

THE REFORESTATION PROJECT

TEACHERS NOTES



This is a fun way to help develop and practice:

- working with fractions
- working with decimals.

How to raise money:

Pupils can get sponsored for taking part, or they can get sponsored for each tree they plant, eg 10p per tree. Alternatively, parents and carers can make a donation.

What you'll need:

- A copy of this worksheet.
- A copy of the grid for each pupil.
- Counters
- Workbooks or scrap paper for the pupils to make their workings.

How to play:

1. Pupils can play individually, in pairs or in groups.
2. Write each question on the board one at a time, giving the pupils two minutes to write an answer.
3. For every question they get right, they can move their counter along five squares (or plant five trees) on their hundred square.
4. For every question they get wrong, they must chop down 3 trees by moving their counter back three squares.
5. The winner is the first to reforest the whole hundred square.
6. Pupils can then show how far they got on the hundred square by drawing trees or colouring it in.



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Answers:

Can you complete these calculations?

1A. $\frac{2}{5} + \frac{1}{5} = \frac{\boxed{3}}{\boxed{5}}$

1B. $\frac{7}{8} - \frac{4}{8} = \frac{\boxed{3}}{\boxed{8}}$

1C. $\frac{3}{4} - \frac{1}{4} = \frac{\boxed{2}}{\boxed{4}}$

1D. $\frac{3}{11} + \frac{5}{11} = \frac{\boxed{8}}{\boxed{11}}$

1E. $\frac{3}{4} = \frac{\boxed{6}}{8} = \frac{9}{\boxed{12}}$

1F. $\frac{\boxed{1}}{3} = \frac{2}{6} = \frac{4}{\boxed{12}}$

1G. $\frac{4}{5} = \frac{\boxed{8}}{10} = \frac{12}{\boxed{15}}$

1H. $\frac{\boxed{2}}{6} = \frac{4}{12} = \frac{\boxed{6}}{18}$

Can you solve these additions using the column method?

2A. $0.57 + 0.42 = 0.99$

o	.	t	h	
0	.	5	7	
+	0	.	4	2

0	.	9	9	

2B. $0.07 + 0.14 = 0.21$

o	.	t	h	
0	.	0	7	
+	0	.	1	4

0	.	2	1	

2C. $0.23 + 0.58 = 0.81$

o	.	t	h	
0	.	2	3	
+	0	.	5	8

0	.	8	1	

2D. $0.85 + 0.02 = 0.87$

o	.	t	h	
0	.	8	5	
+	0	.	0	2

0	.	8	7	

Can you solve these subtractions using the column method?

3A. $0.89 - 0.43 = 0.46$

o	.	t	h	
0	.	8	9	
-	0	.	4	3

0	.	4	6	

3B. $0.46 - 0.05 = 0.41$

o	.	t	h	
0	.	4	6	
-	0	.	0	5

0	.	4	1	

3C. $0.64 - 0.26 = 0.38$

o	.	t	h	
0	.	6	4	
-	0	.	2	6

0	.	3	8	

3D. $0.21 - 0.05 = 0.16$

o	.	t	h	
0	.	2	1	
-	0	.	0	5

0	.	1	6	

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Answers continued:

Can you complete these calculations?

4A.

$$0.63 + \boxed{0.37} = 1$$

4B.

$$1 = \boxed{0.93} + 0.07$$

4C.

$$1 = 0.25 + \boxed{0.75}$$

4D.

$$\boxed{\text{eg } 0.47} + \boxed{\text{eg } 0.23} + 0.3 = 1$$

(Any answers that total 0.7 across the two boxes are correct)

Can you complete these addition and subtraction calculations?

5A.

$$5.62 + 3.34 = \boxed{8.96}$$

	T	O	.	t	h
	5	6	2		
+	3	3	4		
	8	9	6		

5B.

$$2.93 + 7.08 = \boxed{10.01}$$

	T	O	.	t	h
	2	9	3		
+	7	0	8		
	1	0	0	1	

5C.

$$9.32 - 5.89 = \boxed{3.43}$$

	T	O	.	t	h
	9	3	2		
-	5	8	9		
	3	4	3		

5D.

$$17.85 - 3.09 = \boxed{14.76}$$

	T	O	.	t	h
	1	7	8	5	
-	3	0	9		
	1	4	7	6	

6. Can you arrange these numbers in ascending order from left to right?

2.15 1.52 1.25 2.51 2.05 2.5

$\boxed{1.25} < \boxed{1.52} < \boxed{2.05} < \boxed{2.15} < \boxed{2.5} < \boxed{2.51}$

7. Can you solve the number puzzle?

My number is greater than 8, but less than 10.

