

Mathematics: Using and applying mathematics

Descriptor	Guidance
<p>P1(i) Pupils encounter activities and experiences. They may be passive or resistant. They may show simple reflex responses, <i>for example, startling at sudden noises or movements</i>. Any participation is fully prompted.</p>	
<p>P1(ii) Pupils show emerging awareness of activities and experiences. They may have periods when they appear alert and ready to focus their attention on certain people, events, objects or parts of objects, <i>for example, grasping objects briefly when they are placed in their hand</i>. They may give intermittent reactions, <i>for example, sometimes showing surprise at the sudden presence or absence of an event or object</i>.</p>	
<p>P2(i) Pupils begin to respond consistently to familiar people, events and objects. They react to new activities and experiences, <i>for example, becoming excited or alarmed when a routine is broken</i>. They begin to show interest in people, events and objects, <i>for example, tracking objects briefly across their field of awareness</i>. They accept and engage in coactive exploration, <i>for example, lifting objects briefly towards the face in shared investigations</i>.</p>	
<p>P2(ii) Pupils begin to be proactive in their interactions. They communicate consistent preferences and affective responses, <i>for example, showing a desire to hold a favourite object</i>. They recognise familiar people, events and objects, <i>for example, looking towards their own lunch box when offered a selection</i>. They perform actions, often by trial and improvement, and they remember learned responses over short periods of time, <i>for example, repeating an action with a familiar item of equipment</i>. They cooperate with shared exploration</p>	

<p>and supported participation, <i>for example, handling and feeling the texture of objects passed to them.</i></p>	
<p>P3(i) Pupils begin to communicate intentionally. They seek attention through eye contact, gesture or action. They request events or activities, <i>for example, pushing an item of equipment towards a member of staff.</i> They participate in shared activities with less support. They sustain concentration for short periods. They explore materials in increasingly complex ways, <i>for example, banging or rubbing objects together.</i> They observe the results of their own actions with interest, <i>for example, as they throw or drop objects on to different surfaces.</i> They remember learned responses over more extended periods, <i>for example, remembering how to activate a pop-up object from a previous lesson.</i></p>	
<p>P3(ii) Pupils use emerging conventional communication. They greet known people and may initiate interactions and activities, <i>for example, dropping objects to prompt interventions from adults.</i> They can remember learned responses over increasing periods of time and may anticipate known events, <i>for example, collecting coats and bags at the end of the school day.</i> They may respond to options and choices with actions or gestures, <i>for example, pointing to or giving one object rather than another.</i> They actively explore objects and events for more extended periods, <i>for example, manipulating objects in piles, groups or stacks.</i> They apply potential solutions systematically to problems, <i>for example, using items of equipment purposefully and appropriately.</i></p>	
<p>P4 Pupils are aware of cause and effects in familiar mathematical activities, <i>for example, knowing that in a role-play shop a coin can be exchanged for an item; hitting a mathematical shape on a concept</i></p>	<p>Note that P3 does not include the understanding of exchange. As with all of the P levels, if the pupil meets the performance criterion in a context which is not</p>

<p><i>keyboard to make it appear on the screen. Pupils show awareness of changes in shape, position or quantity, for example, grouping objects that have similar key features such as shape; creating very simple sequences of light or sound using switched equipment; recalling an object which has been placed out of sight. They anticipate, follow and join in familiar activities when given a contextual clue, for example, anticipating the next chorus or action in songs and rhymes; matching cakes to plates.</i></p>	<p>a discrete maths lesson, the activity should still be taken into account when awarding a Plevel.</p>
<p>P5 Pupils sort or match objects or pictures by recognising similarities, <i>for example, matching shoes or socks by placing next to one placed by an adult; find matching pairs from a collection of pictures; collecting objects given one criterion e.g. blue or big.</i> They make sets that have the same small number of objects in each, <i>for example, distributing sweets into containers so that there are one or two in each.</i> They solve simple problems practically, <i>for example, selecting appropriate containers for items of different sizes; checking there is a knife for every fork.</i></p>	<p>If a child needs support to enable them to demonstrate their knowledge, understanding or skills, then this can always be provided.</p>
<p>P6 Pupils sort objects and materials according to a given criteria, <i>for example, sorting footballs into a net and table tennis balls into a box.</i> They copy simple patterns or sequences, <i>for example, copying a drumbeat; copying a simple pattern of repeated movements; copying a pattern of large and small cups.</i></p>	
<p>P7 Pupils complete a range of classification activities using a given criterion, <i>for example, sorting a pile of coins by size, colour or shape; sorting all the blue Wellington boots; sorting all the size 6 shoes.</i> They identify when an object is different and does not belong to a given familiar category, <i>for example, removing odd items from sets; collecting items into</i></p>	

<p>sorting boxes or drawers. They respond appropriately to key vocabulary and questions, <i>for example 'How many?'</i></p>	
<p>P8 Pupils talk about, recognise and copy simple repeating patterns and sequences, <i>for example, recognising and describing simple repeating patterns on textiles or necklaces from different cultures; recognising and describing a pattern of socks on a line; joining in a pattern of hand claps; talking about and copying patterns such as beats in familiar music; shapes made by hand and feet in damp sand; sponge prints.</i> Pupils use their developing mathematical understanding of counting up to ten to solve simple problems encountered in play, games or other work, <i>for example, using tokens or marks to tally events or scoring in games; counting in the school environment; using ordinal words to describe positions and turns.</i> Pupils make simple estimates, <i>for example, estimating the number of cubes that will fit into a box or the number of strides across a room.</i></p>	
<p>Level 1 Pupils use mathematics as an integral part of classroom activities. They represent their work with objects or pictures and discuss it. They recognise and use a simple pattern or relationship.</p>	

