



Focus area: Maths

Curriculum considerations for children across all areas of SEN in Maths

- Pedagogy and content adapted to meet the child's needs.
- For those working more than 2 years behind adapted sequencing/basic skills focus time delivered to fill gaps.

Additional enhancements

- Same day corrective teaching.
- Birmingham toolkit gap filling
- Repetition of basic skills linked to BTK

Key Learning Challenges:

Understanding scientific vocabulary
Understanding instructions.
Understanding instructions for tasks.

Communication and Interaction

- Breaking down instructions into small chunks,
- Providing visual reminders of instructions.
- Pre teaching new vocabulary prior to lessons.
- Sending home key vocabulary on word mats prior to a unit of work.
- Vocabulary mats with visual prompts.
- Giving increased processing time for mental calculations (10 second rule, I will come back to you later').
- Scaffolding language around mathematical reasoning 'I think the answer means...'
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Key Learning Challenges:

Recalling previously taught knowledge.
Working memory
Understanding scientific vocabulary.
Difficulty writing down ideas/explanations
Difficulty explaining their ideas

Learning and Cognition

- Pre teaching of mathematical vocabulary.
- Coloured paper/overlays
- Vocabulary mats with visual prompts.
- Additional concrete resources
- Pre teaching of key concepts
- Provide visual prompts for each small step.
- Regular review of key skills.
- Alternative methods of recording – photos, videos, Ipad
- Use of visuals/reduced language to explain learning
- Alternatives to written answers to show understanding – multiple choice, circling answers, drawing the answer, sticking/Velcro, matching
- Scaffolding language around reasoning.

Key Learning Challenges:

Likely to have gaps due to missed learning.
Difficulties around concentration/task completion.

Social, emotional and mental health

- Using task planner/task chunking.
- Time framing/use of timers/ target number of questions.
- Check ins
- Checking understanding/ small group/individual modelling
- Visual prompts
- When modelling encourage learners to make jottings or draw each step out on to a whiteboard.
- Incorporate some questions which appeal to their interests.

Key Learning Challenges

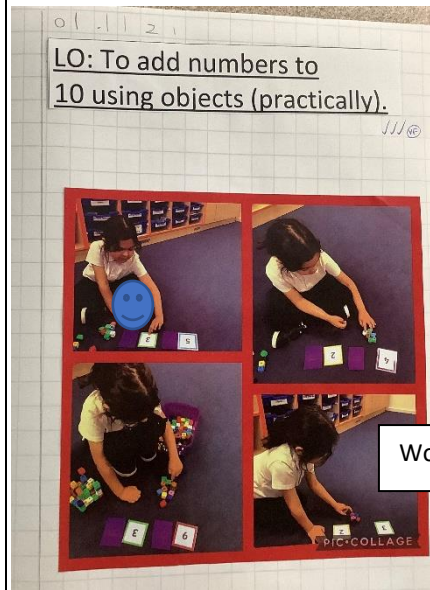
Being able to read the text/questions/board.
Being able to hear the teaching/instructions

Physical and Sensory

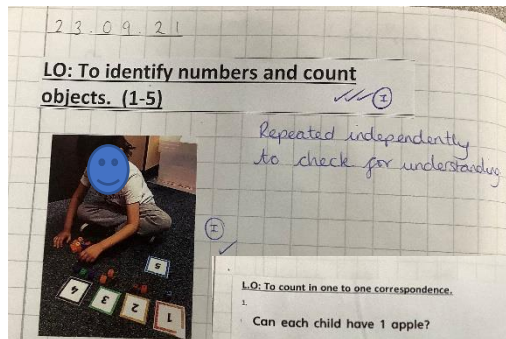
- Enlarged questions.
- Use of coloured paper/overlays
- Seated near the front of class.
- Use or radio aids by teacher/pupil (as advised by HI service).
- Alternations to texts (as advised by vision service).

EYFS Example	KS1 Example	KS2 Example
<ul style="list-style-type: none"> - Use of manipulatives - Adapted/ larger manipulatives used for those with less developed fine motor skills. 	<ul style="list-style-type: none"> - Number of the day to embed key place value skills - One small step introduced per lesson - Increased use of manipulatives and pictorial representations - Increased use of worksheets to reduce cognitive load - Increased opportunities to for repeated practice of a new skill 	<ul style="list-style-type: none"> - Number of the day to embed key place value skills - One small step introduced per lesson - Increased use of manipulatives and pictorial representations - Increased use of worksheets to reduce cognitive load - Increased opportunities to for repeated practice of a new skill

