

STEMM PROGRAMME

LESSON PLAN ONE

Visible Light

Slide	Subject	Description	Timing
1	Introduction to course and topic		5 mins
5	Visible and invisible light	Discuss the similarities and differences between visible and invisible light.	5 mins
	Colour in light	Discuss the way in which light is made up of different colours and the difference in temperature these colours produce. Discuss Hershel's experiment.	5 mins
8	Colour in light activity	Using a prism (diffraction grating) to see the rainbow of colours in 'white' light	10 mins
11	Our eyes vs the camera	Discuss how our eyes adjust to see light as 'neutral' but a camera sees the colours in the light as it really is. Explain how a white-balance sets any light to white.	5 mins
13	Uses in photography	Discuss how different light temperature affects the mood/feel of a photo. How can photographers add emotion to their photos using light?	10 mins
17	Activity	Discover the effect of light on a photo by taking the same photo of the same person/object but with different lighting, i.e. sunlight, artificial light, low light. Discuss the changes in the mood/feel/meaning of the photos due to the change in light.	15 mins
18	Summary	Recap on main points of learning in today's session.	5 mins
	Homework	To take 2 photos of the same subject but with 2 very different lighting techniques. i.e. to take 2 pictures of a dog, one being dark and shadowy and the other in bright sun light. This activity allows them to compare the impact of light on the photo.	