



## Rationale of Reception Changes

In response to the new Early Learning Goals, updates have been made to the Mathematics Mastery Reception curriculum.

In consultation with Lydia Cuddy-Gibbs, Head of Early Years for Ark Schools and Head Teacher at Ark Start, revisions have been made to the programme of study.

“The Mathematics Mastery curriculum, classroom resources and teacher development **drive strong conceptual understanding of number**. Therefore, the priority for any school adopting the new ELGs needs to be supporting Reception teachers to understand the knowledge in the new goals, how this is **already supported by Mathematics Mastery’s curriculum, classroom resources and teacher development**, and how this **can be boosted through child led play in exploration time**”

*Lydia Cuddy-Gibbs, Head of Early Years for Ark Schools & Head Teacher at Ark Start*

The details below will outline how the new goals are already supported by the curriculum and what changes are being made to draw further attention to the elements underpinning the new ELGs.

### Overall updates

- **ELG: Number:** Our existing Reception curriculum already drives deep understanding of number to 10. Conceptual understanding, one of our Dimensions of Depth, is embedded across the entire curriculum and pupils are encouraged to explore the composition of number through multiple representations. Engaging with multiple representations, including concrete and pictorial, allow for opportunities to subitise. The **‘Numbers within 10’** unit has been brought earlier within the Programme of Study to allow for further opportunities to gather evidence against this ELG. For further ELG alignment, the **‘Securing addition and subtraction facts’** unit will focus upon number bonds up to 5 and 10. Please see the ‘Unit specific updates’ section for further detail.
- **ELG: Numerical patterns:** Mathematical thinking, one of our Dimensions of Depth, is embedded across the entire curriculum and pupils are encouraged to pattern seek in every lesson. Taking the elements of this ELG in turn, the existing curriculum allows for opportunities to a) verbally count beyond 20, b) compare quantities up to 10 and c) explore and represent patterns within numbers up to 10. Although numerical pattern seeking, and the elements outlined above, are encouraged in all number-based units, each term there’s at least one number pattern focused unit of work: Autumn – **‘Pattern and Early number’**, Spring – **‘Number patterns within 15’**, Summer – **‘Number patterns within 20’**, **‘Number patterns beyond 20’** and **‘Exploration of patterns within number’**. Please see the ‘Unit specific updates’ section for further detail.
- **Shape, space and measures:** Although there is no longer a goal for shape, space and measure, the [Government consultation response](#) states, ‘Practitioners and teachers will still be required to teach children about shape, space and measures, as part of a well-rounded curriculum as set out in the revised mathematics educational programme.’ **Therefore, these crucial elements of maths will remain in our Programme of Study.**
- **New Unit Overviews and updated Unit tutorials:** Available for each unit, these signpost teachers to how exactly how each unit aligns with the new ELGs and Development Matters statements. An example overview and tutorial can be found [here](#).
- **New ELGs & Maths Meetings:** Fluency in all elements of the ELGs can be developed through Maths Meetings (e.g. number bond recall, subitising, doubles, odds/evens, counting, comparing quantities).



Understanding can be strengthened when revisited regularly in Maths Meetings segments. Updated Maths Meeting guidelines for Reception will be available by September 21.

- **New ELGs & Continuous provision cards:** We know just as much learning happens outside the classroom as inside the classroom, so finding opportunities to promote the ELGs within continuous provision is important. These cards will also be revised accordingly and available by September '21.

