

Engagement Curriculum: Yearly Plan- Mathematics: EYFS, KS 1, KS 2

Social Partner Stage: Critical priorities	Language Partner stage- Critical priorities	Conversation Partner Stage- Critical priorities
<p>Social Partner Stage (Before words) - Children with autism at this stage often do not find initiations with social stimuli intrinsically rewarding, as it is difficult to predict that a caregiver or teacher is a source of assistance; thus, even facial and gestural forms of communication are initially delayed. When they do emerge, gestures tend to involve physical manipulation (e.g., pulling a caregiver’s hand) rather than using a gesture to send a “shared message” to others (e.g., giving, pointing, showing, pushing away, waving, and a head nod / headshake).</p> <p>Critical priorities:</p> <ul style="list-style-type: none"> • Increasing functional, spontaneous communication, as a high rate of nonverbal communication (i.e., 2 communications per minute in highly motivating situations) = language acquisition and social relationships. • Increasing conventional gestures that have a shared meaning (e.g., giving, pointing, pushing away, head nods, and head shakes). 	<p>Language Partner Stage (Emerging language) - Children with autism at this stage often show a preference for object labels (i.e., nouns) versus more social words, namely subjects (i.e., people’s names) and verbs (e.g., action words). This is likely due to a limited appreciation of the intentions of others and limited gaze shifting toward people and between people and objects. As subject + verb word combinations are predictive of creative language acquisition, limitations in this semantic relationship lead to a reliance on object labels and rote sentence structures</p> <p>Critical priorities:</p> <ul style="list-style-type: none"> • Increasing range of <i>spontaneous</i> communication involving others (e.g., requesting actions and social routines, commenting on actions, and sharing experiences with others). • Increasing range of word combinations for subject + verb (e.g., “Sarah open the biscuits,” “Jason play basketball,” “Mum pour the juice.”) 	<p>Conversational Partner Stage; Children with autism at this stage continue to show difficulty with predicting the intentions of others, a challenge which impacts the development of self-efficacy as a communicator and the ability to establish and maintain peer relationships. This challenge also limits the development of more sophisticated syntax to clarify intentions, knowing how to pick topics, when to initiate, how to balance conversational turns, and collaborating and negotiating with others.</p> <p>Critical priorities:</p> <ul style="list-style-type: none"> • Increasing spontaneous communication with one’s peers and a sense of self-efficacy. • Increasing awareness of social norms of conversation (e.g., balancing turns, vocal volume, proximity, conversational timing, and topic selection)

All children will follow the texts relevant for their key stage. These texts however will be taught in accordance with the children’s Communication stage

and so critical priorities considered during all planning.

The Maths curriculum will be taught in the following way:

Social Partner stage:

- Use of communication boards, to communicate needs and wants.
- E.G. selecting nursery rhymes, numbers etc. Use of visuals to sequence self-help activities, E.G. dressing and toileting.
- Intensive interaction with counting rhymes. Creating rituals and encouraging initiation for these activities.
- Use of Now and Next to structure work and sensory activities.
- Autism attention bucket- Stages 1 and 2. Focus attention and sustain attention activities. Children look at people and objects they are pointing to. Use of interactive white board for focus attention activities, e.g. Number crew, Number blocks, counting rhymes, and visual and auditory maths activities.
- Use of percussion instruments to support counting and symbol use goals for turn taking and copying a partner.
- Use of Maths Recovery activities to understand of number using concrete objects. Focus on tolerating adults in their space and moving on learning tasks with number.
- Tracing over numbers for visual sensory activities.
- Using playdough and paint to create numbers and shapes to support visual sensory tasks.
- Jigsaws: Develop problem solving, and independent working tasks, tolerating another adult in space to move learning along and tolerating other children in space by working in pairs or with two other children to complete a jigsaw. Develop turn taking skills.

Language Partner Stage:

- Use of Maths Recovery resources. Develop number skills through Perceptual counter, Figurative counter and counting on child. Use the Attention bucket, workstation, circle time and partner games to facilitate Maths Recovery activities.
- Use of ten frames and concrete resources to support visual and tactile sensory approach to teaching mathematics.
- Use of Number Blocks for Focused attention and turn taking and Number Crew for Focused attention and problem-solving activities.
- Language expansion activities. Facilitate through role play activities, through stories, Attention bucket. Develop mathematical language.
- Reciprocal communication activities- Turn taking during maths board games, and Attention bucket turn taking stage 3 activities. Also, through maths role play activities..
- Autism Attention Bucket: Stages 1, 2, 3 and 4. Stage 1: Focus attention.
- Stage 2: Sustain attention.
- Stage 3: Take turns and re-engage.
- Stage 4: Shift attention, re-engage and work independently.
- Mark making activities,

- tracing over patterns, letters and numbers for visual sensory activities.
- Using paint and playdough for again visual sensory activities.
- Use of Now and Next charts for work and sensory activities. Use to foster independent working skills.
- Use of 5-point scale to express and manage emotions.
- Sequencing activities: Links made with cooking, Lego therapy and following instructions. Also, links made with P.E.
- Jigsaws and building models using a range of construction materials: Reciprocal interactions, working with an adult, working with other children and working independently.

