

The Developmental Journey in Cognition and Learning
The Developmental Milestones are taken from [MAPP for Cognition and Learning](#)

Developmental Milestone Sensorimotor Development	Discovery-based Learning	Enabling Environments <i>Suggested activities/topics</i>	Resources and Support <i>Click links to access</i>																																				
<table border="1"> <tr><td>7.1</td><td>Notices stimuli</td></tr> <tr><td>7.2</td><td>Responds to stimulus</td></tr> <tr><td>7.3</td><td>Responds to a range of stimuli</td></tr> <tr><td>7.4</td><td>Responds consistently to one stimulus</td></tr> <tr><td>7.5</td><td>Responds differently to different stimuli</td></tr> <tr><td>7.6</td><td>Explores the environment</td></tr> <tr><td>7.7</td><td>Intentional exploration of the environment</td></tr> <tr><td>7.8</td><td>Shifts attention from one object to another</td></tr> <tr><td>7.9</td><td>Shifts attention from one object to another and back again</td></tr> <tr><td>7.10</td><td>Random activity on objects</td></tr> <tr><td>7.11</td><td>Intentional action on objects</td></tr> <tr><td>7.12</td><td>Intentional action on objects (contingency awareness - understands cause and effect)</td></tr> <tr><td>7.13</td><td>Repeats and action when the first attempt is unsuccessful</td></tr> <tr><td>7.14</td><td>Searches for, or looks toward, an interesting object which has gone out of sight (object permanence)</td></tr> <tr><td>7.15</td><td>Performs two different actions in sequence to get reward</td></tr> <tr><td>7.16</td><td>Manipulates objects purposefully</td></tr> <tr><td>7.17</td><td>Modifies an action when repeating it does not work</td></tr> <tr><td>7.18</td><td>Tries new strategy when old one fails</td></tr> </table>	7.1	Notices stimuli	7.2	Responds to stimulus	7.3	Responds to a range of stimuli	7.4	Responds consistently to one stimulus	7.5	Responds differently to different stimuli	7.6	Explores the environment	7.7	Intentional exploration of the environment	7.8	Shifts attention from one object to another	7.9	Shifts attention from one object to another and back again	7.10	Random activity on objects	7.11	Intentional action on objects	7.12	Intentional action on objects (contingency awareness - understands cause and effect)	7.13	Repeats and action when the first attempt is unsuccessful	7.14	Searches for, or looks toward, an interesting object which has gone out of sight (object permanence)	7.15	Performs two different actions in sequence to get reward	7.16	Manipulates objects purposefully	7.17	Modifies an action when repeating it does not work	7.18	Tries new strategy when old one fails	<ul style="list-style-type: none"> • Communication for all • Engagement for learning • Sensory exploration • Sensory stories • Music and movement • Discovery boxes • Cause and effect • Intensive interaction • Community participation • Tracking with eye gaze • Joint attention and enjoyment in shared activities 	<p>Personalised Curricula: The targeted development of functional skills and concepts in the EHC domains of SEND</p> <p>Informal (Thematic) Curricula: Inclusive teaching vehicles to motivate pupils and create enjoyable, memorable and predictable learning experiences</p> <p>We must consider:</p> <ul style="list-style-type: none"> • The indoor environment • The sensory environment • The emotional environment • The outdoor environment • Responding to feelings and needs • Visual organisation and structure • Building predictability in learnt routines • Building independence in self-help and life skills – make these experiences memorable and purposeful 	<p>Early Communication</p> <p>Sensory story box ideas</p> <p>Music for engagement</p> <p>Using IT</p> <p>Early Years Developmental Journal</p> <p>Routes for Learning</p> <p>Engagement Model and observations</p> <p>Multi-sensory curriculum example</p> <p>Sensory Play Ideas</p> <p>Heuristic Play</p>
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Example Timetable for a Pre-Formal Learner or Semi-Formal Explorer

