

Mathematics: Levels A – D and Foundation



Level A	Level B	Level C	Level D	Foundation Level
Number and Algebra				
Number and place value				
Respond to objects being counted and distributed	Use number names 'one', 'two' and 'three' in sequence to count in everyday situations	Use number names in sequence to count in everyday situations, initially from one to five	Use a number names in sequence to count in everyday situations, initially from one to ten	Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point
Respond to situations where counting is involved	Correspond 'one' with a single object	Know and match number name, numerals and quantities to three	Recognise number name, numerals and quantities, initially up to five and beyond	Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond
Respond to groups of personally relevant objects	Explore the concept of 'none', 'one' and 'more'	Identify groups as being 'one', 'more' or 'less'	Subitise regular arrangements of objects and arrays up to five	Subitise small collections of objects
Respond to situations where the comparison of two collections or objects is involved	Make comparison between items using appropriate language such as 'same' or 'different'	Compare and order two collections according to their quantity	Compare, order and make comparisons between two collections, according to their quantity, using numbers initially to five	Compare, order and make correspondences between collections, initially to 20, and explain reasoning
Respond to the removal and addition of familiar items and objects in practical situations	Participate in everyday situations involving 'adding' and 'taking away'	Demonstrate in practical situations, 'adding one more to' and 'taking one away from' in everyday situations	Model practical situations involving 'adding to' or 'taking away' with collections of up to five objects	Represent practical situations to model addition and subtraction
React to practical situations of sharing	Respond to everyday practical situations of sharing	Sharing materials in practical situations	Sharing material in practical situations so everyone has the same amount	Represent practical situations to model sharing
Money and financial mathematics				
React to everyday financial situations involving money	Respond to everyday financial situations involving money and match notes and coins	Using money in everyday financial situations and matching coins to two dimensional images	Use direct comparison to sort coins or notes into groups	Represent simple, everyday financial situations involving money
Patterns and algebra				
Respond to the identification of objects	Participate in the comparison of objects, using language such as 'same' and 'different'	Pair identical objects from a small collection, and recognise simple repeated patterns	Sort like objects based on a given classification, and identify and continue a simple repeated pattern with its next element	Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create patterns with objects and drawings
Respond to repeated routines in everyday events	Follow a simple cause and effect process	Identify repeated routines and sequences in everyday events	Follow a sequence of steps	Follow a short sequence of instructions
Measurement and Geometry				
Using units of measurement				
Respond to objects based on length	Compare objects using direct comparison	Compare two objects based on measurement attributes of length	Respond to contexts involving 'heavier/lighter' than and 'holds more/less' than	Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language
Respond to personally relevant everyday events	Recognise and participate in familiar events that happen on a daily basis	Identify familiar events that occur at different stages of a day (morning, afternoon, evening, night)	Identify and sequence regular events that occur during the school day and comment on their duration (short/long)	Compare and order the duration of events using the everyday language of time
Respond to personally relevant routine events	Participate in regular daily events	Identify the familiar events within the day using a visual schedule	Identify the days of the week in sequence	Connect days of the week to familiar events and actions
Shape				
Respond to familiar everyday shapes and objects	Identify when two shapes or objects are the same sort or not	Match familiar two dimensional shapes and three dimensional objects	Use direct comparison to sort three dimensional objects and two dimensional shapes	Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment
Location and transformation				
Respond to movement of an object	Respond to a simple statement about location or direction	Locate familiar three-dimensional objects in the classroom when they are named	Follow simple directional words to locate or move an object 'on', 'in' or 'under'	Describe position and movement
Statistics and Probability				
Data representation and interpretation			Anguar simple yearne suppliers should date that here have	
Respond to objects relevant to a given context	Participate in data collection	Identify data relevant to a given context	Answer simple yes/no questions about data that has been gathered in a given context	Answer yes/no questions to collect information
Respond to objects being moved and organised to make a data display	Participate in the grouping of data	Follow simple instructions to sort objects into a simple data display	Collect and display data in response to a question using materials	Organise answers to yes/no questions into simple data displays using objects and drawings
Experience data display being interpreted	Experiencing data being used for decision making in everyday situations	Identify the choices/ responses of a data display	Identify what the data display is representing and answer questions using yes/no responses	Interpret simple data displays about yes/no questions

Continued... (Achievement Standards)



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Achievement Standard

Number and Algebra

Students observe the use of number within their daily life. They begin to respond to numbers in everyday experiences. Students demonstrate awareness of counting by responding to number rhymes, songs, stories and finger games. They experience and respond to 'one for you, one for me', 'gone', 'no more left' and 'give me more'. Students participate in making piles, groups or bundles of familiar everyday objects and respond to objects being put together and taken apart.

