

Year 2 mathematics screening tool



Child's name:

Year level:

DOB:

Date administered:

Age: ___ Years ___ Months

Teacher administering screen:

Score: / 20

Individually administer this 20-question screening tool to students believed to be 'just average' to 'poor' in mathematics, preferably before the final term or early in the final term of Year 2. Only **score one point if all items per question are answered correctly** and within any set time frames. Have available materials as listed. The screen takes about 10 minutes per student to administer. This maths screen is currently on trial until mid-2015.

Materials required

1. One screening sheet per child
2. 10 black lead pencils
3. Numbers 4, 9, 13, 27, 42, and 8 written on individual cards
4. Three number sets written on individual cards: 4 or 8, 9 or 6, $\frac{1}{4}$ or $\frac{1}{2}$
5. These two equations written on individual cards: ' $_ - _ = 2$ ' and ' $8 + 3 = _$ '
6. Three pairs of scissors, three book holders, or three cups
7. The five symbols: +, -, x, \div and = written on individual cards
8. 10 pencils secured to a card, laid in a row with a small gap of about 1cm between each
9. A number board 1 to 100, formatted in lines of ten, or a small bead frame
10. An analogue clock-face to show: 6 o'clock, 5 minutes past 11, half past 3

Questions for students

A. Can rapidly name by sight (within about 2 to 3 seconds):

1. 'How many pencils?' (Hold five separated black lead pencils, in a fan shape, in your hand in front of student).
2. 'Point to the hand that has the most pencils.' (Left hand holding three pencils, right hand holding seven pencils—student to point).
3. 'Tell me these numbers.' (Show these 5 numbers written on individual cards: 4, 9, 13, 42, 8).

B. Can answer (within about 10 seconds):

4. 'Tell me a small number.' (We are looking for an answer close to zero and less than 10).
5. 'Which number is bigger, 4 or 8? 9 or 6? $\frac{1}{4}$ or $\frac{1}{2}$?' (Show each number set written on individual cards).
6. 'The difference between two numbers is 2. What could be the two numbers?' (Show individual card with the equation: $_ - _ = 2$. Accept the range of possible correct answers).
7. 'What is 8 plus 3 equal to?' (Show individual card with the equation: $8 + 3 = _$. Observe any immature strategies such as using fingers to count).
8. 'I counted some objects in the room. There were only three of these objects in the room. What three objects might I have counted?' (Have three pairs of scissors visible, three book holders, or three cups present).
9. 'In the number 27, what does the 2 mean?' (Show the number 27 written on an individual card).

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C. Can name at least two descriptions for the following five symbols:

10. – 14. ‘Tell me two different names or descriptions for each of these signs/symbols?’ (Show each of the five symbols +, −, x, ÷ and = written on an individual card and accept all correct answers as demonstrated below).

10.	11.	12.	13.	14.
+	−	x	÷	=
addition	subtraction	multiplication	division	equals
plus	minus	times	divided by	makes
altogether (how many do I have altogether)	difference between (what is the difference)	groups/lots of	each (how many do they each have?)	the same as
add/and	subtract	product	how many groups of	has the same value as
sum	take away/ less	by	goes into/ share equally	amounts to
total/increase	deduct	multiply	quotient	matches/totals

D. Counts without error:

15. ‘Use your finger to correctly count, out loud, these pencils’. (Show 10 pencils secured to a card, already laid in a row with a 1 cm gap between each. The child must correctly use one-to-one correspondence to score).

16. ‘Count out loud, by ones, from 7 to 15.’

17. ‘Count out loud, by threes, using this number board or a bead frame, from 3 to 24.’

18. ‘Count out loud, backwards by ones, from 23 to 7.’

E. Times and maths reasoning?

19. ‘What is the time?’ (Show on an analogue clock-face: 6:00, 11:05, 3:30.)

20. ‘Two pens cost \$1.90 in total. What change should you get from two dollars?’

F. Score: Total correct / 20

0 to 12	Make a targeted teaching group and if there is little change over a 6-week period recommend referral with parent permission for further assessment with a psychologist.
13 to 16	Note errors and revise weakness areas with the child via the classroom program. Monitor the child carefully for the next two terms.
17 to 20	Correct answers with the child now and proceed with usual program.

Write any other comments, recommendations, information or areas of concern on paper and attach to this screen.