

Independent Learning Project

Department:	MATHS	Start Date:	Autumn 2 nd Half term	Due Date:	December
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Title of Task: Maths and Optical Illusion Art		How should I submit my work?	
Aims/Learning Outcomes: - To identify how mathematics principles are used in real life application in this specific case of Art work. - To gain insight into how Maths is used in design and Art - To create an artwork using mathematical processes and content.		Success Criteria: (Other sheet attached)	My Target Level:
What you need to do		Extension Task	Useful Topic Related Words
Guidelines: You should research famous artists who have used maths to make optical illusions. You will use your research to help you to create your own illusion. You Must: Research the history of Optical Illusion Research how maths is used to create Optical Illusion Art Create your own optical illusion art work You Should: Show adequate examples of the art Show evidence of exploring the topic further Explore the use of colour in the art		You Could: -Research additional artists and compare the differences between the artists. -Create additional drawings based on a combination of artists. -Can you use the Fibonacci sequence in your art?	Symmetry Scale Pattern Movement Size

What steps can I use to help along the way? These steps will be helpful when completing the project.	Are there any supporting documents – PowerPoint's, images, pictures, website links, etc?	Equipment that I may need
Checkpoint 1 (due in week 1) <u>Students to research the history of Optical Illusion</u> • Time period • Artists and the method of their Optical Illusion Art... • Fibonacci sequence used in Optical Illusion Art (types of Fibonacci patterns, shapes and sequence) • Rule of Thirds in composition used in Optical Illusion Art • Geometric shapes used in the art movement 'Cubism' • Present day optical Illusion Art and Maths.	Artists to Research: Victor Vasarely Bridget Riley Josef Albers Richard Anuskiewicz Richard Allen	pen, pencil, colouring pencils, ruler, internet
Checkpoint 2 (due in week 2) <u>Research two of the Artists below that use Optical illusion art.</u> • Date and place of birth • Where they studied? • How did they come to create optical art? • At least three examples of work, with labelling shapes used and optical illusion created?		
Checkpoint 3 (due in week 3) <u>Research how maths is used to created Optical Illusion Art</u> • What mathematical principles are applied? • What are the most common shapes used? • What effects can be created and how? • Example: The square in the centre appears to be spinning, even though, the viewer knows that it is standing still.		

Checkpoint 4 (due in week 4) <u>Create your own optical illusion art work</u> To create an effect, example: • Illusion of Movement (either popping out or sinking in or spinning on the page) • Deception of Size • Deception of direction Hand in all work as a portfolio		
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Please remember to plan out your time carefully and ask your subject teacher if there is anything that you do not understand.