

Main Criteria: Forward Education
Secondary Criteria: National Curriculum for England
Subjects: Mathematics, Science, Technology Education
Grades: 5, 6, 7, 8, Key Stage 2, Key Stage 3

Forward Education

Solar Water Disinfection (SODIS)

National Curriculum for England
Mathematics
 Grade **Key Stage 2** - Adopted: 2014

PROGRAMME OF STUDY	UK.MA.Y5.M.	Year 5 – MEASUREMENT
STRAND		Pupils should be taught to:

STATUTORY REQUIREMENT	MA.Y5.M.5.	Estimate volume [for example, using 1 cm ³ blocks to build cuboids (including cubes)] and capacity [for example, using water].
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PROGRAMME OF STUDY	UK.MA.Y6.M.	Year 6 – MEASUREMENT
STRAND		Pupils should be taught to:

STATUTORY REQUIREMENT	MA.Y6.M.7.	Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm ³) and cubic metres (m ³), and extending to other units [for example, mm ³ and km ³].
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National Curriculum for England
Mathematics
 Grade **Key Stage 3** - Adopted: 2014

PROGRAMME OF STUDY	UK.MA.Y7-9.1.	Year 7-9 – Working mathematically
STRAND		Through the mathematics content, pupils should be taught to:
STATUTORY REQUIREMENT	MA.Y7-9.1.1.	Develop fluency

STATUTORY REQUIREMENT	MA.Y7-9.1.1.2.	Select and use appropriate calculation strategies to solve increasingly complex problems.
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PROGRAMME OF STUDY	UK.MA.Y7-9.1.	Year 7-9 – Working mathematically
STRAND		Through the mathematics content, pupils should be taught to:
STATUTORY REQUIREMENT	MA.Y7-9.1.2.	Reason mathematically

STATUTORY REQUIREMENT	MA.Y7-9.1.2.5.	Begin to reason deductively in geometry, number and algebra, including using geometrical constructions.
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PROGRAMME OF STUDY	UK.MA.Y7-9.1.	Year 7-9 – Working mathematically
STRAND		Through the mathematics content, pupils should be taught to:
STATUTORY REQUIREMENT	MA.Y7-9.1.3.	Solve problems

STATUTORY REQUIREMENT	MA.Y7-9.1.3.1.	Develop their mathematical knowledge, in part through solving problems and evaluating the outcomes, including multi-step problems.
STATUTORY REQUIREMENT	MA.Y7-9.1.3.2.	Develop their use of formal mathematical knowledge to interpret and solve problems, including in financial mathematics.
STATUTORY REQUIREMENT	MA.Y7-9.1.3.3.	Begin to model situations mathematically and express the results using a range of formal mathematical representations.

PROGRAMME OF STUDY	UK.MA.Y7-9.5.	Geometry and measures
STRAND		Pupils should be taught to:

STATUTORY REQUIREMENT	MA.Y7-9.5.1.	Derive and apply formulae to calculate and solve problems involving: perimeter and area of triangles, parallelograms, trapezia, volume of cuboids (including cubes) and other prisms (including cylinders).
STATUTORY REQUIREMENT	MA.Y7-9.5.15.	Use the properties of faces, surfaces, edges and vertices of cubes, cuboids, prisms, cylinders, pyramids, cones and spheres to solve problems in 3-D.

**National Curriculum for England
Science
Grade Key Stage 2 - Adopted: 2014**

PROGRAMME OF STUDY	UK.SC.Y3-4.WS.	YEARS 3-4 - Working scientifically
STRAND		During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

STATUTORY REQUIREMENT	SC.Y3-4.WS.3.	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
STATUTORY REQUIREMENT	SC.Y3-4.WS.9.	Using straightforward scientific evidence to answer questions or to support their findings.

PROGRAMME OF STUDY	UK.SC.Y5-6.WS.	YEARS 5-6 - Working scientifically
STRAND		During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:

STATUTORY REQUIREMENT	SC.Y5-6.WS.2.	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
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**National Curriculum for England
Science
Grade Key Stage 3 - Adopted: 2014**

PROGRAMME OF STUDY	UK.SC.Y7-9.WS.	YEARS 7-9 - Working scientifically
STRAND	SC.Y7-9.WS.3.	Analysis and evaluation
STATUTORY REQUIREMENT		Through the content across all three disciplines, pupils should be taught to:

STATUTORY REQUIREMENT	SC.Y7-9.WS.3.4.	Present reasoned explanations, including explaining data in relation to predictions and hypotheses.
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**National Curriculum for England
Technology Education
Grade Key Stage 2 - Adopted: 2014**

PROGRAMME OF STUDY	UK.CO.	Computing
STRAND		Pupils should be taught to:

STATUTORY REQUIREMENT	CO.1.	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
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STATUTORY REQUIREMENT	CO.3.	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
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**National Curriculum for England
Technology Education
Grade Key Stage 3 - Adopted: 2014**

PROGRAMME OF STUDY	UK.CO.	Computing
STRAND		Pupils should be taught to:

STATUTORY REQUIREMENT	CO.2.	Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem.
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STATUTORY REQUIREMENT	CO.3.	Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions.
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