Maths - Age Related Expectations
Year 7 Pathways

		Learning Attitude		Mathematical Skills		Literacy / Communication Skills	
Pathway 1 - 3	1	Can complete work with regular support.		Can perform basic algorithms with reasonable accuracy. Can occasionally use different, given, strategies to solve problems.		Beginning to communicate mathematically.	
	2	Can sometimes complete work independently.		Can perform basic algorithms with reasonable accuracy, correcting careless errors when highlighted. When given a choice of strategies to solve a problem, can identify the most efficient.		Can communicate using some mathematical terminology.	
	3	Attempts to work independently most lessons.		Can perform basic algorithms with minimal errors, correcting careless errors when highlighted. When prompted, can consider different strategies to solve a problem and choose the most efficient.		Can use accurate mathematical terminology with minimal prompting.	
	4	Can work independently, staying on task with minimal guidance.		Can perform basic algorithms with minimal errors, catching and correcting careless mistakes independently. Attempts more than one method when solving a problem.		Can use accurate mathematical terminology to explain their ideas.	

		Learning Attitude		Mathematical Skills		Literacy / Communication Skills	
P a t h w a y 4 - 6	1	Mostly willing to work independently.		Can perform basic algorithms with minimal errors. Can begin to find strategies to solve problems.		Can communicate what they have done using some mathematical language.	
	2	Regularly works independently - staying on task without prompting.		Can perform basic algorithms with minimal errors and more complex calculations with reasonable accuracy. Attempts more than one method when solving a problem.		Can communicate their processes using accurate mathematical language.	
	3	Works independently every lesson, making an attempt to answer a question before asking for teacher feedback.		Can perform basic algorithms accurately, and multi-step algorithms with minimal errors. Attempts different methods, showing an understanding of the reasoning behind a particular method.		Can communicate their methods clearly, logically and using accurate mathematical language.	
	4	Consistently works independently and attempts to answer a question a couple of times before asking for teacher feedback.		Can perform a range of algorithms accurately, correcting errors when highlighted. Is able to investigate multiple strategies to solve problems.		Can consistently communicate the reasoning behind their work using accurate mathematical terminology.	

		Learning Attitude	Mathematical Skills	Literacy / Communication Skills	
Pathway 7-9	1	Consistently demonstrates a willingness to work independently.	Consistently performs basic algorithms accurately. Attempts different methods showing an understanding of the reasoning behind a particular method.	Beginning to use mathematical language and notation in order to communicate thinking.	
	2	Works independently every lesson, attempting to solve a problem before asking for teacher feedback.	Performs basic algorithms accurately and multi-step algorithms with minimal errors. Is willing to investigate a range of strategies to answer questions.	Regularly using mathematical language and notation in their working and explanations.	
	3	Works independently every lesson, making several attempts before asking for teacher feedback.	Performs basic algorithms flawlessly, catching and correcting careless errors and performs multi-step algorithms accurately. Can accurately use multiple methods to answer the same question and demonstrates an understanding of the reasoning behind each.	Consistently uses accurate mathematical language and notation in their working and explanations.	
	4	Works independently every lesson and takes risks in order to complete tasks.	Consistently performs multi-step algorithms accurately, catching careless errors. Can accurately perform multiple strategies to solve a problem explaining the reasoning behind each strategy and can link the processes involved to other areas of Maths.	Can explain their work in precise mathematical language and using correct notation and layout.	

Maths - Age Related Expectations
Year 8 Pathways

		Learning Attitude	Mathematical Skills	Literacy / Communication Skills	
Pathway 1-3	1	Works independently most lessons and stays on task without prompting.	Can perform basic algorithms accurately without support. Is able to use different methods to solve a problem.	Can use accurate mathematical terminology to explain their process.	
	2	Regularly works independently, attempting to answer questions before asking for teacher support.	Can perform multi-step algorithms with reasonable accuracy and minimal support. Is able to use multiple methods and comment on which is their preferred one and why.	Can lay out solutions accurately and reason their methodology for each step.	
	3	Works independently consulting the correct methodology from peers before asking for support.	Can perform multi-step algorithms with minimal errors and without support. Is able to follow a solution, spot errors and correct them.	Can lay out solutions accurately with the correct notation and use mathematical terminology to explain the steps of a method other than their own.	
	4	Works autonomously and can propose a solution before asking for feedback.	Performs routine procedures with accuracy and consistency, and those with multiple steps correctly on the majority of occasions. Can evaluate results and methods mathematically.	Communicates information using mathematically accurate terminology and the correct layout and notation for multiple methods.	

		Learning Attitude		Mathematical Skills		Literacy / Communication Skills	
P a t h w a y 4 - 6	1	Consistently works independently and attempts a question several ways before asking for guidance.		Can accurately perform basic and multi-step algorithms with working, spotting and correcting careless errors independently. Is able to reproduce multiple strategies to solve problems, and give pros and cons for each.		Can explain their work in accurate mathematical language and using correct notation and layout.	
	2	Can answer questions independently and can generate strategies to solve more complex problems as part of a group.		Produces substantial chains of calculation with minimal errors and a clear process. Can accurately use multiple methods to answer a question, explaining which is most efficient.		Consistently communicates their work using precise mathematical terminology and accurate notation.	
	3	Attempts to solve a problem, using a legitimate mathematical strategy, before asking for feedback/support.		Produces accurate and clear chains of calculation, which they can back up with legitimate mathematical reasons. Can analyse different solutions to the same problem and comment on the accuracy and efficiency of each one.		Communicates their work effectively and using precise terminology and accurate notation and layout, adapting their terminology to different scenarios.	
	4	Generates multiple strategies to solve mathematical problems, predominantly independently.		Construct substantial chains of calculation accurately, with clear and accurate working, and can justify each step when asked. Can evaluate methods and results, commenting on overall efficiency and accuracy, pinpointing areas of weakness.		Interprets and communicates a range of information effectively using precise mathematical language and the correct layout and notation.	

		Learning Attitude		Mathematical Skills		Literacy / Communication Skills	
P a t h w a y 7 - 9	1	Works independently when required and takes risks in order to complete tasks.		Performs substantial chains of calculation with minimal errors. Can accurately use multiple methods to answer a question, explaining which is most efficient.		Can explain their work in precise mathematical language and communicate it clearly to others.	
	2	Works independently every lesson, but also with peers as an effective mentor or mentee.		Performs substantial chains of calculation flawlessly, giving reasons for each step when asked. Can analyse different solutions to problems and comment on the validity of the result.		Consistently, and without prompting, explains their work in precise mathematical language and communicates it clearly to others.	
	3	Can work effectively with peers to collaboratively generate strategies to solve complex mathematical problems.		Constructs substantial chains of calculation with reasons given for each step taken and adapt their logic to given scenarios. Can follow an argument or process, explaining and correcting any flaws.		Interprets and communicates their work accurately, using precise mathematical language and accurate written notation, applying to different scenarios with reasoning.	
	4	Independently generates strategies to solve complex mathematical problems.		Construct substantial chains of reasoning, including convincing mathematical arguments. Critically evaluates methods, arguments and results.		Interprets and communicates complex information accurately, using precise mathematical language and accurate notation.	