

(Non-Statutory)
Updated September 2023

Requirements for Using Mathematics Measure

Across the curriculum, at a level appropriate to their ability, pupils should be enabled to:

- choose the appropriate materials, equipment, and mathematics to use in a particular situation;
- use mathematical knowledge and concepts accurately;
- work systematically and check their work;
- use mathematics to solve problems and make decisions;
- develop methods and strategies, including mental mathematics;
- explore ideas, make and test predictions and think creatively;
- identify and collect information;
- read, interpret, organise, and present information in mathematical formats;
- use mathematical understanding and language to ask and answer questions, talk about and discuss ideas, and explain ways of working;
- develop financial capability;
- use ICT to solve problems and/or present their work;

using their **Knowledge and Understanding** of:

- Measure (weight)**
- Measure (length)**
- Measure (capacity)**
- Measure (area)**
- Measure (time)**

Prerequisite Skills (Q Skills) in Using Mathematics across the Curriculum

Progress is also demonstrated by decreasing levels of support from adults: with direction, with decreasing direction, without direction. Communication can be both verbal and nonverbal.

Q1 Experience (experience/encounter)	Q2 Respond (become aware, respond, interact intermittently)	Q3 Engage (engage with/imitate modelled behaviour, direct attention, focus, recognise)	Q4 Actively Participate (interact, share, actively participate, collaborate, anticipate)	Q5 Consolidate (begin to develop an understanding, recall)
In sensory, structured activities, and in familiar and accessible contexts within activity-based and/or play-based learning, pupils:				
<ul style="list-style-type: none"> • encounter a variety of mathematical materials and equipment for use in a particular situation; • experience mathematical activities; • experience daily routines and work systems; • experience problem-solving activities; • experience a variety of simple patterns; • encounter collections of mathematical objects; • encounter a variety of mathematical objects/pictures/symbols; • experience a range of mathematical language; • experience shopping activities; • experience the digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • interact intermittently with appropriate mathematical materials and equipment for use in a particular situation; • interact intermittently with mathematical activities; • become aware of daily routines and work systems; • interact intermittently with problem-solving activities; • become aware of and respond to a variety of simple patterns; • interact intermittently with a range of mathematical objects; • interact intermittently with a collection of mathematical objects/pictures/symbols; • respond to a range of basic mathematical language; • interact intermittently with shopping activities; • interact intermittently with the digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • engage with appropriate mathematical materials and equipment for use in a particular situation in response to teacher guidance/modelling; • engage in/with mathematical activities in response to cues and prompts; • engage in/with simple and familiar work systems in response to teacher modelling; • engage with and imitate a range of mathematical problem-solving strategies; • engage with simple mathematical strategies by imitating teacher modelling; • imitate simple and familiar patterns in response to teacher modelling; • engage with the collection of mathematical objects; • engage with and/or imitate in the representation of their work with appropriate symbols/objects/pictures; • recognise, engage with, and imitate some basic mathematical language; • engage with shopping activities; • engage with digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • actively participate in making choices when selecting specific materials and equipment for a simple mathematical activity; • interact with activities based on mathematical concepts; • actively participate in simple and familiar work systems; • actively participate in a range of mathematical problem-solving strategies such as guessing; • participate in simple supported mathematical strategies; • participate in copying simple patterns; • actively participate in the collection