

# KS3 Age Related Expectations

# MATHEMATICS

YEAR 7

## APPROACHING STANDARD

I can use basic mathematical operations and simple number relationships, and perform basic calculations involving simple fractions, decimals, and percentages. I have a basic understanding of angle facts. I can solve simple area and volume problems for basic shapes. I can accurately create and transform basic shapes. I can handle basic problems related to units of measure. I can use basic forms and approaches to present different data types. I can manipulate simple expressions, equations and formulae. I can recognise and describe simple linear patterns algebraically and graphically. I can apply knowledge to solve basic structured problems.

## AGE RELATED

I can use basic mathematical operations and simple number relationships, and perform calculations involving simple fractions, decimals, and percentages. I have a basic understanding of angle facts and apply them to simple problems. I can solve simple area and volume problems for basic shapes. I can accurately create and transform basic shapes. I can handle basic problems related to units of measure. I can use basic forms and approaches to present and interpret different data types. I can manipulate and apply simple expressions, equations and formulae. I can recognise and describe linear patterns algebraically and graphically. I can apply knowledge to solve structured problems.

## GREATER DEPTH

I can use a range of mathematical operations and relationships and perform calculations involving fractions, decimals and percentages. I can understand and apply angle facts to a variety of problems. I can solve a range of area and volume problems. I can accurately construct and transform a range of shapes. I can use and solve problems with units of measure. I can present, interpret and analyse different data types, in different forms. I can manipulate and apply expressions, equations and formulae. I can understand and describe linear patterns algebraically and graphically. I can apply mathematical knowledge to solve unstructured problems.

## GREATER DEPTH PLUS

I can use a wider range of mathematical operations and relationships and perform calculations involving fractions, decimals and percentages. I can understand and apply angle facts to a wider variety of problems. I can solve a wider range of area and volume problems. I can accurately construct and transform a wider range of shapes. I can use and solve problems with units of measure. I can present, interpret and analyse different data types, in a range of forms. I can manipulate and apply more complex expressions, equations and formulae. I can understand and describe linear and quadratic patterns algebraically and graphically. I can apply mathematical knowledge to solve a range of unstructured problems.



How do I make progress in Mathematics?

## PROGRESSION

YEAR 8

## APPROACHING STANDARD

I can use basic mathematical operations and simple number relationships, and perform calculations involving simple fractions, decimals, and percentages. I have a basic understanding of angle facts and can apply them to simple problems. I can solve simple area and volume problems for basic shapes. I can accurately create and transform basic shapes. I can handle basic problems related to units of measure. I can use basic forms and approaches to present and interpret different data types. I can manipulate and apply simple expressions, equations and formulae. I can recognise and describe linear patterns algebraically and graphically. I can apply knowledge to solve structured problems.

## AGE RELATED

I can use a range of mathematical operations and relationships and perform calculations involving fractions, decimals and percentages. I can understand and apply angle facts to a variety of problems. I can solve a range of area and volume problems. I can accurately construct and transform a range of shapes. I can use and solve problems with units of measure. I can present, interpret and analyse different data types, in different forms. I can manipulate and apply expressions, equations and formulae. I can understand and describe linear patterns algebraically and graphically. I can apply mathematical knowledge to solve unstructured problems.

## GREATER DEPTH

I can use a wider range of mathematical operations and relationships and perform calculations involving fractions, decimals and percentages. I can understand and apply angle facts to a wider variety of problems. I can solve a wider range of area and volume problems. I can accurately construct and transform a wider range of shapes. I can use and solve problems with units of measure. I can present, interpret and analyse different data types, in a range of forms. I can manipulate and apply more complex expressions, equations and formulae. I can understand and describe linear and quadratic patterns algebraically and graphically. I can apply mathematical knowledge to solve a range of unstructured problems.

## GREATER DEPTH PLUS

I can use a range of mathematical operations and relationships and perform complex calculations involving fractions, decimals and percentages. I can understand and apply angle facts to complex problems. I can solve a range of complex area and volume problems. I can accurately construct and transform complex shapes. I can use and solve problems with units of measure. I can present, interpret and analyse complex data types, in a range of forms. I can manipulate and apply complex expressions, equations and formulae. I can understand and describe linear and quadratic patterns algebraically and graphically. I can apply mathematical knowledge to solve a range of complex unstructured problems.



## PROGRESSION

YEAR 9

## APPROACHING STANDARD

I can use a range of mathematical operations and relationships and perform calculations involving fractions, decimals and percentages. I can understand and apply angle facts to a variety of problems. I can solve a range of area and volume problems. I can accurately construct and transform a range of shapes. I can use and solve problems with units of measure. I can present, interpret and analyse different data types, in different forms. I can manipulate and apply expressions, equations and formulae. I can understand and describe linear patterns algebraically and graphically. I can apply mathematical knowledge to solve unstructured problems.

## AGE RELATED

I can use a wider range of mathematical operations and relationships and perform calculations involving fractions, decimals and percentages. I can understand and apply angle facts to a wider variety of problems. I can solve a wider range of area and volume problems. I can accurately construct and transform a wider range of shapes. I can use and solve problems with units of measure. I can present, interpret and analyse different data types, in a range of forms. I can manipulate and apply more complex expressions, equations and formulae. I can understand and describe linear and quadratic patterns algebraically and graphically. I can apply mathematical knowledge to solve a range of unstructured problems.

## GREATER DEPTH

I can use a range of mathematical operations and relationships and perform complex calculations involving fractions, decimals and percentages. I can understand and apply angle facts to complex problems. I can solve a range of complex area and volume problems. I can accurately construct and transform complex shapes. I can use and solve problems with units of measure. I can present, interpret and analyse complex data types, in a range of forms. I can manipulate and apply complex expressions, equations and formulae. I can understand and describe linear and quadratic patterns algebraically and graphically. I can apply mathematical knowledge to solve a range of complex unstructured problems.

## GREATER DEPTH PLUS

I can use sophisticated mathematical operations accurately. I can understand and use complex number relationships. I can understand and apply angle facts to complex problems. I can solve a range of sophisticated area and volume problems. I can construct and transform complex shapes. I can use units of compound measure. I can clearly and effectively present and interpret data to draw conclusions. I can construct and manipulate complex expressions, equations and formulae. I can understand and describe complex linear and quadratic patterns algebraically and graphically. I can apply mathematical knowledge to solve a range of sophisticated unstructured problems.

