

# Functional Skills Maths E1-E3 Workbook Challenge

## Addition

Topic	Challenge	Activity
Number & Calculations	Number & Calculations challenge and assess learners' understanding of the knowledge required to calculate with whole numbers, fractions and decimals.	Number & Calculations
Algebra	Algebra challenge and assess learners' ability to solve equations.	Algebra
Geometry & Measures	Geometry & Measures challenge and assess learners' ability to measure shapes from their side up and around corners.	Geometry & Measures
Data	Data challenge and assess learners' ability to interpret data.	Data
Probability	Probability challenge and assess learners' ability to predict outcomes.	Probability
Statistics	Statistics challenge and assess learners' ability to analyse data.	Statistics

<b>Dominoes Challenge</b>		
Count the number of domino math on the Dominoes table and race to win the total.		
=	=	=
=	=	=
=	=	=
<b>Answer Sheet</b>		
+  =	+  =	
+  =	+  =	
Use the Math Dominoes Worksheet page to recreate your own sums and then test you classmates.		

	<b>Dominoes</b>				
Test Your Friend!					
<input type="text"/>	<input type="text"/>	=	<input type="text"/>	<input type="text"/>	=
<input type="text"/>	<input type="text"/>	=	<input type="text"/>	<input type="text"/>	=
<input type="text"/>	<input type="text"/>	=	<input type="text"/>	<input type="text"/>	=
<input type="text"/>	<input type="text"/>	=	<input type="text"/>	<input type="text"/>	=

A colorful illustration of a family having a picnic in a park. A father in a yellow shirt and red shorts sits on a blue and white checkered blanket, holding a red and white checkered basket. He is joined by his two children: a son in a red t-shirt and blue shorts, and a daughter in a purple t-shirt and pink shorts. They are all eating sandwiches. In the background, there are green trees, a body of water, and mountains under a clear blue sky with a few birds.

Missing Numbers		
Fill in the missing part of the sum		
1	+	= 10
6	+	= 10
5	+	= 10
8	+	= 10
13	+	= 20
18	+	= 20
6	+	= 20
11	+	= 20

The screenshot shows a game titled "Against the Clock". At the top, there's a yellow bar with the word "ALERT" and a blue bar with the number "10". The main title "Against the Clock" is displayed prominently. Below the title, a subtitle reads "Let the timer and try to answer these simple addition sums as quickly as you can...". On the left side, there are four addition problems:  $1 + 7 =$ ,  $5 + 3 =$ ,  $3 + 4 =$ , and  $7 + 1 =$ . To the right of the problems is a white 3D-style character holding a calculator. Further to the right are two questions with input fields: "How many did you get right?" with a red-bordered box for the answer, and "How long did it take to finish?" with a green-bordered box for the answer.

**Squares Count**

Count the number colored squares  
and then try the same to him.

Blue	<input type="text"/>	Yellow	<input type="text"/>
Red	<input type="text"/>	Orange	<input type="text"/>

$\square + \square =$	$\square$
$\square + \square + \square =$	$\square$
$\square + \square + \square + \square =$	$\square$

On the next page will come  
some another

$\square + \square + \square + \square + \square + \square =$	$\square$
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The image shows a pyramid puzzle game. At the top, a yellow button labeled 'ANSWER' is shown above the text 'Pyramid Puzzle (easy)'. Below this, the instruction 'Work your way up the pyramid using each correct answer in the next row.' is displayed. The main part of the game is a pyramid structure made of four stacked rectangles. The top rectangle contains the number '36'. The middle row contains two rectangles, both with '+ 10' written above them. The bottom row contains three rectangles, with the first having '4 + 6 = 10' written above it, the second having '10 + 2 =' written above it, and the third having '\_ + 6 =' written above it. A purple arrow points from the text 'The Answer Should Be' to the top of the pyramid. A large purple arrow also points from the text 'It is not 36; you need to go back!' to the right side of the pyramid.

A pyramid puzzle worksheet with a yellow title bar at the top. The title is "Pyramid Puzzle (Medium)" and below it is the instruction "Now you have the hang of it, try this one!". The main part of the worksheet shows a pyramid made of four stacked rectangles. Each rectangle contains a math equation to solve. The equations from bottom to top are:  $4 + 2 =$ ,  $_ + 6 =$ ,  $_ + 9 =$ , and  $_ + 10 =$ . Above the pyramid, there is a large empty box for writing the answer to the final equation,  $_ + 1 =$ .