Monday	Tuesday	Wednesday	Thursday	Friday
Welcome song, photo register and weather. Early morning feelings check and regulating activities.				
Story time and rhymes	Counting songs Cause and effect	Story time and rhymes	Counting songs Cause and effect	Story time and rhymes
Communication Carousel				
Snack, rest, break				
Group Time Early learning skills; attention and focus activity; early play sequences e.g. 'ready, steady, go' or <i>Motivate to Communicate!</i>				
Sensory: Gross Motor Carousel				
Early Communication: Intensive Interaction; blowing and tracking; early turn-taking activities; 'my turn, your turn'; choice				
Relaxation	Body awareness	Relaxation/Yoga	Body Awareness	Relaxation
Lunch break: play, break, rest Life-skills: eating, toileting, personal care Social skills: developing friendships through buddies and structured play opportunities				
Group work: Key Concepts relating to topic	Group work: Shared activity relating to topic	Group work: Revisit key concepts	Group work: Shared activity with greater independence	Group work: Review key concepts
Fine motor skills	Movement and music	Sensory story	Movement and music	Fine motor skills
Early Communication: Intensive Interaction; blowing and tracking; early turn-taking activities; 'my turn, your turn'; choice				
Goodbye song and transition home				

Example Timetable for a Pre-Formal Learner or Semi-Formal Explorer			
Cognition and Learning	Communication and Interaction	Social, Emotional & Mental Health	Physical and Sensory
<p>Early learning tasks</p> <p>Repeated learning</p> <p>Personal planning</p> <p>Multi-sensory learning</p> <p>Cause and effect</p>	<p>Motivate to communicate</p> <p>Intensive interaction</p> <p>Choice & preferences</p> <p>Early communication skills</p>	<p>Feelings and needs</p> <p>Life skills</p> <p>Personal care and self-help</p> <p>Happiness</p>	<p>Sensory stories</p> <p>Sensory Play</p> <p>Fine and Gross Motor</p> <p>Messy Play</p> <p>Sensory Integration</p>

Follows Routines	Learning and Engagement	Enabling Environments <i>Suggested activities/topics</i>	Resources and Support <i>Click links to access</i>
8.1 Follows familiar routines and takes part in familiar tasks or activities.	<ul style="list-style-type: none"> • Increased independence with tasks, transition and skills • Early sorting, stacking, posting & matching tasks • 2-part posting: pull apart and post • Fine motor skills • Gross motor skills • Early play skills • Match or sort by colour and/or shape • Request and choice • Communicate – wants, needs and preferences • Sensory integration activities 	<ul style="list-style-type: none"> • Visual organisation and structure to increase independence & ability to anticipate • Flexible learning space to incorporate range of learning experiences • Managing transition to support with emotional regulation • Structuring activities for task engagement • Exploratory child led play • Planned opportunities to model functional play 	<p><u>How to play</u></p> <p><u>Shoe box tasks</u></p> <p><u>SALT- increasing interaction bids</u></p>
8.2 Negotiates familiar environment			
8.3 Knows where familiar items go and where they are found.			
8.4 Uses familiar objects appropriately, according to their function.			
8.5 Identifies or collects the materials needed for an activity.			
8.6 Identifies, or anticipates, the next step in a familiar activity.			
8.7 Suggests ways in which an activity might be improved.			
8.8 Thinking about consequences: answers “If ... then ...” questions.			
8.9 Thing about causes and reasons: response to “Why ... because ...” questions			

Understanding Instructions	Learning and Engagement	Enabling Environments <i>Suggested activities/topics</i>	Resources and Support <i>Click links to access</i>
9.1 Associates an Object of Reference, sign, symbol or word with a specific activity.	<ul style="list-style-type: none"> • Increase communication bids • Increase symbol recognition • Matching symbols to photographs • Marching symbols in the environment to support transition • Following a task schedule by matching colour or symbol to a task • Sequencing key skills 	<ul style="list-style-type: none"> • Sequencing activities in real life situations for life skills and self help • Structuring tasks to increase independence • See and learn programme for early words and phrases • Practice applying skills and key concepts through play and own interests 	See and learn
9.2 Follows single-step instruction relating to objects or activities in the immediate environment.			Core board 10 key signs
9.3 Follows multi-step instruction relating to objects or activities in the immediate environment.			Progression in matching
9.4 Follows instructions which refer beyond the immediate perceptual environment.			
9.5 Follows instruction which does not conform to usual routine.			
Problem Solving	Learning and Engagement	Enabling Environments <i>Suggested activities/topics</i>	Resources and Support <i>Click links to access</i>
10.1 Recognises that there is a problem	<ul style="list-style-type: none"> • Characteristics of play and learning • Sequencing • Established routines and work system in the class/setting • Able to request help, rest, drink or toilet • Increase requests for equipment, activity or action • Observations for learning, play and interaction 	<ul style="list-style-type: none"> • Using strengths and motivators to increase opportunities to request help. • Strengthen clarity and predictability • Strengths focused • Socially focused • Sensory focused • Happiness and wellbeing • Support and challenge 	Characteristics of play
10.2 Requests assistance			Early problem solving
10.3 Re-establishes routine or order which has been disrupted			Strategies for interaction
10.4 Responds to immediate situation with appropriate learnt response			Sabotage
10.5 Replaces damaged object or supplies missing object			
10.6 Proposes action or set of actions to remedy problem			
10.7 Proposes (or seeks) alternative activity when a problem cannot be fixed			

