



Y8 Independent Learning Task

Subject:	Mathematics			
ILT #3	Photographing Maths			
Week set:				
Duration:	Approximately 1 hour			
Hand in:				
Instructions:	Take photographs of at least 5 examples of mathematics in the real world. For each photograph, identify and explain the mathematics involved and how it is used. Include a variety of mathematical ideas and present your work creatively as a digital presentation, poster or photo collage. Use correct mathematical vocabulary throughout.			
Skills:	This task develops students' ability to: • Recognise mathematics in everyday contexts. • Identify ideas such as symmetry, angles, fractions, percentages, patterns, area, perimeter, scale, measurement and shape. • Explain how mathematics is used in real objects and situations. • Apply classroom mathematics beyond the classroom. • Communicate thinking clearly using photographs, captions and correct vocabulary. • Make connections across mathematical topics. • Develop observation, curiosity, creativity and independence.			
Marking schema:		Developing	Proficient	Advanced
	Assessment Area	Emerging	Secure	Excelling
	M athematical Understanding	Identifies some maths in the photographs, but explanations may be limited or inaccurate.	Accurately identifies and explains the key mathematics in the photographs using suitable vocabulary.	Shows detailed, accurate understanding and makes insightful connections between mathematical ideas.
	A pplication of Mathematics	Includes some real-life examples, but links to the mathematics are limited.	Applies mathematics successfully to at least 5 real-life examples and explains how it is used.	Uses a varied range of examples and applies mathematics confidently, with measurements or calculations where appropriate.
	T hinking & Communication	Uses photographs and some explanation, but ideas may be brief or unclear.	Presents work clearly and creatively using photographs,	Communicates clearly and creatively with well-chosen photographs and precise explanations.

			explanations and correct vocabulary.	
	H abits of Independent Learning	Completes the main task with some support and limited checking.	Works independently, follows the checklist and checks explanations for accuracy and clarity.	Shows strong independence and curiosity, seeking interesting examples and refining work carefully.
	S tretch & Challenge	Meets the core expectations of the task.	Completes one or more Level Up Challenges, such as using 3 maths topics or adding calculations.	Goes well beyond the core task, explaining how maths improves designs or creating a detailed portfolio with extra research.
Additional guidance or help:	Checklist: take at least 5 clear photographs; identify the maths in each; explain how it is used in real life; include a variety of mathematical ideas; present your work creatively; and use correct mathematical vocabulary. Ideas: symmetry; angles; fractions/percentages; patterns and sequences; area/perimeter; scale and measurement; shape and space; graphs; tessellations; ratios and proportion. Level Up: use at least 3 different maths topics; explain how the maths improves an object or design; add measurements/calculations; or create a digital portfolio with captions and extra research.			