TBAT	Key content	Skills	Assessment
1. Light waves To describe how objects affects how light travels	Recall that light, sound travels at different speeds in different materials. Use the ray model of light to explain how we see things that are not sources of light.	Students to observe materials under different lights	Self-assess
2. Reflection Explain the how surfaces affect reflection	Use ray diagrams to explain the law of reflection Describe the differences in light reflected from smooth and rough surfaces.	Use the equipment to identify the relationship between the angle of incidence and the angle of reflection Measuring angles using a protractor	Self-assess the method
3. Refraction Explain how states of matter affect the rate of refraction	Explain why refraction occurs. Draw ray diagrams to describe the refraction of light as it passes into and out of different media.	Use the equipment to identify the relationship between the angle of incidence and the angle of refraction Measuring angles using a protractor	Mid-term assessment-Refraction practical planning
4. The eye Describe how we are able to see images	Identify the parts of the eye and state their functions. Describe the difference between long and short sighted Explain how we see an image	Eye dissection	Self-assess
5. Therapy	Students to reflect on teacher feedback to improve their answer		

6. Camera and the eye Compare the mechanisms of an eyeball to that of a camera	Describe similarities and differences between cameras and eyes. Explain how different types of lens are used to correct long-sight and short-sight.	Students use ray boxes to shine parallel rays of light through cylindrical converging lenses of different thicknesses and note the difference	Self-assess
7. Colours Explain why objects appear to be different colours under particular filters	Recall the primary colours for light. Explain why objects look different in light of different colours.	Students use white light from a ray box and shine it through different filters onto a white screen. They then explore what happens when they use two filters, one after the other.	Self-assess
8. Waves in medicine Describe how waves are utilised to treat illnesses	Define the electromagnetic spectrum Describe the properties of X-rays and Gamma rays Explain how each is used in medicine	Students to apply this knowledge to careers within medicine	Self-assess
9. Revision lesson	Complete the revision mat to consolidate their learning. Complete the quick quiz to assess their understanding and focus their revision		
10. Assessment	End of unit test	Exam technique	Peer assessed
11. Reflection lesson	Students to reflect on their assessment using the knowledge organiser		