Representing Ideas	Learning and Engagement	Enabling Environments <i>Suggested activities/topics</i>	Resources and Support <i>Click links to access</i>
11.1 Identifies the next step on a pictorial schedule or timetable	<ul style="list-style-type: none"> • Able to identify and distinguish 40+ subjects • Able to label common verbs and nouns • Able to understand time sequence, now and then and later • Able to order and sequence pictures • Recording information and ideas in a range of ways including symbols • Opportunities to practice skills following instructions and visual sequences 	<ul style="list-style-type: none"> • Increase visual structure in tasks 	<u>Colourful semantics</u>
11.2 Follows a series of steps of a pictorial schedule or timetable		<ul style="list-style-type: none"> • Provide a range of supports for recording and alternatives to writing 	<u>Sequencing cards</u>
11.3 Places a set of pictures in correct temporal sequence		<ul style="list-style-type: none"> • Provide topic vocabulary banks / topic communication boards 	<u>IT to support representing ideas</u>
11.4 Orders pictures to represent a causal sequence		<ul style="list-style-type: none"> • Simple sequencing activities beginning, middle and end 	<u>Topic boards / vocabulary flash cards</u>
11.5 Records events		<u>Visual instructions: Life skills</u>	
11.6 Records information		<u>Visual recipes</u>	
11.7 Records before-and-after changes			
11.8 Interprets information			
11.9 Follows a sequence of instructions (e.g. a pictorial recipe)			

Number	Learning and Engagement	Enabling Environments <i>Suggested activities/topics</i>	Resources and Support <i>Click links to access</i>
12.1 Recites number names in order	<ul style="list-style-type: none"> Shows enjoyment and anticipates in familiar number rhymes and songs Able to join in with simple counting songs and rhymes Able to match 1 to 1 in everyday contexts <i>eg matching one spoon in one bowl, giving all the children one apple</i> Is able to identify which set has more and which set has less when comparing two sets of concrete objects Shows awareness of what is next in a number sequence Use 1 to 1 correspondence to match sets using a six or ten frame Match corresponding numeral to sets up to 6 then 10 Recognises, orders and recites numbers to 10 	<ul style="list-style-type: none"> Building independence and applying skills in real life contexts Practice, repetition and consolidation of the skills across contexts and with different partners Use a range of concrete objects, counting frames and visual supports to support independent problem solving Provide a number rich environment so children can explore number concepts through play Understand and develop mathematical thinking as the foundation for understanding number 	<p>Maths Enhancement Programme</p> <p>Improving Maths in Early years and KS1</p> <p>Strategies to support SEND learners</p> <p>SEND and Inclusion in Maths lessons</p> <p>Sensory Maths</p> <p>Maths Printable</p> <p>Numicon Teaching Support and Resources</p>
12.2 Identifies written numerals			
12.3 Identifies numerals in the environment			
12.4 Orders number symbols (numerals) correctly			
12.5 Counts out a small set of objects without omissions or over-counting			
12.6 Knows that the last number in the count represents the number of objects in the set			
12.7 Demonstrates understanding of one-to-one correspondence in a practical context			
12.8 Compares two sets of objects and says which set contains 'more' and which set contains 'less'			
12.9 Responds to the question 'how many?' by counting (or recalling the number of the relevant count)			
12.10 Matches numerals to corresponding sets of objects			
12.11 Understands the concept of 'one more'			
12.12 Understands 'add more' or 'take some away (or out)'			
12.13 Understands 'first', 'next' and 'last'			

For further advice and support with regard to using this resource, please contact Rebecca.Mawson@bdsip.co.uk (Inclusion Adviser: Autism)