of mathematical objects/information; • actively participate in the representation of their work with appropriate symbols/objects/pictures; • actively participate in communicating simple mathematical language; • actively participate with shopping activities; • actively participate with digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • develop an understanding of making choices when selecting specific materials, equipment, and mathematical processes for a simple mathematical activity; • show some understanding of mathematical notation, such as numerals +, -, or =; • begin to show some organisation in their work; • recall the use of simple and familiar work systems; • demonstrate a basic understanding that mathematical problem-solving requires a strategy, such as trial and error; • recall an increasing range of basic mathematical strategies; • copy and continue simple patterns; • begin to develop an understanding of methods used to collect basic mathematical objects/information; • begin to develop an understanding of representing their work using familiar and appropriate symbols/objects/pictures; • begin to understand and communicate using appropriate mathematical language in response to questions about their work; • recall what to do in shopping activities and put it into practice; • begin to develop an understanding of selecting and using the most appropriate digital device for a mathematical activity;
<ul style="list-style-type: none"> • experience the language associated with weight, for example heavy and light; 	<ul style="list-style-type: none"> • respond intermittently to the language of weight, for example heavy and light; 	<ul style="list-style-type: none"> • engage by imitating handling a group of similar objects that are different in weight; 	<ul style="list-style-type: none"> • participate in activities to identify objects that are heavy and light; 	<ul style="list-style-type: none"> • find everyday objects that weigh the same or different, such as chairs, mugs or schoolbags;
<ul style="list-style-type: none"> • experience the language associated with length, for example tall and short; 	<ul style="list-style-type: none"> • respond intermittently to the language associated with length, for example tall and short; 	<ul style="list-style-type: none"> • engage by imitating handling a group of similar objects that are different in length; 	<ul style="list-style-type: none"> • participate in identifying objects that are long or short; 	<ul style="list-style-type: none"> • sort a range of clothing into shop sizing categories such as small, medium and large;
<ul style="list-style-type: none"> • experience the language associated with capacity, for example full, empty, more and stop; 	<ul style="list-style-type: none"> • respond intermittently to the language of capacity, for example full, empty or more; 	<ul style="list-style-type: none"> • engage by imitating handling a range of materials, and different sizes and shapes of containers; 	<ul style="list-style-type: none"> • participate in identifying containers that are full or empty; 	<ul style="list-style-type: none"> • sort containers that are full and empty;
<ul style="list-style-type: none"> • experience covering a surface with a range of paints/crayons and sizes and shapes of paper; 	<ul style="list-style-type: none"> • respond by staying within the specified area, for example the PE hall, the classroom or the playground; 	<ul style="list-style-type: none"> • engage by imitating teacher modelling of covering the surface of a page with paint; 	<ul style="list-style-type: none"> • participate in setting a table for an appropriate number of people, depending on the size of the table; 	<ul style="list-style-type: none"> • be able to estimate how many clothes could be hung on a given washing line space;
<ul style="list-style-type: none"> • experience a daily routine in school. 	<ul style="list-style-type: none"> • respond intermittently to language associated with time, for example 'now'/'later' and 'first'/'then'. 	<ul style="list-style-type: none"> • engage in a range of turn-taking activities. 	<ul style="list-style-type: none"> • dress appropriately for the seasons/weather. 	<ul style="list-style-type: none"> • identify daily routines.
More Examples of Q1	More Examples of Q2	More Examples of Q3	More Examples of Q4	More Examples of Q5