Conversation Partner Stage:

- Use of Maths Recovery to develop facility with number from Perceptual counter, Figurative counter and counting on child. Use of games to foster turn taking and reciprocal communication. Maths Recovery delivered through the Attention Bucket, circle time, partner games and workstation activities.
- Use of ten frames and concrete objects to support visual and tactile sensory approaches to maths.
- Autism Attention Bucket: Stages 1, 2, 3 and 4.
- Use of Now, Next and Then to organise activities.
- Use of 5-point scale to manage and express emotions.
- Sequencing activities: Links made with cooking, Lego therapy and following instructions.
- Jigsaws and building models using different construction materials: Working independently, with an adult and working in groups.

7 Areas of Engagement:

Planning will consider the 7 areas of engagement:

1. Respond
2. Curiosity
3. Investigation
4. Discovery
5. Anticipation
6. Initiation
7. Perseverance

The Maths Recovery identifies children at certain counting stages. These are as follows:

- Perceptual child: Child starts counting from 1, but cannot accurately count, unless it is an unscreened calculation..
- Figurative counter: Child counts from 1, however is accurate with count and calculation. Can use this for screened addition tasks.
- Counting on child: Adds a number on by not dropping to 1 but counting on from the first add end.
- Non-Counting child: Decomposes numbers to work out more complex calculations.

Autumn Term: Perceptual counter	Autumn Term: Figurative counter	Autumn Term: Counting on child	Autumn Term: Non counter
Spring Term: Perceptual counter	Spring Term: Figurative counter	Spring Term: Counting on child	Spring Term: Non count child
Summer Term: Perceptual counter	Summer Term: Figurative counter	Summer Term: Counting on child	Summer Term: Non count child

Maths Recovery Units covered throughout the year for different number stages:

Numbers, words and Numerals		
<ul style="list-style-type: none"> • Objectives: (Chapter 3, Teaching number in the classroom) 	<ul style="list-style-type: none"> • Early Counting and Addition: Chapter 4 (Teaching number in the classroom) 	<ul style="list-style-type: none"> • Structuring Numbers 1 to 10. (Chapter 5 Teaching number in the classroom)
<ul style="list-style-type: none"> • Extend knowledge of forward number word sequences. • To sequence numerals To • count in 1's, 10's and 100's. • To be able to say the number after any given 	<ul style="list-style-type: none"> • To counting to compare two quantities and say which is more. • To count visible numbers forwards and backwards and say one more or one less, two more or two less. 	<ul style="list-style-type: none"> • To think figurative about numbers in the range of 1 to 10 and partition numbers in the range of 1 to 10 for an explanation. • To ascribe number to regular special patterns and match to a numeral in the range of 1 to

<p>number.</p> <ul style="list-style-type: none"> • To extend knowledge of backward number word sequence. • To order non sequential numerals. • To identify and recognise digits from 1 to 9. • To sequence and order numerals. • To identify numerals. • To use counting on strategies in addition and subtraction. • To extend knowledge of numerals to 100. 	<ul style="list-style-type: none"> • To add with two collections, where the first collection is screened and the number in the second collection is in the range of 2 to 5. • Addition involving screened collections of items, where the second add end is in the range of 2 to 5. • To count on from a given number with visible items in a row. • Counting the number of children within a group. • To establish the numerosity of a collection. • To use counting on in a partially screened addition task. • To develop conceptual based temporal patterns which can be useful in keeping track when solving additive and subtractive task. 	<p>6.</p> <ul style="list-style-type: none"> • To subitize in the context of regular special configurations. • To develop facility with combinations to 5. • To develop facility with 5 and 10. To increase children's figurative knowledge of numbers in the range of 1 to 10. • To ascribe number to domino patterns. • To extend knowledge of domino patterns. • To learn the partitions of 10. • Facility of combinations to 10. • To develop facility of combinations to 5. •
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