## Foundation to Year 2

## Whole class oral test: Key Number Concepts

The following 3 questions focus solely on testing Quantity and Partitioning with numbers less than ten. This should enable you to put students into 4 groups, each of which has a further 5 questions to ask so that you know what to do for each child. 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.

Group 1: 0 or 1 correct
Group 2: 2 correct Whole Class

1. "Get exactly 6 blocks from this box". Move them around. "How many now? Shut your eyes and show me with your fingers."

2. "Shut your eyes. Show me 6 fingers. Now, show me 6 fingers another way."
3. "Draw 8 blocks arranged in a circle or an array for me." Do not provide blocks to use.
Group 3: all correct but struggled or had multiple attempts

> Group 4: all correct easily

Record student names or initials in each box to show whether they were correct or incorrect with each question:

|  | Get 6. <br> How many now? | Show 6 fingers. <br> Show 6 another way. | Draw 8 blocks in a circle or an array <br> (NB: do not provide the blocks to <br> use). They must have 8 only. |
| :--- | :--- | :--- | :--- |
| Correct |  |  |  |
| Correct <br> (multiple <br> attempts) |  |  |  |
| Incorrect |  |  |  |

## Group testing:

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

## Group 1

1. "Get exactly 4 blocks from this box" (A). If correct, move them and ask. "How many now?" If incorrect, try with 3 . If correct, increase to 5 or 6 . (B)
2. "Draw me a picture of your foot with all your toes". Do not let them take off their shoes to count their toes. (C)
3. "Tell me how many blocks go in the cup." Drop 1 block in and they say "one". Drop a second in as they count "two". Drop a third on the table, then pick it up. Do they count "three"? Put it in the cup. Do the count "four"? Repeat with various numbers to check. Shake the cup and ask, "How many now?" (D)
4. Place 4 blocks on the table. Let them count them. Cover all the blocks with your hand and pick up 2 without showing the kids. Reveal the two left, "How many did I pick up?". Repeat, but this time pick up 3 and leave 1. Repeat, but this time pick up 1 and leave 3. (F, G)
5. Arrange 6 blocks to form a $2 \times 3$ rectangle. Let the children look at it, count the blocks etc and reduce to a square $2 \times 2$ if needed. Place a cover over the blocks and have children draw it from memory. (C)

## Group 2

1. "Get exactly 8 blocks from the box." (A) Move the blocks around, then ask, "How many now?" Do they have to count them, or can they conserve 8? (B)
2. Arrange 8 blocks to form a $2 \times 4$ rectangle. Let the children look at it, count the blocks etc. Place a cover over the blocks and have children draw it from memory. Reduce to 6 ( $2 \times 3$ ) if unsuccessful. Draw a tens frame if successful. (C)
3. Count 6 blocks dropping into an opaque mug. Cover the mug with your hand. "I put 6 blocks in the cup. I haven't let any of the blocks fall out. I haven't put any more in." Shake the cup with your hand over. "Shut your eyes. Show me with your fingers how many are in the cup now that I have shaken it". (D)
4. Shut your eyes. Show me 8 fingers. (E)
5. Place 6 blocks on the table. Leave 2 on the table and cover 4 with your hand but sneakily so they can't see you do it. "I had 6 to start with. Now there are only 2 . Shut your eyes. Show me with your fingers how many I have covered out of the 6 if there are 2 left." Repeat with covering other amounts. Increase the amount to 8 (hide 5) if completing easily or decrease down to 4 if struggling. NB if struggles with 4, move to Group 1 and check that testing instead. (F, G)

## Group 3 and Group 4

1. "Get exactly 12 blocks from the box." (A) Move the blocks around, then ask, "How many now?" Do they have to count them, or can they conserve 12 ? (B)
2. Arrange 10 blocks to form a $2 \times 5$ rectangle. Let the children look at it, count the blocks etc. Place a cover over the blocks and have children draw it from memory. Reduce to 8 or 6 if unsuccessful. Draw 12 in at least 2 different arrays if successful. (C)
3. Count 8 blocks dropping into an opaque mug. Cover the mug with your hand. "I put 8 blocks in the cup. I haven't let any of the blocks fall out. I haven't put any more in." Shake the cup with your hand over. "Shut your eyes. Show me with your fingers how many are in the cup now that I have shaken it". (D)
4. Find a partner. Together, make 12 fingers. (E) Now make 12 fingers, but you can't use 5 on any hand. Now make 12 fingers but you can't have the same amount on any hand. (F)
5. Place 12 blocks on the table. Leave 5 on the table and cover 7 with your hand but sneakily so they can't see you do it. "I had 12 to start with. Now there are only 5. Shut your eyes. Show me with your fingers how many I have covered out of the 12 if there are 5 left." Repeat with covering other amounts. Decrease down to 8 if struggling.
$>$ If successful with each task, try the written questions that follow.
$>$ If unsuccessful, change the numbers and repeat the testing to be similar to Group 2.

## Written questions:

1. Draw 23 made from tens and ones (C)
2. Put the right number in each box to finish the hundreds chart (E)

3. Circle the answer (F)

$$
\begin{array}{llll}
28+24= & 42 & 412 & 52 \\
26+25= & 411 & 51 & 41
\end{array}
$$

4. Put a number in each box to make the sum right (G)

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

## 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
$\left.\begin{array}{|l|l|l|l|l|l|l|l|}\hline \text { Name } & \begin{array}{l}\text { A. Collect } \\ \text { this } \\ \text { amount } \\ \text { from a } \\ \text { box }\end{array} & \begin{array}{l}\text { B. Conserve } \\ \text { when } \\ \text { visible }\end{array} & \begin{array}{l}\text { C. Draw } \\ \text { in a } \\ \text { structure } \\ \text { when } \\ \text { covered }\end{array} & \begin{array}{l}\text { D. Conserve } \\ \text { when } \\ \text { covered }\end{array} & \begin{array}{l}\text { E. Partition } \\ \text { in one way }\end{array} & \begin{array}{l}\text { F. Partition } \\ \text { in all the } \\ \text { ways }\end{array} \\ \hline\end{array} \begin{array}{l}\text { G. Partition } \\ \text { with one } \\ \text { part hidden }\end{array}\right]$

* This question assesses the concept of Relative Size. The student's answer must be accurate without adding on extra numbers. Successfully completing this task means that students are ready for 3-dgit place value, telling the time, and understanding fractions other than halves and quarters.