Level 1 follows Q5

Requirements for Using Mathematics Number and Money

Across the curriculum, at a level appropriate to their ability, pupils should be enabled to:

- choose the appropriate materials, equipment, and mathematics to use in a particular situation;
- use mathematical knowledge and concepts accurately;
- work systematically and check their work;
- use mathematics to solve problems and make decisions;
- develop methods and strategies, including mental mathematics;
- explore ideas, make and test predictions and think creatively;
- identify and collect information;
- read, interpret, organise, and present information in mathematical formats;
- use mathematical understanding and language to ask and answer questions, talk about and discuss ideas, and explain ways of working;
- develop financial capability;
- use ICT to solve problems and/or present their work;

using their **Knowledge and Understanding** of:

- Number**
- Money**

Prerequisite Skills (Q Skills) in Using Mathematics across the Curriculum

Progress is also demonstrated by decreasing levels of support from adults: with direction, with decreasing direction, without direction. Communication can be both verbal and nonverbal.

Q1 Experience (experience/encounter)	Q2 Respond (become aware, respond, interact intermittently)	Q3 Engage (engage with/imitate modelled behaviour, direct attention, focus, recognise)	Q4 Actively Participate (interact, share, actively participate, collaborate, anticipate)	Q5 Consolidate (begin to develop an understanding, recall)
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In sensory, structured activities, and in familiar and accessible contexts within activity-based and/or play-based learning, pupils:

<ul style="list-style-type: none"> • experience a variety of mathematical materials and equipment for use in a particular situation; 	<ul style="list-style-type: none"> • respond to appropriate mathematical materials and equipment for use in a particular situation; 	<ul style="list-style-type: none"> • engage with appropriate mathematical materials and equipment for use in a particular situation in response to teacher guidance/modelling; 	<ul style="list-style-type: none"> • actively participate in making choices when selecting specific materials and equipment for a simple activity; 	<ul style="list-style-type: none"> • begin to develop an understanding of making choices when selecting specific materials, equipment, and mathematics for a simple activity;
<ul style="list-style-type: none"> • experience mathematical activities; • experience daily routines and work systems; 	<ul style="list-style-type: none"> • respond to mathematical activities; • respond to daily routines and work systems; • respond to objects of reference/symbols that mark specific activities/times; • anticipate familiar routines by moving/increasing eye contact before a favoured activity; 	<ul style="list-style-type: none"> • engage in/with mathematical activities in response to cues and prompts; • engage in/with simple and familiar work systems in response to teacher modelling; 	<ul style="list-style-type: none"> • actively participate in activities based on mathematical concepts; • actively participate in simple and familiar work systems; 	<ul style="list-style-type: none"> • show some understanding of mathematical notation, such as numerals +, -, or =; • begin to develop an understanding of some organisation in their work;
<ul style="list-style-type: none"> • experience problem-solving activities; 	<ul style="list-style-type: none"> • respond to problem-solving activities; 	<ul style="list-style-type: none"> • engage with and imitate a range of mathematical problem-solving strategies; • recall simple mathematical strategies in response to teacher modelling; 	<ul style="list-style-type: none"> • actively participate in a range of mathematical problem-solving strategies such as guessing; • participate in simple supported mathematical strategies; 	<ul style="list-style-type: none"> • demonstrate a basic understanding that mathematical problem-solving requires a strategy, such as trial and error; • become familiar with an increasing range of basic mathematical strategies;
<ul style="list-style-type: none"> • experience a variety of simple patterns; • experience two stimuli in two different positions; 	<ul style="list-style-type: none"> • become aware of and respond to a variety of simple patterns; 	<ul style="list-style-type: none"> • imitate simple and familiar patterns in response to teacher modelling; 	<ul style="list-style-type: none"> • actively participate in copying simple patterns; 	<ul style="list-style-type: none"> • recognise and continue simple patterns;
<ul style="list-style-type: none"> • experience collections of mathematical objects; 	<ul style="list-style-type: none"> • respond to a range of mathematical objects; • respond to the collection of mathematical objects/pictures/symbols; 	<ul style="list-style-type: none"> • engage with the collection of objects; • engage with or imitate presenting their work with appropriate symbols/objects/pictures; 	<ul style="list-style-type: none"> • actively participate in the collection of objects/information; • actively participate in presenting their work with appropriate symbols/objects/pictures; 	<ul style="list-style-type: none"> • begin to develop an understanding of methods used to collect basic mathematical objects/information; • begin to develop an understanding of presenting their work using familiar and appropriate symbols/objects/pictures;
<ul style="list-style-type: none"> • experience a range of mathematical language; 	<ul style="list-style-type: none"> • respond to a range of basic mathematical language; 	<ul style="list-style-type: none"> • engage with some basic mathematical language; 	<ul style="list-style-type: none"> • actively participate in communicating simple mathematical language; 	<ul style="list-style-type: none"> • begin to understand and communicate using appropriate mathematical language in response to questions about their work;

