

KS3 Assessment Rubric – MATHS – USING & APPLYING MATHEMATICS

Year 7

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils try different approaches and find ways of overcoming difficulties that arise when they are solving problems. • They are beginning to organise their work and check results. • Pupils discuss their mathematical work and are beginning to explain their thinking. • They use and interpret mathematical symbols and diagrams. • Pupils show that they understand a general statement by finding particular examples that match it. 	<ul style="list-style-type: none"> • Pupils develop their own strategies for solving problems and use these strategies both in working within mathematics and in applying mathematics to practical contexts. • When solving problems, with or without ICT, they check their results are reasonable by considering the context. • They look for patterns and relationships, presenting information and results in a clear and organised way, using ICT appropriately. • They search for a solution by trying out ideas of their own. 	<ul style="list-style-type: none"> • In order to explore mathematical situations, carry out tasks or tackle problems, pupils identify the mathematical aspects and obtain necessary information. • They calculate accurately, using ICT where appropriate. • They check their working and results, considering whether these are sensible. • They show understanding of situations by describing them mathematically using symbols, words and diagrams. • They draw simple conclusions of their own and explain their reasoning.

Year 8

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • Pupils develop their own strategies for solving problems and use these strategies both in working within mathematics and in applying mathematics to practical contexts. • When solving problems, with or without ICT, they check their results are reasonable by considering the context. • They look for patterns and relationships, presenting information and results in a clear and organised way, using ICT appropriately. • They search for a solution by trying out ideas of their own. 	<ul style="list-style-type: none"> • In order to explore mathematical situations, carry out tasks or tackle problems, pupils identify the mathematical aspects and obtain necessary information. • They calculate accurately, using ICT where appropriate. • They check their working and results, considering whether these are sensible. • They show understanding of situations by describing them mathematically using symbols, words and diagrams. • They draw simple conclusions of their own and explain their reasoning. 	<ul style="list-style-type: none"> • Pupils carry out substantial tasks and solve quite complex problems by independently and systematically breaking them down into smaller, more manageable tasks. • They interpret, discuss and synthesise information presented in a variety of mathematical forms, relating findings to the original context. • Their written and spoken language explains and informs their use of diagrams. • They begin to give mathematical justifications, making connections between the current situation and situations they have encountered before.

Year 9

Working Towards Age Expectations	Working At Age Expectations	Working Above Age Expectations
<ul style="list-style-type: none"> • In order to explore mathematical situations, carry out tasks or tackle problems, pupils identify the mathematical aspects and obtain necessary information. • They calculate accurately, using ICT where appropriate. • They check their working and results, considering whether these are sensible. • They show understanding of situations by describing them mathematically using symbols, words and diagrams. • They draw simple conclusions of their own and explain their reasoning. 	<ul style="list-style-type: none"> • Pupils carry out substantial tasks and solve quite complex problems by independently and systematically breaking them down into smaller, more manageable tasks. • They interpret, discuss and synthesise information presented in a variety of mathematical forms, relating findings to the original context. • Their written and spoken language explains and informs their use of diagrams. • They begin to give mathematical justifications, making connections between the current situation and situations they have encountered before. 	<ul style="list-style-type: none"> • Starting from problems or contexts that have been presented to them, pupils explore the effects of varying values and look for invariance in models and representations, working with and without ICT. • They progressively refine or extend the mathematics used, giving reasons for their choice of mathematical presentation and explaining features they have selected. • They justify their generalisations, arguments or solutions, looking for equivalence to different problems with similar structures. • They appreciate the difference between mathematical explanation and experimental evidence.