electric Discharge	
LED	
OLED	
Plasma Display	
LCD	