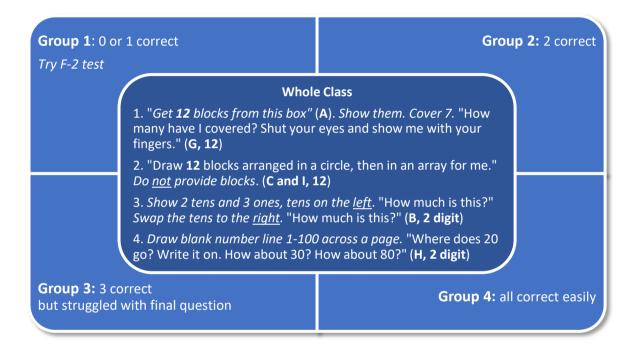
Years 3-5 Diagnostic Test

Whole class oral test: Key Number Concepts

The following 4 questions focus on testing Quantity, Partitioning and Place Value. This should enable you to put students into 4 groups. Group 1 should use the F-2 test. Advice follows for groups 2-4. Remember that the whole class testing is not always accurate as students make errors. If you think that a student has ended up in the wrong group then repeat the questions later, adapting them for each group as necessary, to find out what they understand. Record your findings in the Recording Sheet on the final page.



Record student names or initials in the appropriate groups:

	Correct	Multiple attempts	Incorrect
		or opened eyes	
1. Show 12 blocks. Cover 7. "How			
many have I covered? Shut your			
eyes and show me with your			
fingers."			
2. "Draw 12 blocks arranged in a			
circle, then in an array for me." Do			
<u>not</u> provide blocks.			
3. Show 23 ones, tens on the <u>left</u> .			
"How much is this?" Swap the tens			
to the <u>right</u> . "How much is this?"			
4. Draw blank number line 1-10			
across a page. "Where does 2 go?			
Write it on. How about 3? How			
about 8?"			

Group testing:

Refer to recording sheet on following pages for what the letters mean.

Group 1

Use the F-2 testing pages to find out what students understand.

Group 2

Written test 1 (over page).

Group 3 and Group 4

Written test 2 (over page), then written test 3 if only very minor mistakes. Written test 1 if they find 2 too difficult. If Written Test 3 is too easy, try the Years 6-8 Diagnostic Test instead.

Recording sheet

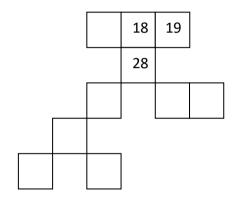
Using the information collected, work out what Quantity each child can collect, draw when it is covered, conserve when it moves around, and conserve when you drop it into a cup and they can't see it. Work out what quantity they can Partition when one of the parts is hidden. Work on one more than they are confident with for each concept.

Record a quantity in each box for which a child can consistently and successfully complete the task										
Name	A. Collect this amount from a box	B. Conserve when visible	C. Draw in a structure when covered	D. Conserve when covered	E. Partition (simple)	F. Partition (complex)	G. Partition with one part hidden	H. Relative size and estimation	I. Multiplicative or structural thinking	J. Proportional Reasoning

Written test 1:

1. Draw 15 squares arranged to make an array (C, teens)

2. Put the right number in each box to finish the hundreds chart (E, 2 digits)



3. Circle the correct answer (F)

4. Each number sentence has two boxes. They should have **the same number** in them to make the sums work. Fill in the boxes. (**G, teens**)



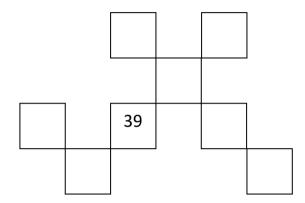


5. Look at the number line. Write on 2, 3 and 8 where they should go. (H)

Written test 2:

1. Draw 24 squares arranged to make an array, in two different ways (I, single digit terms)

2. This is part of a hundreds chart. Fill in the missing numbers. (F, 2 digits)



3. Circle the correct answer (**F, 2 digits**)

4. Each number sentence has two boxes. They should have the same number in them to make the sums work. Fill in the boxes. (G, 2 digits)



5. Look at the number line. Write on 10, 20, 30, 80 where they should go. (H)

Written test 3:

1. Answer these questions and show your working (F, 3 digit)

2. Draw an arrangement of counters or squares to show what these operations mean. (I, single digit terms)

5 x 4

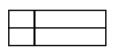
5 ÷ 4

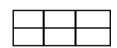
3. Circle the quarters. Cross through any that are not quarters. (J, base 2 fractions)







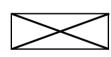
















4. Write these fractions on the line in their correct position: $\frac{1}{2}$ $\frac{1}{4}$ $\frac{2}{3}$ $\frac{3}{4}$ (**H, simple fractions**)



→

5. Here is 3 made from MAB. Draw 3.7 made from MAB (J, decimals)

