



Y9 Independent Learning Task

Subject:	Mathematics			
ILT #2	Question Creation Challenge			
Week set:				
Duration:	Approximately 1 to 1 ½ hours			
Hand in:				
Instructions:	Choose a topic from Modules 1–4 and create at least 10 original questions to test understanding of the topic. Include a mix of question types and difficulty levels. Think carefully about key facts, methods and common mistakes. Write answers or mark schemes, test your questions on someone else, then review and improve them.			
Skills:	This task develops students' ability to: • Retrieve and apply mathematical knowledge. • Identify the key ideas within a topic. • Create clear and purposeful mathematical questions. • Think about common errors and misconceptions. • Communicate mathematics accurately. • Reflect on the quality and difficulty of questions. • Develop independence, creativity and deeper thinking.			
Marking schema:		Developing	Proficient	Advanced
	Assessment Area	Emerging	Secure	Excelling
	Mathematical Understanding	Shows some understanding of the chosen topic, but questions may focus mainly on simple recall or include gaps in the mathematics being tested.	Creates questions that accurately test the key knowledge, methods and concepts from the chosen topic, using correct mathematical vocabulary.	Shows deep understanding by designing questions that probe important ideas, connections, misconceptions and different levels of mathematical thinking.
	Application of Mathematics	Some questions or answers are correct, but there may be errors, unclear wording or incomplete solutions/mark schemes.	Creates mathematically accurate questions with correct answers or mark schemes and applies appropriate methods across a range of question types.	Produces consistently precise questions, solutions and realistic mark schemes, including well-designed multi-step, problem-solving or exam-style applications.
	Thinking & Communication	Questions communicate some mathematical ideas, but wording, structure or level of challenge may sometimes be	Writes clear, fair and purposeful questions with a suitable mix of recall, explanation, calculation and problem solving,	Crafts highly effective questions that make the solver think deeply, anticipate common mistakes and communicate complex mathematical ideas

		unclear or repetitive.	organised so another person can use them easily.	with clarity and precision.
	H abits of Independent Learning	Completes the main task with some support; planning, testing, reflection or improvement may be limited.	Works independently to plan, create, test and review the question set; uses feedback and improves at least two questions.	Shows strong independence and resilience by testing questions thoughtfully, acting on feedback, refining difficulty and presentation, and improving the set beyond the first draft.
	S tretch & Challenge	Meets the core expectation by creating at least 10 questions with answers or mark schemes.	Completes one or more Level Up Challenges, such as creating 15+ questions, including multi-step/problem-solving questions or producing realistic exam-style marks and mark schemes.	Goes well beyond the core task by creating a sophisticated, varied question bank or mini-quiz that combines challenge levels, realistic assessment design and thoughtful testing with others.
Additional guidance or help:	Remember: creating good questions means thinking like an examiner. Your questions could include: • Recall questions • Explanation questions • Calculations • Problem-solving questions • Multi-step questions • Questions based on common mistakes If you get stuck: • Look at the key facts and methods from your chosen topic. • Think about what students often find difficult. • Make sure every question has a clear answer. • Include a range of difficulty rather than making every question the same. Level Up Challenges: • Creating 15 or more high-quality questions. • Including at least 3 multi-step or problem-solving questions. • Creating realistic exam-style questions with marks and mark schemes. • Swapping questions with someone else and improving any that were unclear. • Turning your best questions into a mini-quiz or presentation.			