A pyramid puzzle game board. At the top is a yellow box labeled 'ANSWER'. Below it is a large blue box containing the text 'Pyramid Puzzle (Hard)' and 'Have a go at this one if you feel really confident!'. The main part of the board is a pyramid made of five rows of boxes. Row 1: Top box contains '120'. Row 2: Two boxes below it contain ' $_+ 5 =$ ' and ' $_+ 4 =$ '. Row 3: Three boxes below it contain ' $_+ 11 =$ ', ' $_+ 20 =$ ', and ' $_+ 1 =$ '. Row 4: Four boxes below it contain ' $_+ 15 =$ ', ' $_+ 9 =$ ', ' $_+ 6 =$ ', and ' $_+ 16 =$ '. Row 5: Bottom row contains five boxes from left to right: ' $4 + 4 =$ ', ' $_+ 2 =$ ', ' $_+ 7 =$ ', ' $_+ 10 =$ ', and ' $_+ 12 =$ '.

	<b>Colour your own sums</b>
Use colour to show the different ways that add up to 10	
$\boxed{3} + \boxed{7} = \boxed{10}$	
$\boxed{4} + \boxed{6} = \boxed{10}$	
$\boxed{5} + \boxed{5} = \boxed{10}$	
$\boxed{2} + \boxed{8} = \boxed{10}$	

Colour your own sums		
Use <b>colours</b> to shade the different boxes that add up to <b>20</b>		
<input type="text" value="10"/>	<input type="text" value="6"/>	<input type="text" value="4"/>
<input type="text" value="10"/>	<input type="text" value="6"/>	<input type="text" value="4"/>
<input type="text" value="10"/>	<input type="text" value="6"/>	<input type="text" value="4"/>
<input type="text" value="10"/>	<input type="text" value="6"/>	<input type="text" value="4"/>
<input type="text" value="10"/>	<input type="text" value="6"/>	<input type="text" value="4"/>

	<h2>Number line counting</h2>	
Now try the same challenge but with some bigger numbers.		
$14 + 8 =$		
$9 + 8 =$		
$6 + 10 =$		
$5 + 6 =$		
$18 + 2 =$		
$11 + 7 =$		

The title card features a yellow speech bubble icon containing the word 'Kinder' in blue. To its right is the main title 'Let's use tally' in large, bold, black letters. Below the title is a subtitle in smaller black text: 'Only the pictures available, and try to spot as many as the animals as you can.' The background shows a bright blue sky with several small, colorful cartoon animals (a rabbit, a bear, a squirrel, a bird, and a deer) scattered across it. In the foreground, there's a green grassy field with a white flower patch on the left, a brown wooden barn on the right, and a small black and white dog sitting on the grass. Two cartoon rabbits are in the center foreground, looking towards the viewer.

Animal	#	Tally Marks	#	Total

Did you Spot the mouse? Where is he? \_\_\_\_\_

A 3x3 grid of colored squares containing the following numbers:

19	13	4
5	17	3
8	9	16

13	10	14
9	8	7
6	19	3

20	11	4
5	12	9
10	17	15

A 3x3 grid of colored squares. The top row contains blue, orange, and green squares with the numbers 6, 15, and 4 respectively. The middle row contains yellow, purple, and red squares with the numbers 18, 19, and 9 respectively. The bottom row contains dark blue, light green, and pink squares with the numbers 5, 3, and 20 respectively.

A 3x3 grid of colored squares containing the following numbers:

19	10	3
4	11	8
2	15	17

The squares are colored as follows: top row (blue, orange, green), middle row (yellow, purple, red), bottom row (dark blue, light green, pink).

Bingo Caller Cards			
1	1d 2d	3d 1d, 3d	3d 3d, 4d
4	4d 3d, 5d	4d, 2d, 4d 2d, 4d, 4d	4d 4d, 5d
7	4d, 8d 4d, 5d	5d, 3d, 7d 2d, 6d, 6d	5d 4d, 5d
10	5d, 8d 5d, 10d	5d, 3d, 7d 1d, 3d, 7d	5d 4d, 1d, 5d
13	6d, 8d 5d, 10d	6d, 4d, 8d 1d, 3d, 7d	6d 7d, 9d, 10d
16	6d, 8d, 10d 4d, 10d, 10d	6d, 6d, 6d 2d, 6d, 6d	6d 10d, 12d
19	7d, 10d, 8d 7d, 6d, 4d, 4d	7d, 6d, 9d, 9d 3d, 6d, 10d, 6d	7d 10d, 12d, 13d