



Promoting the expertise of schools to meet the needs of pupils with specific learning difficulties through advisory work, training and exemplar teaching

Baseline Number Assessment

September 2018



This assessment is intended to support schools with the assess-plan-do-review cycle for pupils with **early number difficulties**. It provides a baseline summary for number skills and separate tracking summaries for each of the five number strands covered. This is designed to help school identify teaching targets and monitor progress.

The number strands covered are:

1. Numerosity
2. Counting
3. Understanding number including place value
4. Maths facts
5. Calculating

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Baseline Assessment Summary Sheet	p. 5
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Numerosity (1) & Counting (2) Strands	p. 7
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Resources for assessment section	See separate booklet

** For the calculating strand please print off separate booklet*

Assessment Guidelines

General Guidelines:

1. Assess one pupil at a time in a quiet area. Make sure the pupil is seated comfortably. The pupil will need a pencil for some sections of the assessment.
2. Assessment tasks can be completed in one sitting, with a rest break or over several sessions depending on the pupil. The test will take approximately 30 - 45 minutes depending on the pupil's progress through each strand.
3. Do not help the pupil during the assessment task. However, support them by being positive and encouraging them to have a go. Use non-specific praise for effort e.g. *Thanks for that or you are working hard.*
4. Before starting the number assessment use the 'I can do..' sheet as a discussion to gain pupil voice.
5. Stop each strand once targets for the pupil have been identified/the pupil is struggling.
To get a fuller understanding of a pupil's needs get them to try each strand to help identify strengths and weaknesses. Within the calculation strand try some from each operation.

You will need:

1. Assessment record sheets (p. 5 - 22), pen and ring binder



2. Calculation pupil booklet



3. Equipment - see each strand but if completing all strands you will need:

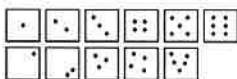
Base 10 Counters



Whiteboard and pen



See resources section for:

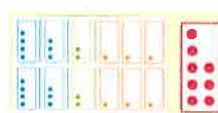


9	10	11
12	13	14
15	16	17

0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Print these resources single sided on cream card and cut up in advance.

Familiar concrete materials: this will depend on what the pupil uses in class for example...



Scoring and transferring results to the summary /progress tracker:

1. Be discreet when recording the pupil's response on record sheets so that the pupil cannot see what you are writing e.g. put the record sheets inside a ring binder. What the adult **does** is in **blue font** and what is **said** to the pupil is in **green font**. Use the record sheets to record if the answer is correct or not and also observations - how the pupil worked and or what they said. This will help in discussions about next steps.
2. Note: the initials CPA stand for Concrete/Pictorial/Abstract
3. After assessment, transfer the information onto the summary sheet if all the strands have been completed - use the traffic light system so you can quickly see strengths, areas for consolidation and gaps in a pupil's learning. Highlight or dot in the corresponding colours.



Unknown - New learning

Not secure - For consolidation

Secure

Patterns and Numerosity (1.1)	Disc patterns		Random patterns	
Counting Objects (2.1)	1:1		conservation	How many fingers

Using the assessment:

The assessment is designed to help school identify gaps and misconceptions for a pupil not making progress in early number. Areas of weakness can occur earlier than might be expected, meaning the pupil is building current number work on weak foundations. The aim is to identify areas of weakness so they can be addressed. The ultimate aim is that the pupil can work in the abstract, within an increasing larger number range and be able to apply that knowledge to different situations.

1. Once the baseline assessment is complete, use the summary of baseline results to help you select targets.
2. When selecting a target to work on, fill in the baseline part of progress tracker for the relevant strand so that it can be used for review. If CPA is in the column, circle the level the pupil is working confidently within.
3. Provide time to work with the pupil 1:1 or in a small group (if pupils have the same areas of weakness). Pupils with specific difficulties in number may well need to work at the concrete level longer than some of their peers but the links to the pictorial and then the abstract level should be made clearly to them. Introduce mathematical language carefully and review regularly to ensure they are retained. Praise strategies rather than getting all the answers correct. Ideally use equipment that the pupil has access to in class to help them transfer knowledge from intervention to class.
4. Once targets have been addressed in intervention, recheck using that section of the assessment and fill in the review. If appropriate, select new targets. Do this as part of your assess-plan-do-review progress checks.