



THIRD SPACE
LEARNING

Week 1

Day 1

Possible methods to use:

Addition

$$\begin{array}{r} 72.8 \\ + 54.6 \\ \hline 127.4 \\ \hline 11 \end{array}$$

Division

$$\begin{array}{r} 0663r5 \\ 8 \overline{) 5309} \end{array}$$



Week 1 – Day 1

THIRD SPACE
LEARNING

✓ Try mentally first

✓✓ Try a written method

$$A. 186 + 70 =$$

$$B. 5,667 + 3,334 =$$

$$C. 3 \times 7 =$$

$$D. 161 \div 7 =$$



Week 1 – Day 1

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$$E. 196 + 60 =$$

$$F. 7,943 + 8,473 =$$

$$G. 6 \times 7 =$$

$$H. 224 \div 7 =$$



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Week 1 – Day 1

Fluency

- Work out this missing numbers:
 $\underline{\quad\quad} - 92 = 145$
 $740 + \underline{\quad} = 1039$
 $\underline{\quad\quad} = 580 - 401$
- Peter bought boxes of crisps when they were on offer. After 12 weeks, his family had eaten 513 packets and there were 714 left. How many did he buy?
- Children follow a series of instructions to find a mystery number.

Eg Start with 100.
Add 5000.
Take away 400.
Add 20.
Subtract 750.
What number have you got?



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Week 1 – Day 1

(ANSWERS)

- A. 256
- B. 9,001
- C. 21
- D. 23
- E. 256
- F. 16,416
- G. 42
- H. 32

Fluency Answers

1)

237

299

179

2)

1,227 (A lot of crisps!)

3)

3,970



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Week 1

Day 2

Possible methods to use:

Addition

$$\begin{array}{r} 72.8 \\ + 54.6 \\ \hline 127.4 \\ \hline 11 \end{array}$$

Fraction

Question:

$\frac{1}{2}$ of 16.

Step 1: $WN \div D$

$$16 \div 2 = 8$$

Step 2: Answer to step 1 $\times N$

$$8 \times 1 = 8$$

Therefore,

$$\frac{1}{2} \text{ of } 16 = 8$$



Week 1 – Day 2

THIRD SPACE
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✓ Try mentally first

✓✓ Try a written method

$$A. 377 + 40 =$$

$$B. 7,643 + 1,339 =$$

$$C. 3,327 + 4,375 =$$

$$D. \frac{1}{4} \text{ of } 36 =$$



Week 1 – Day 2

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$$\text{E. } 678 + 50 =$$

$$\text{F. } 4,384 + 9,281 =$$

$$\text{G. } 8,595 + 5,632 =$$

$$\text{H. } \frac{2}{4} \text{ of } 36 =$$



Week 1 – Day 2

Reasoning

- Rachel has £10. She spends £6.49 at the shop. Would you use columnar subtraction to work out the answer? Explain why.
- **True or False?**
Are these number sentences true or false? $8.7 + 0.4 = 8.11$
 $6.1 - 0.9 = 5.2$
Give your reasons.
- Which of the following questions are easy and which ones are hard?
 $213323 - 10 =$
 $512893 + 300 =$
 $819354 - 200 =$
 $319954 + 100 =$
Explain why you think the hard questions are hard.

Week 1 – Day 2

(ANSWERS)

Answers:

- A. 417
- B. 14,982
- C. 7,702
- D. 9
- E. 728
- F. 13,665
- G. 14,227
- H. 18

Reasoning Answers:

1)

No as it would be 10.00 and there would be a lot of exchanging. It would be easier to do frog method.

2)

$$8.7 + 0.4 = 8.11$$

False, as $0.7 + 0.4$ makes 1.1 as you need to regroup. You can't have more than 10 in the tenths column.

$$6.1 - 0.9 = 5.2$$

True, as you would have to exchange from the 6 to make 11 tenths, then minus the 9 tenths leaves you with 2 tenths.

3)

$$213323 - 10 \rightarrow \text{easy}$$

$$512893 + 300 \rightarrow \text{hard}$$

$$819354 - 200 \rightarrow \text{easy}$$

$$319954 + 100 \rightarrow \text{hard}$$

They are hard as you need to regroup from the hundred column into the thousands column. In the last one you will then even need to regroup into the ten thousands column.



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Week 1

Day 3

Possible methods to use:

Division

$$\begin{array}{r} 0663r5 \\ 8 \overline{) 5309} \end{array}$$

Multiplication

$$\begin{array}{r} 327 \\ \times 4 \\ \hline 1308 \\ 1 \end{array}$$



Week 1 – Day 3

THIRD SPACE
LEARNING

✓ Try mentally first

✓✓ Try a written method

$$A. 8 \times 7 =$$

$$B. 217 \div 7 =$$

$$C. 40 \times 7 =$$

$$D. 67 \times 7 =$$



Week 1 – Day 3

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$$E. 8 \times 8 =$$

$$F. 315 \div 7 =$$

$$G. 80 \times 7 =$$

$$H. 96 \times 7 =$$



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Week 1 – Day 3

Problem Solving

- If 2541 is the answer, what's the question?
 - Can you create three addition calculations?
 - Can you create three subtraction calculations?
 - Did you use a strategy?
- Using 0-9 dice roll 3 at the same time to create a number. Your partner needs to do the same.
 - Who can add them together correctly first?
 - Who can subtract the smallest from the largest correctly first?Use a calculator to check.
- Kangchenjunga is the third highest mountain in the world at 28,169 feet above sea level. Lhotse is the fourth highest at 27,960 feet above sea level. Find the difference in heights mentally.



