

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.

<p>Group 1: 0 or 1 correct <i>Try F-2 test</i></p>	<p>Group 2: 2 correct</p>
<p>Whole Class</p> <ol style="list-style-type: none"> 1. "Get 12 blocks from this box" (A). Show them. Cover 7. "How many have I covered? Shut your eyes and show me with your fingers." (G, 12) 2. "Draw 12 blocks arranged in a circle, then in an array for me." Do <u>not</u> provide blocks. (C and I, 12) 3. Show 2 tens and 3 ones, tens on the <u>left</u>. "How much is this?" Swap the tens to the <u>right</u>. "How much is this?" (B, 2 digit) 4. Draw blank number line 1-100 across a page. "Where does 20 go? Write it on. How about 30? How about 80?" (H, 2 digit) 	
<p>Group 3: 3 correct but struggled with final question</p>	<p>Group 4: all correct easily</p>

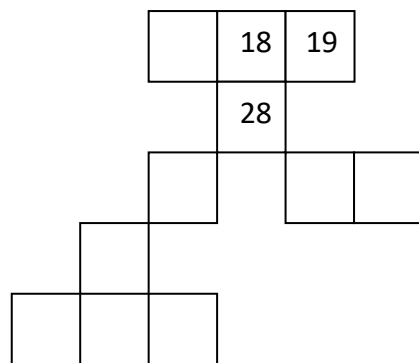
Record student names or initials in the appropriate groups:

	Correct	Multiple attempts or opened eyes	Incorrect
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?"			

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)

$$18 + 24 = \quad 32 \quad 412 \quad 42 \quad \text{another answer}$$

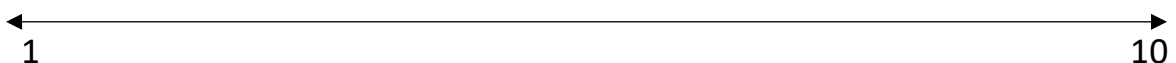
$$43 - 17 = \quad 34 \quad 36 \quad 26 \quad \text{another answer}$$

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)

$$\square + \square + 2 = 12$$

$$\square + \square - 5 = 17$$

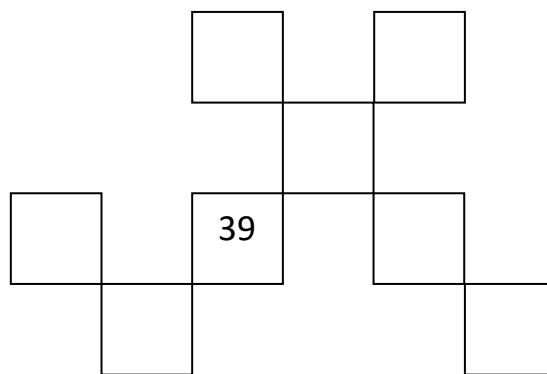
5. Look at the number line. Write on 2, 3 and 8 where they should go. (H)



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**)

$$28 + 24 = \quad 42 \quad 412 \quad 52 \quad \text{another answer}$$

$$54 - 17 = \quad 43 \quad 37 \quad 47 \quad \text{another answer}$$

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**)

$$\square + 3 + \square = 31$$

$$\square - 4 + \square = 24$$

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**)

$$208 + 124 =$$

$$504 - 217 =$$

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

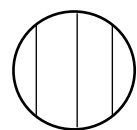
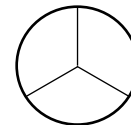
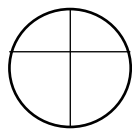
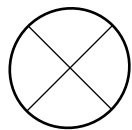
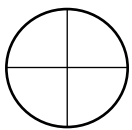
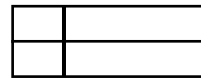
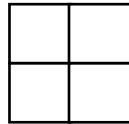
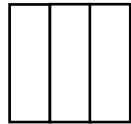
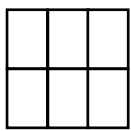
$$15 \times 3$$

$$15 \div 3$$

$$5 \times 4$$

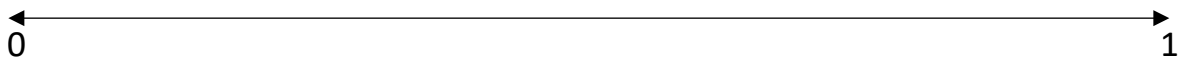
$$5 \div 4$$

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**)