Measurement and Geometry

Students observe and explore objects within daily life. They react and respond to objects and experience measurement attributes in practical situations. Students explore objects of varying weights, lengths, capacities and materials. They show an awareness of time and daily routine by responding to a signal from the teacher, and items being brought out or removed. Students respond to a signal from a timer, used to indicate the end of an activity. Students explore and respond to objects of varying textures, colours, sizes and shapes. Students explore space by moving and changing position and location, and respond to changes in position.

Statistics and Probability

Students observe objects and events within their daily life. Students begin to display a similar and predictable reaction to regular events. They respond to major changes to regular games and activities associated with chance, surprise and predictability, such as moving a switch to activate a toy.

Number and Algebra

Students participate in everyday activities that involve numbers and counting, comparing groups of objects, and pattern activities. Students can rote count to three. Students identify 'one' and 'lots' of objects and show an understanding of 'more' in familiar situations. They manipulate objects and build a tall tower by using 'more' blocks and take blocks away from a tower to make the tower 'less' tall.

Measurement and Geometry

Students participate in everyday activities that explore measurement and use measurement attributes in practical situations. Students demonstrate beginning understanding of basic measurement concepts such as 'long or short', 'heavy or light'. They explore routine events and show an awareness of time and daily routines by responding to a routine signal from the teacher. They demonstrate an awareness of object permanence by searching for objects that have been hidden and participate in class activities that explore three-dimensional objects. They can match identical familiar three-dimensional shapes that are 'the same'. Students respond to specific instructions relating to manipulating the movement and location of self and objects.

Statistics and Probability

Students participate in class activities that explore object, events and displaying information. They develop an awareness of chance by playing with materials or objects that involve cause and effect (actions that will happen) and playing games where the outcome is unpredictable. Students respond to a simple pictorial representation of their activities related to a short time-frame.

Number and Algebra

Students connect number names and numerals with sets of up to five elements. They match individual objects with counting sequences up to and back from five. Students use concrete materials to solve problems that involve comparing, combining and separating sets. Students make 'groups', 'lots' and groups of 'one' and can indicate which collection has 'more' than the other. They can distribute objects to each person in a group until there are no objects left. Students order the first three elements of a set. Students can match one attribute of familiar objects.

Measurement and Geometry

Students explore measurement attributes in practical situations and use words to describe the characteristics of familiar objects. Students solve simple mathematical problems associated with longer and shorter lengths. They explore events and identify day and night events. They can identify events that may or may not happen today. Students respond to a simple pictorial representation of activities related to their whole day. They match objects that are the same and sort familiar objects, and an understanding of the concept of 'inside and outside' by following instructions. They demonstrate an understanding of location and spatial awareness by following simple instructions related to simple spatial concepts.

Statistics and Probability

Students participate in and contribute to the development of picture schedules, timetables and pictorial lists associated with familiar activities, such as listing the ingredients needed for a cooking session. They demonstrate an understanding of the concept of chance by participating in games of chance, and identifying events that may or may not happen today.

Number and Algebra

Students connect number names and numerals with sets of up to 10 elements. They match individual objects with counting sequences up to and back from 10. They recognise and point to numerals in and around the classroom, for example, numbers on a clock face. Students use concrete materials to solve problems that involve comparing. combining and separating sets. They can indicate when groups of less than 10 objects are the same or different in number and that two collections have the 'same' quantity by matching items one to one. They can find the first and last object in a sequence and place objects into sets to make 'more' and take objects from a group to make 'less'. Students order the first five elements of a set. They sort objects and shapes based on a given attribute and create simple repeating patterns of two elements or more by copying a pattern.

Measurement and Geometry

Students explore measurement attributes in practical situations and identify and describe the basic characteristics of a range of objects. They can identify regular events within the school week. They can follow a class pictorial schedule and mark off each passing day on a calendar. Students demonstrate an understanding of two- and three-dimensional shapes by matching basic geometric objects to pictures of that object, identifying basic three-dimensional shapes in the classroom and sorting shapes into like groups. Students show an understanding of 'location' and spatial concepts by responding to instructions to position items.

Statistics and Probability

Students explore events and follow a simple picture schedule, and use these to answer simple 'yes' or 'no' questions. They play a variety of chance games such as bingo or snakes and ladders and demonstrate an understanding that they will not always win.

Number and Algebra

Students connect number names and numerals with sets of up to 20 elements, estimate the size of these sets, and use counting strategies to solve problems that involve comparing, combining and separating these sets. They match individual objects with counting sequences up to and back from 20. Students order the first 10 elements of a set. They represent, continue and create simple patterns.

Measurement and Geometry

Students identify measurement attributes in practical situations and compare lengths, masses and capacities of familiar objects. They order events, explain their duration, and match days of the week to familiar events. Students identify simple shapes in their environment and sort shapes by their common and distinctive features. They use simple statements and gestures to describe location.

Statistics and Probability

Students sort familiar categorical data into sets and use these to answer yes/no questions and make simple true/false statements about the data.

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