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Week 1 – Day 3 (ANSWERS)

Answers:

- A. 56
- B. 31
- C. 280
- D. 469
- E. 64
- F. 45
- G. 560
- H. 672

Problem Solving Answers:

1 & 2)

These can be any! Happy to check if you send via email to the office.

3)

209 feet



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Week 1

Day 4

Possible methods to use:

Division

$$\begin{array}{r} 0663r5 \\ 8 \overline{) 5309} \end{array}$$

Multiplication

$$\begin{array}{r} 327 \\ \times 4 \\ \hline 1308 \\ 1 \end{array}$$

Fraction

Question:

$\frac{1}{2}$ of 16.

Step 1: $WN \div D$

$$16 \div 2 = 8$$

Step 2: Answer to step 1 $\times N$

$$8 \times 1 = 8$$

Therefore,

$$\frac{1}{2} \text{ of } 16 = 8$$



Week 1 – Day 4

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LEARNING

✓ Try mentally first

✓✓ Try a written method

$$\text{A. } \frac{1}{3} \text{ of } 42 =$$

$$\text{B. } 91 \div 7 =$$

$$\text{C. } 70 \times 6 =$$

$$\text{D. } 26 \times 7 =$$



Week 1 – Day 4

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$$E. \frac{2}{3} \text{ of } 42 =$$

$$F. 112 \div 7 =$$

$$G. 90 \times 6 =$$

$$H. 53 \times 7 =$$



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Week 1 – Day 4

Fluency

- Calculate:
 $1638 + 2517$
 $4023 - 2918$
- Julie has 1578 stamps, Heidi has 2456 stamps. How many stamps do they have altogether? Show how you can check your answer using the inverse.
- Adam earns £37,566 pounds a year. His wife, Sarah, earns £22,819 a year. How much do they earn altogether? They have to pay £7887 income tax per year, how much are they left with after this is taken off?



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Week 1 – Day 4 (ANSWERS)

Answers:

- A. 14
- B. 13
- C. 420
- D. 182
- E. 28
- F. 16
- G. 540
- H. 371

Fluency Answers:

1)
4155
1105

2)
4034

Inverse:

$$4034 - 1578 = 2456$$

$$4034 - 2456 = 1578$$

3)
Altogether £60,385
Left £52,498



THIRD SPACE
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Week 1

Day 5

Possible methods to use:

Addition

$$\begin{array}{r} 72.8 \\ + 54.6 \\ \hline 127.4 \\ 11 \end{array}$$

Multiplication

	3	2	7
x			4
<hr/>			
1	3	0	8
	1	2	

Fraction

Question:

$$\frac{1}{2} \text{ of } 16.$$

Step 1: $WN \div D$

$$16 \div 2 = 8$$

Step 2: Answer to step 1 $\times N$

$$8 \times 1 = 8$$

Therefore,

$$\frac{1}{2} \text{ of } 16 = 8$$



Week 1 – Day 5

THIRD SPACE
LEARNING

✓ Try mentally first

✓✓ Try a written method

$$\text{A. } \frac{1}{5} \text{ of } 25 =$$

$$\text{B. } 37 \times 7 =$$

$$\text{C. } 674 + 70 =$$

$$\text{D. } 6,764 + 1,643 =$$



Week 1 – Day 5

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$$\text{E. } \frac{3}{5} \text{ of } 25 =$$

$$\text{F. } 48 \times 7 =$$

$$\text{G. } 467 + 70 =$$

$$\text{H. } 8,256 + 6,187 =$$



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Week 1 – Day 5

Reasoning

- There are mistakes in the following calculations. Explain the mistake and then make a correction to find the correct answer.

$$\begin{array}{r} 2451 \\ +562 \\ \hline 8071 \end{array}$$

$$\begin{array}{r} 782 \\ -435 \\ \hline 353 \end{array}$$

- $\square + 3475 = 6\square 24$
What numbers go in the boxes? What different answers are there? Convince me.
- A five digit number and a four digit number have a difference of 4365. Give me three possible pairs of numbers.



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Week 1 – Day 5 (ANSWERS)

Answers:

- A. 5
- B. 259
- C. 744
- D. 8407
- E. 15
- F. 336
- G. 537
- H. 14,443

Reasoning Answers:

1)

$2451 + 562 \rightarrow$ The mistake is that 562 is not in the correct place value column.

Correct answer: 3,013

$782 - 435 \rightarrow$ the mistake is they have taken away the top number from the bottom. E.g. in the ones column they have done $5-2$.

Correct answer: 347

2 & 3)

These can be many! Happy to check if you send via email to the office.