



MATHEMATICS

EXAM BOARD: PEARSON EDEXCEL

Subject Assessment Grid

	SKILL: USE AND APPLY STANDARD TECHNIQUES (AO1) <ul style="list-style-type: none"> • Accurately recall facts, terminology and definitions • Use and interpret notation correctly • Accurately carry out routine procedures or set tasks requiring multi-step solutions 	SKILL: REASON, INTERPRET AND COMMUNICATE MATHEMATICALLY (AO2) <ul style="list-style-type: none"> • Make deductions, inferences and draw conclusions from mathematical information • Construct chains of reasoning to achieve a given result • Interpret and communicate information accurately • Present arguments and proofs • Assess the validity of an argument and critically evaluate a given way of presenting information 	SKILL: SOLVE PROBLEMS WITHIN MATHEMATICS AND IN OTHER CONTEXTS (AO3) <ul style="list-style-type: none"> • Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes • Make and use connections between different parts of mathematics • Interpret results in the context of the given problem • Evaluate methods used and results obtained • Evaluate solutions to identify how they may have been affected by assumptions made
+ 9 -	<ul style="list-style-type: none"> • Use mathematical language and symbols effectively to present convincing and reasoned mathematical arguments. 	<ul style="list-style-type: none"> • Critically evaluate a given way of presenting information • Present arguments and proofs. • Assess the validity of an argument. • Examine generalisations and conclusions distinguishing between sound and unsound ones. • Critically evaluate, explain and justify methods, arguments, results and any assumptions made. 	<ul style="list-style-type: none"> • Critically examine different methods for tackling complex problems selecting the most efficient option. • Apply mathematical knowledge in familiar or unfamiliar contexts. • Evaluate solutions to identify how they may have been affected by assumptions.
+ 8 -	<ul style="list-style-type: none"> • Use mathematical language and symbols consistently and effectively. • Give sound reasons for choosing and following a particular line of enquiry. 	<ul style="list-style-type: none"> • Interpret and communicate complex information accurately. • Make deductions, inferences and draw sound conclusions from mathematical information. • Construct substantial chains of reasoning including convincing arguments and proofs. • Critically evaluate, explain and justify methods, arguments and results. 	<ul style="list-style-type: none"> • Make and use connections between different parts of mathematics to solve a wide range of mathematical and non-mathematical problems. • Interpret results in the context of the given problem.
+ 7 -	<ul style="list-style-type: none"> • Use mathematical language and symbols consistently. • Accurately carry out set tasks requiring multi-step solutions by drawing on a sound knowledge of mathematical facts, terminology, notation, definitions and formulae. • Follow alternative approaches to complex multi-step procedures. 	<ul style="list-style-type: none"> • Interpret and communicate complex information fairly accurately. • Make deductions, inferences and draw conclusions from mathematical information. • Construct chains of reasoning including some arguments and proofs. • Explain and justify methods and results. 	<ul style="list-style-type: none"> • Show an understanding of problems in mathematical or non-mathematical contexts and make some connections between different parts of mathematics to solve such problems. • Comment on the methods used and the results obtained.



Subject Assessment Grid

+ 6 -	<ul style="list-style-type: none"> Recall and use mathematical facts accurately. Recall and apply terminology, notation, definitions and formulae accurately. Perform routine single procedures accurately. Begin to develop and follow alternate approaches when carrying out complex multi-step procedures. 	<ul style="list-style-type: none"> Interpret and communicate information accurately. Make deductions, inferences and draw conclusions from mathematical information. Begin to construct chains of reasoning to achieve a given result. Explain methods and results. 	<ul style="list-style-type: none"> Show an understanding of problems in mathematical or non-mathematical contexts and translate such problems into a series of logical processes. Comment on the methods used and the results obtained.
+ 5 -	<ul style="list-style-type: none"> Recall and use mathematical facts with accuracy. Recall and apply terminology, notation, definitions and formulae with increasing accuracy. Carry out routine multi-step procedures effectively. 	<ul style="list-style-type: none"> Interpret and communicate information accurately. Make deductions, inferences and draw conclusions from mathematical information. Present sustained arguments about methods and results. 	<ul style="list-style-type: none"> Show an understanding of problems in mathematical contexts and translate such problems into a series of systematic processes. Comment effectively on the solution obtained.
+ 4 -	<ul style="list-style-type: none"> Recall and use mathematical facts. Show a sound understanding of terminology and definitions. Show an increased understanding of mathematical notion. Carry out routine procedures requiring multi-step solutions. 	<ul style="list-style-type: none"> Interpret and communicate information effectively. Make deductions and simple inferences from mathematical information. Present fairly sustained arguments about methods and results. 	<ul style="list-style-type: none"> Show an understanding of mathematical language used in simple worded problems and apply appropriate techniques to solve problems. Begin to comment on how reasonable the answer is in the context of the question.
+ 3 -	<ul style="list-style-type: none"> Recall and use mathematical facts. Show a fairly secure understanding of simple terminology and definitions. Show some understanding of mathematical notation. Perform simple routine procedures including some with multi-step solutions. 	<ul style="list-style-type: none"> Interpret and communicate information. Make deductions from mathematical information. Use reasoning to obtain results. Provide sustained evaluations of methods and results. 	<ul style="list-style-type: none"> Show an awareness (may be an insecure awareness) of mathematical language used in simple worded problems. Make decisions about operation(s) to apply.
+ 2 -	<ul style="list-style-type: none"> Recall and use simple mathematical facts Show an understanding of simple terminology and definitions Perform simple routine procedures and show an awareness of tasks which require multi-step solutions. 	<ul style="list-style-type: none"> Interpret and communicate basic information. Make some basic deductions and draw conclusions from mathematical information. Provide basic evaluations of methods and results. 	<ul style="list-style-type: none"> Identify keywords. Sort relevant information and decide the operation(s) to apply in simple worded problems.
+ 1 -	<ul style="list-style-type: none"> Recall simple mathematic facts. Show some understanding of very simple terminology. Perform very simple routine procedures. 	<ul style="list-style-type: none"> Interpret and communicate very basic information. Provide simple evaluations of methods and results. 	<ul style="list-style-type: none"> Identify keywords. Sort relevant information in simple worded problems.
+ WT -	The student is currently working towards a grade in this skill.	The student is currently working towards a grade in this skill.	The student is currently working towards a grade in this skill.