<ul style="list-style-type: none"> • experience a range of number rhymes, songs and activities; • experience/encounter simple two factor patterns; 	<ul style="list-style-type: none"> • respond to number rhymes/songs/activities; • respond to mathematical apps/computer programs; 	<ul style="list-style-type: none"> • engage with and/or imitate some actions during number rhymes and songs; • engage with touch counting up to three, then five, then 10; 	<ul style="list-style-type: none"> • participate in matching numerals up to three, then five, then ten; • recognise sets up to 10; 	<ul style="list-style-type: none"> • match numerals using different fonts up to 10; • estimate sets up to five;
<ul style="list-style-type: none"> • experience a range of real or play coins; • experience trips to a range of shops/cafes. 	<ul style="list-style-type: none"> • respond to/interact with a range of real or play coins; • respond to trips to a range of shops. 	<ul style="list-style-type: none"> • engage with/imitate modelled choosing of objects they would like to buy; • engage with/imitate the matching of individual coins. 	<ul style="list-style-type: none"> • participate in matching and sorting individual coins; • participate in posting/placing coins in a moneybox/till. 	<ul style="list-style-type: none"> • identify the number on a coin; • distinguish real coins from pretend coins.
More Examples of Q1	More Examples of Q2	More Examples of Q3	More Examples of Q4	More Examples of Q5

Level 1 follows Q5

Requirements for Using Mathematics Shape and Space/ Handling Data

Across the curriculum, at a level appropriate to their ability, pupils should be enabled to:

- choose the appropriate materials, equipment, and mathematics to use in a particular situation;
- use mathematical knowledge and concepts accurately;
- work systematically and check their work;
- use mathematics to solve problems and make decisions;
- develop methods and strategies, including mental mathematics;
- explore ideas, make and test predictions and think creatively;
- identify and collect information;
- read, interpret, organise, and present information in mathematical formats;
- use mathematical understanding and language to ask and answer questions, talk about and discuss ideas, and explain ways of working;
- develop financial capability;
- use ICT to solve problems and/or present their work;

using their **Knowledge and Understanding** of:

Shape and Space

Handling Data

Prerequisite Skills (Q Skills) in **Using Mathematics** across the Curriculum

Progress is also demonstrated by decreasing levels of support from adults: with direction, with decreasing direction, without direction. Communication can be both verbal and nonverbal.

