

Notes for Unit 6: Coherence

Purpose of this unit: <ul style="list-style-type: none"> Look at coherence through making connections to all the previous units Provide trainees with the opportunity to reflect on how they learnt maths and to experience a lesson to compare and contrast that experience. 	Materials in this unit: <ul style="list-style-type: none"> PowerPoint presentation Handout 1: Commutativity Handout 2: Three points to sequence Handout 3: Language summary Handout 4: Sequencing activity
Approximate time to complete the unit: <ul style="list-style-type: none"> Three hours 	Resources needed during the session: <ul style="list-style-type: none"> Counters (ten per pair of trainees) Whiteboards and pens (one each) Part-part-whole diagrams (one per pair) A copy each of Handouts 1 and 3 Handouts 2 and 4 (cut into strips) and sorting strips (one of each between two or three)

Suggested timings		Overview of the session for the leader
Mins	Slides	
5	1-4	Introductory section.
30	5-8	An opportunity for trainees to consider what coherence might mean and to refine that definition/link to where this has been observed in practice and/or the experiences they have had.
15	9	This slide provides an opportunity for trainees to consider their own subject knowledge in the area of multiplication. This will be the theme throughout this unit.
20	10-12	This section enables the trainees to start thinking about teaching sequences and the order in which they teach concepts.

10	13-15	These slides enable a visual reference to the teaching sequences as exemplified in the PD materials. This broad overview is provided and, as we move through this unit, trainees will have the chance to think about the sequences within this spine.
20	16-18	At this point we are going to focus in on one teaching point.
15	19	This slide enables trainees to consider how it might make you feel when you are asked to retrieve something that perhaps you never understood. Explain that you will engage in a lesson to see how this law can be taught, building on what is already known, using representations and language so that the structure of the maths is remembered rather than the name of the law.
30	20-39	The next set of slides introduce a 'lesson'. It will be taught to show how coherence is used to support all pupils to understand the maths – multiplication is distributive. Close the lesson by focusing on the generalisation that a factor can be partitioned. Equations can be written to show which factor has been partitioned.
5	40-41	These slides enable you to draw attention to the PD materials and to revisit the elements of coherence that trainees have experienced.
10	42-44	Draw out the features of the planning process. For the teacher to plan in this detail, and to know which small steps to use, relies on deep subject knowledge. Planning collaboratively and discussing the maths is important.
15	45-47	These slides are to identify the next teaching point, the overall considerations of coherence, to reflect on trainees' learning over this unit and how they will move this into their practice.
5	48-50	Reference slides.