My number has 2 decimal places.

The hundredths number is even.

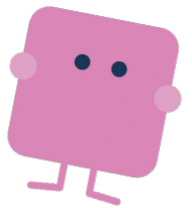
The tenths number is 7.

The ones number is odd.

The hundredths number is greater than the tenths number.

What is my number?

$\boxed{9.78}$



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PUPILS WORKSHEET



Questions:

Can you complete these calculations?

1A. $\frac{2}{5} + \frac{1}{5} = \frac{\square}{\square}$

1B. $\frac{7}{8} - \frac{4}{8} = \frac{\square}{\square}$

1C. $\frac{3}{4} - \frac{1}{4} = \frac{\square}{\square}$

1D. $\frac{3}{11} + \frac{5}{11} = \frac{\square}{\square}$

1E. $\frac{3}{4} = \frac{\square}{8} = \frac{9}{\square}$

1F. $\frac{\square}{3} = \frac{2}{6} = \frac{4}{\square}$

1G. $\frac{4}{5} = \frac{\square}{10} = \frac{12}{\square}$

1H. $\frac{\square}{6} = \frac{4}{12} = \frac{\square}{18}$

Can you solve these additions using the column method?

2A. $0.57 + 0.42 =$

o	.	t	h	
0	.	5	7	
+	0	.	4	2

□	.	□	□	

2B. $0.07 + 0.14 =$

o	.	t	h	
0	.	0	7	
+	0	.	1	4

□	.	□	□	

2C. $0.23 + 0.58 =$

o	.	t	h	
0	.	2	3	
+	0	.	5	8

□	.	□	□	

2D. $0.85 + 0.02 =$

o	.	t	h	
0	.	8	5	
+	0	.	0	2

□	.	□	□	

Can you solve these subtractions using the column method?

3A. $0.89 - 0.43 =$

o	.	t	h	
0	.	8	9	
-	0	.	4	3

□	.	□	□	

3B. $0.46 - 0.05 =$

o	.	t	h	
0	.	4	6	
-	0	.	0	5

□	.	□	□	

3C. $0.64 - 0.26 =$

o	.	t	h	
0	.	6	4	
-	0	.	2	6

□	.	□	□	

3D. $0.21 - 0.05 =$

o	.	t	h	
0	.	2	1	
-	0	.	0	5

□	.	□	□	

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PUPILS WORKSHEET



Questions continued:

Can you complete these calculations?

4A.

$$0.63 + \boxed{} = 1$$

4B.

$$1 = \boxed{} + 0.07$$

4C.

$$1 = 0.25 + \boxed{}$$

4D.

$$\boxed{} + \boxed{} + 0.3 = 1$$

Can you complete these addition and subtraction calculations?

5A.

$$5.62 + 3.34 =$$

T	O	.	t	h
5	6	.	2	
+	3	.	3	4
		.		

5B.

$$2.93 + 7.08 =$$

T	O	.	t	h
2	9	.	3	
+	7	.	0	8
		.		

5C.

$$9.32 - 5.89 =$$

T	O	.	t	h
9	3	.	2	
-	5	.	8	9
		.		

5D.

$$17.85 - 3.09 =$$

T	O	.	t	h
1	7	.	8	5
-	3	.	0	9
		.		

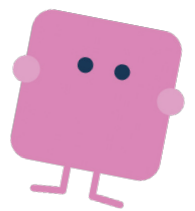
6. Can you arrange these numbers in ascending order from left to right?

2.15	1.52	1.25	2.51	2.05	2.5

7. Can you solve the number puzzle?

- My number is greater than 8, but less than 10.
- My number has 2 decimal places.
- The hundredths number is even.
- The tenths number is 7.
- The ones number is odd.
- The hundredths number is greater than the tenths number.

What is my number?



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Reforestation grid

Can you help to reforest the hundred grid? Answer your teacher's questions correctly to plant 5 trees. But watch out! Answer incorrectly and you'll have to chop down 3 trees.