	Q1 Experience (experience/encounter)	Q2 Respond (become aware, respond, interact intermittently)	Q3 Engage (engage with/imitate modelled behaviour, direct attention, focus, recognise)	Q4 Actively Participate (interact, share, actively participate, collaborate, anticipate)	Q5 Consolidate (begin to develop an understanding, recall)
	In sensory, structured activities, and in familiar and accessible contexts within activity-based and/or play-based learning, pupils:				
	<ul style="list-style-type: none"> • experience a variety of mathematical materials and equipment for use in a particular situation; 	<ul style="list-style-type: none"> • respond to appropriate mathematical materials and equipment for use in a particular situation; 	<ul style="list-style-type: none"> • engage with appropriate mathematical materials and equipment for use in a particular situation in response to teacher guidance/modelling; 	<ul style="list-style-type: none"> • actively participate in making choices when selecting specific materials and equipment for a simple mathematical activity; 	<ul style="list-style-type: none"> • begin to develop an understanding of making choices when selecting specific materials, equipment, and mathematical processes for a simple mathematical activity;
	<ul style="list-style-type: none"> • experience mathematical activities; • experience daily routines and work systems; 	<ul style="list-style-type: none"> • respond to mathematical activities; • respond to daily routines and work systems; • respond to objects of reference/symbols that mark specific activities/times; • anticipate familiar routines, such as moving or increasing eye contact before a favoured activity; 	<ul style="list-style-type: none"> • engage in/with mathematical activities in response to cues and prompts; • engage in/with simple and familiar work systems in response to teacher modelling; 	<ul style="list-style-type: none"> • actively participate/interact with activities based on mathematical concepts; • actively participate in daily routines; • actively participate in simple and familiar work systems; 	<ul style="list-style-type: none"> • show some understanding of mathematical notation, such as +, -, or =; • begin to show some organisation in their work; • recall the use of simple and familiar work systems;
	<ul style="list-style-type: none"> • experience problem-solving activities; 	<ul style="list-style-type: none"> • respond to problem-solving activities; 	<ul style="list-style-type: none"> • engage with and imitate a range of mathematical problem-solving strategies; • engage with simple mathematical strategies by imitating teacher modelling; 	<ul style="list-style-type: none"> • actively participate in a range of mathematical problem-solving strategies such as guessing; • participate in simple supported mathematical strategies; 	<ul style="list-style-type: none"> • demonstrate a basic understanding that mathematical problem-solving requires a strategy, such as trial and error; • recall an increasing range of basic mathematical strategies;
	<ul style="list-style-type: none"> • experience a variety of simple patterns; 	<ul style="list-style-type: none"> • become aware of and respond to a variety of simple patterns; 	<ul style="list-style-type: none"> • imitate simple and familiar patterns in response to teacher modelling; 	<ul style="list-style-type: none"> • participate in copying simple patterns; 	<ul style="list-style-type: none"> • copy and continue simple patterns;
	<ul style="list-style-type: none"> • encounter collections of mathematical objects; • encounter a variety of mathematical objects/pictures/symbols; 	<ul style="list-style-type: none"> • respond to a range of mathematical objects; • interact intermittently with a collection of mathematical objects/pictures/symbols; 	<ul style="list-style-type: none"> • engage with the collection of mathematical objects; • engage with and/or imitate in the representation of their work with appropriate symbols/objects/pictures; 	<ul style="list-style-type: none"> • actively participate in the collection of mathematical objects/information; • actively participate in the representation of their work with appropriate symbols/objects/pictures; 	<ul style="list-style-type: none"> • begin to develop an understanding of methods used to collect basic mathematical objects/information; • begin to develop an understanding of representing their work using familiar and appropriate symbols/objects/pictures;
	<ul style="list-style-type: none"> • experience a range of mathematical language; 	<ul style="list-style-type: none"> • respond to some basic mathematical language; 	<ul style="list-style-type: none"> • recognise, engage with and imitate some basic mathematical language; 	<ul style="list-style-type: none"> • actively participate in communicating simple mathematical language; 	<ul style="list-style-type: none"> • begin to understand and communicate using appropriate mathematical language in response to questions about their work;
	<ul style="list-style-type: none"> • experience digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • respond to digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • engage with the digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • actively participate with the digital devices being used to problem-solve; 	<ul style="list-style-type: none"> • begin to develop an understanding of selecting and using the most appropriate digital device for a mathematical activity;
	<ul style="list-style-type: none"> • experience inset shape puzzles; • experience structured tasks related to shapes; 	<ul style="list-style-type: none"> • respond to a range of 2D and 3D materials (both natural and manufactured); • respond by intermittently interacting with inset shape puzzles; 	<ul style="list-style-type: none"> • engage by imitating singing/signing songs about shapes; • engage by imitating adult modelling of structured tasks related to shapes; 	<ul style="list-style-type: none"> • participate in singing/signing songs about shapes; • participate in structured tasks related to shapes; 	<ul style="list-style-type: none"> • move to a designated position/space on request; • play whiteboard activities and games related to shapes;
	<ul style="list-style-type: none"> • experience adults and peers expressing a preference for a favourite shape, colour and so on; • experience adults and peers sorting a 'family' of objects/pictures. 	<ul style="list-style-type: none"> • respond by intermittently expressing preferences, for a favourite shape, colour, and so on; • respond by intermittently interacting with the sorting of a 'family' of objects/pictures. 	<ul style="list-style-type: none"> • engage by imitating the sorting of a 'family' of objects/pictures; • engage with sensory sorting activities for colour, smell, size, texture and taste. 	<ul style="list-style-type: none"> • participate in activities where objects/pictures are sorted into a 'family'; • participate by expressing preferences, for a favourite shape, colour and so on. 	<ul style="list-style-type: none"> • sort real objects for one criterion and re-sort for a different criterion; • express preferences, for a favourite shape, colour and so on.
	More Examples of Q1	More Examples of Q2	More Examples of Q3	More Examples of Q4	More Examples of Q5