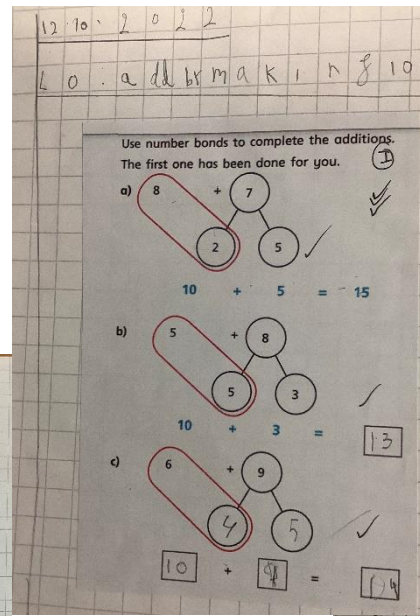
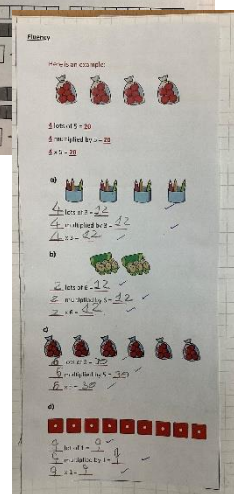
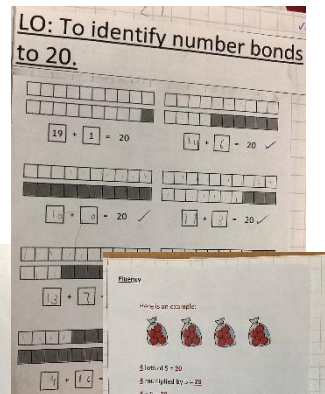
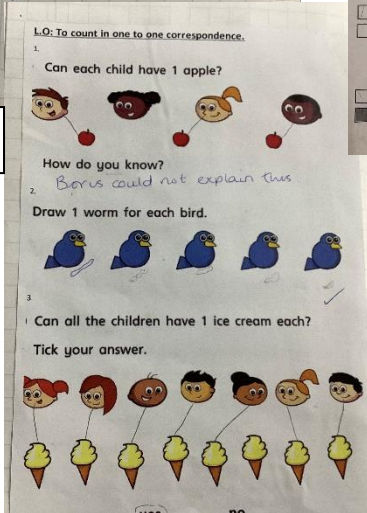
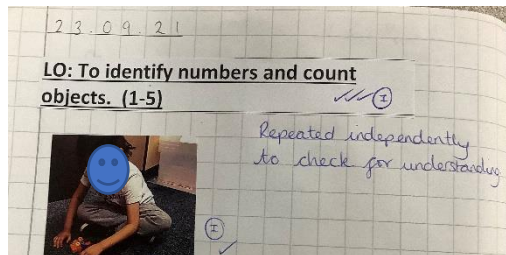
What does this look like in practice? (pictorial examples)



Working practically

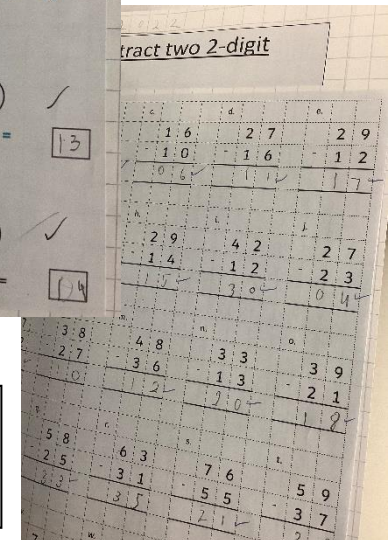


Use of pictorial representations and models

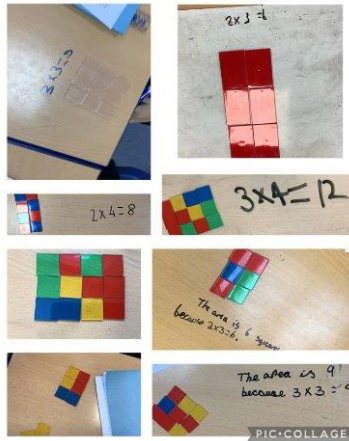
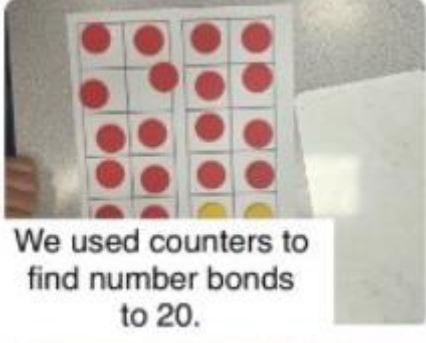


Increased use of worksheets to reduce cognitive load

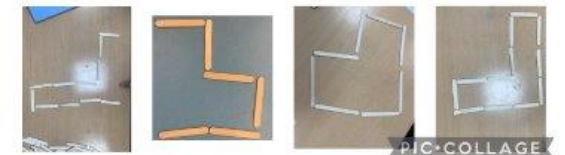
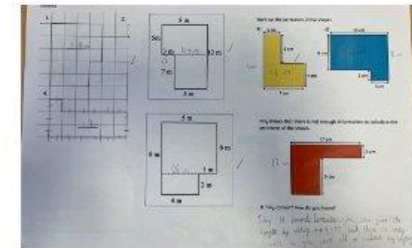
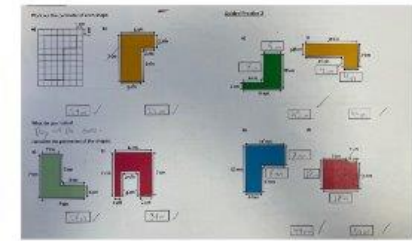
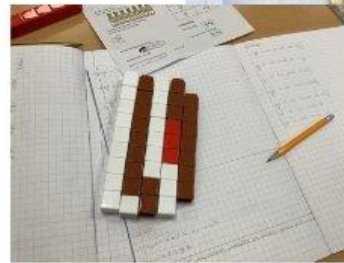
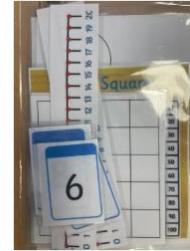
Increased opportunities for repeated practise of a new skill



Use of manipulatives



Resource Packs



PIC-COLLAGE

PIC-COLLAGE