## Unit specific updates

- **Unit 7: Numbers within 10:** As mentioned above, this unit has been brought earlier within the Programme of Study to allow for further opportunities to gather evidence against the 'Number' ELG. Placing this unit before Unit 8 allows pupils to then apply their learning of the number 7 when looking at calendar maths.
- **Unit 8: Calendar and time:** Since Unit 7 has now been brought forwards, this unit will be taught a couple of weeks later in the year. Autumn term Maths Meetings can be used to expose pupils to these mathematical concepts.  
*We acknowledge that some schools may wish to teach this unit earlier/in Autumn term. If absolutely necessary, it is possible to move this unit earlier without compromising the integrity of the cumulative Reception curriculum. However, pupils will miss out on the opportunity of applying their knowledge of numbers up to 7, from the previous unit, and connecting this to the days of the week. Do consider how these connections can still be made, for example, within Maths Meetings.*
- **Unit 10: Grouping and sharing:** This unit will be taught immediately before 'Number patterns within 15'. This allows for plenty of experience with grouping and sharing, including numerical patterns when grouping: '2 lots of 6 = 12' and '2 lots of 7 = 14'. Pupils can then apply this learning and make connections when learning about the number 12 & 14 in the next unit (e.g. 2 lots of 6 = 12, is the same as 10 + 2).
- **Unit 12: Doubling and halving:** By this point, pupils will have learnt about grouping and sharing, followed by number patterns within 15. This unit will build upon this, offering opportunities to apply learning to doubling and halving (e.g. working with numbers 12 and 14, from the previous two units).
- **Unit 16: Number patterns beyond 20:** This unit has been brought earlier within the Programme of Study to allow pupils to learn about numbers beyond 20. This allows for pupils to apply their understanding to **Unit 17: Money** – e.g. recognising 50 p, and **Unit 18: Measures** – e.g. 100 cm on a ruler, baking by measuring in grams.

## Aligning with further ELGs

Through using the Mathematics Mastery Reception curriculum in your setting. You can gather evidence for the following ELGs

- **ELG: Listening, Attention and Understanding:**
  - Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions
  - Make comments about what they have heard and ask questions to clarify their understanding
  - Hold conversation when engaged in back-and-forth exchanges with their teacher and peers.**Each 'part' of the Mathematics Mastery lesson structure allows for this e.g. during the 'Talk Task'**
- **ELG: Speaking:**
  - Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary
  - Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate
  - Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher.



***'Language and Communication' is one of Mathematics Mastery's Dimensions of Depth – dialogue and talk (including full sentences and accurate mathematical vocabulary) is promoted across the entire curriculum and should be embedded in every MM lesson.***

- **ELG: Self-Regulation:**

- Show an understanding of their own feelings and those of others, and begin to regulate their behaviour accordingly
- Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate
- Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.

- **ELG: Building Relationships**

- Work and play cooperatively and take turns with others
- Form positive attachments to adults and friendships with peers
- Show sensitivity to their own and to others' needs.

***Taking both ELGs above: During 'Talk Tasks' pupils develop skills in paired work, turn-taking, sharing of manipulatives/resources and following instructions. [Maths Meetings](#) also allow the opportunity for pupils to engage in each of the ELGs above.***

- **ELG: Managing Self**

- Be confident to try new activities and show independence, resilience and perseverance in the face of challenge

***Mathematical resilience is promoted across the entire curriculum and pupils are encouraged to persevere whenever mathematical challenges are posed in lessons.***

- **ELG: Gross Motor Skills**

- Negotiate space and obstacles safely, with consideration for themselves and others

***[Transitions](#) between different 'parts' of the MM lesson allow for pupils to develop these skills***

- **ELG: Fine Motor Skills**

- Hold a pencil effectively in preparation for fluent writing
- Using the tripod grip in almost all cases
- Use a range of small tools, including scissors, paint brushes and cutlery
- Begin to show accuracy and care when drawing.

- **ELG: Word Reading**

- Say a sound for each letter in the alphabet and at least 10 digraphs
- Read words consistent with their phonic knowledge by sound-blending
- Read aloud simple sentences and books that are consistent with their phonic knowledge, including some common exception words.

- **ELG: Writing**

- Write recognisable letters, most of which are correctly formed
- Spell words by identifying sounds in them and representing the sounds with a letter or letters - Write simple phrases and sentences that can be read by others

***Taking the three ELGs above, practical and written activities allow for pupils to develop these skills***

- **ELG: Being Imaginative and Expressive**

- Sing a range of well-known nursery rhymes and songs;
- Perform songs, rhymes, poems and stories with others, and – when appropriate – try to move in time with music.

***Nursery rhymes and song are embedded across Reception units of work and can also be incorporated into Maths Meetings.***