Fluency Tests Educator Notes

- This file contains these 7 fluency tests.
- The table below describes each test, and details the time allocation and total marks for the test.
- Each test has space underneath to enter the learner scores. See below for how to score the tests.
- You can print the whole file or just the test that you require. Some pages have 2 or 4 tests per page to save on printing costs.
- The tests can be printed in black and white

Test type	Description	Time allocation	Test out of …[1]
1. Add and subtract to 10	**Number range up to 10** Use the numbers in the shaded header rows and shaded columns to add / subtract e.g. 2 + 3 = 5 and 10 − 2 = 8	1 minute for add 1 minute for subtract	48
2. Doubling	Double the shaded number e.g. double 4 is 8, double 2 is 4	1 minute	17
3. Halving	Halve the shaded number e.g. half 4 is 2, half 2 is 1	1 minute	17
4. Add / subtract 10	Add 10 to / subtract 10 from the shaded number. e.g. 5 + 10 = 15, 12 − 10 = 2	1 minute	20
5. Add / subtract 100	Add 100 to / subtract 100 from the shaded number. e.g. 5 + 100 = 105, 102 − 100 = 2	1 minute	20
6. Add and subtract to 20	**Number range up to 20** Use the numbers in the shaded header rows and columns to add / subtract e.g. 2 + 3 = 5 and 10 − 2 = 8	2 minutes for add 2 minutes for subtract	58
7. Add / subtract Tasks	Mixture of horizontal addition and subtraction sums from 1 digit up to 3 digits	15 minutes	10

Scoring the tests and evaluating progress

Each test can give 3 different scores:

1. **Actual mark**: number of answers the learners got right in the test. A simple overall mark.
2. **Completion %**: number of answers the learners actually completed
3. **Accuracy %**: number of correct answers out of those completed

The *completion* and *accuracy* percentages allow one to track 2 things:

- How quickly they are answering in the given time period (giving a *completion rate*)
- How accurate they are in answering in that time (giving an *accuracy rate*)

This means that you can compare these scores and rates when the test is re-administered again, to see where the progress is coming from. In some cases, learners may complete more or the entire test (100% completion) but may not be accurate with that speed. In some cases, learners do not complete the whole test, but what they complete they get right (100% accuracy).

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[1] Note: the sample sum in each test is not scored

An example

Using an example for the doubling test and a hypothetical learner these 3 different scores would be:

Test Name	Out of ..	1. Number Correct (and score)	2. Number Answered (Completion %)	3. Number correct from those completed (Accuracy %)
1st Doubling test	17	7 (7 out of 17 = 41%)	10 (58%)	7 (7 out of 10 correctly answered 70%)

From the scores above, we can see that although the learner got 41% for doubling, he/she actually completed 58% of the test in the given time, and of that 58%, got 70% correct. This gives a totally different perspective on the 41% overall score.

Test Name	Out of ..	1. Number Correct (and score)	2. Number Answered (Completion %)	3. Number correct from those completed (Accuracy %)
2nd Doubling test	17	10 (10 out of 17 = 58%)	15 (88%)	12 (12 out of 15 correctly answered 80%)

Continuing with the example, in a second administration of the doubling test in another term, the learner gets 58% overall, we can see that his/her completion rate has increased by 30% (almost a third more) from 58% to 88% and his/her accurate rate has increased by 10% from 70% to 80%. This is indeed progress.

Add and subtract to 10

Do as many of the addition sums as you can in 1 minute.
Then, when your teacher tells you to, do as many of the subtraction sums as you can in 1 minute. One sum has been done for you.

Name						Date					
Add +	2	4	1	0	3	**Minus -**	10	8	7	9	6
3	5					2	8				
5						4					
4						5					
6						3					
7						6					
Score out of 48			Number completed				Number correct				

Add and subtract to 10

Do as many of the addition sums as you can in 1 minute.
Then, when your teacher tells you to, do as many of the subtraction sums as you can in 1 minute. One sum has been done for you.

Name						Date					
Add +	2	4	1	0	3	**Minus -**	10	8	7	9	6
3	5					2	8				
5						4					
4						5					
6						3					
7						6					
Score out of 48			Number completed				Number correct				

Add and subtract to 20

Do as many of the addition sums as you can in 2 minutes.
Then, when your teacher tells you to, do as many of the subtraction sums as you can in 2 minutes. One sum has been done for you.

Name:						Date:					
Add +	2	7	8	9	5	Minus -	20	19	11	13	16
5						10					
8						8	12				
6						7					
7						6					
9				18		5					

Score out of 48		Number completed		Number correct	

Doubles Double each shaded number. One sum has been done for you.

Name					Date						
5		4		2	4	6		7		8	
15		11		12		13		17		14	
16		18		22		25		24		34	
Score out of 17		Number completed				Number correct					

Halves Halve each shaded number. One sum has been done for you.

Name					Date						
6		4		2	1	6		10		8	
16		14		12		16		22		24	
100		50		34		1000		500		26	
Score out of 17		Number completed				Number correct					

Doubles Double each shaded number. One sum has been done for you.

Name					Date						
5		4		2	4	6		7		8	
15		11		12		13		17		14	
16		18		22		25		24		34	
Score out of 17		Number completed				Number correct					

Halves Halve each shaded number. One sum has been done for you.

Name					Date						
6		4		2	1	6		10		8	
16		14		12		16		22		24	
100		50		34		1000		500		26	
Score out of 17		Number completed				Number correct					

Add and subtract 10 - Add or subtract 10 to each shaded number. Do as many as you can in 1 minute. One sum has been done for you.

Name					Date				
Add 10		5	15	4		Minus 10	10		12	2
2		9		14		19		25		65
36		42		99		98		108		205
102		410		600		327		512		700
Score out of 20			Number completed				Number correct			

Add and subtract 10 - Add or subtract 10 to each shaded number. Do as many as you can in 1 minute. One sum has been done for you.

Add and subtract 10 - Add or subtract 10 to each shaded number. Do as many as you can in 1 minute. One sum has been done for you.

Add and subtract 100 - Add or subtract 100 to each shaded number. Do as many as you can in 1 minute. One sum has been done for you

Name					Date				
Add 100		5	105	4	Minus 100	100		102	2
3		9		13	109		125	165	
36		42		99	198		208	308	
110		420		600	452		547	1000	
Score out of 20			Number completed			Number correct			

Add/subtract Tasks. Do as many of these sums as you can in 15 minutes

Name:	Date:

Question 1: Calculate. Use the space to show your workings if you need to

1.1	3 + 4 = ☐	1.2	8 + 6 = ☐
1.3	23 + 18 = ☐	1.4	55 + 67 = ☐
1.5	104 + 97 = ☐		

Question 2: Calculate. Use the space to show your workings if you need to

2.1	8 – 2 = ☐	2.2	12 – 5 = ☐
2.3	23 – 18 = ☐	2.4	467 – 43 = ☐
2.5	305 – 97 = ☐		

Note how much time learner used to complete these. i.e. note the time elasped since they started.	
Score out of 10:		Number completed		Number correct	