

## Home

Learning

## Pack

## Year 6

Guidance and Answers


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## Year 6 Home Learning Pack - Guidance for Parents

## Mathematics

Rounding Numbers Resource Pack (pages 2-7)

- Independent activity with 3 levels of difficulty

Fractions to Decimals 1 Resource Pack (pages 8-13)

- Independent activity with 3 levels of difficulty

Four Quadrants (pages 14-19)

- Independent activity with 3 levels of difficulty

Fractions of an Amount Resource Pack (pages 20-25)

- Independent activity with 3 levels of difficulty

Find Pairs of Values 2 Resource Pack (pages 26-31)

- Independent activity with 3 levels of difficulty

Common Multiples Activity (page 32)

- $\quad$ Supported discussion and game based on common multiples.


## English

Expanded Noun Phrases Resource Pack (pages 33-38)

- Independent activity with 3 levels of difficulty

Identifying Word Classes in Sentences Resource Pack (pages 39-44)

- Independent activity with 3 levels of difficulty

Using the Passive Verb Resource Pack (pages 45-50)

- Independent activity with 3 levels of difficulty
'World Travel' Non-Text Guided Reading Activity (page 51-56)
Supported activity. Discuss the questions and encourage children to write detailed answers. As an extension, set children the challenge of creating their own questions about the image or another image.


## Other Resources and Ideas:

- Go to https://kids.classroomsecrets.co.uk/ for video tutorials to support the maths in this pack as well as interactive games your child can play
Access resources for all areas of Year 6 learning including activities just like the ones in this pack for just £4.83 for a full month on www.classroomsecrets.co.uk


## Glossary of Terms

## Differentiated

Questions with different levels of challenge to meet the needs of all children. In this pack some of the activities have three levels of 'differentiated' challenge:

## D - Developing <br> E - Expected <br> GD - Greater Depth

The questions start with Developing and get progressively harder as children work their way towards Greater Depth.

## VF - Varied Fluency

Question type in both Mathematics and Grammar, Punctuation and Spelling (GPS) Resource Packs. These questions allow children to practise the same Mathematical or English skill in different ways, resulting in children completing problems with speed and accuracy.

## RPS - Reasoning and Problem Solving

Question types in the Mathematics Resource Packs. Reasoning questions involve thinking through mathematical problems logically. It involves explaining or justifying the solution/answer to a problem. Problem solving questions involve children applying their knowledge and skills to an unfamiliar or completely new context.

## AR - Application and Reasoning

Application and reasoning. Application involves children using their knowledge and skills in an unfamiliar or completely new context. Reasoning questions involve thinking through written problems logically. It involves explaining or justifying the solution/answer to a problem.

## Question openers

Also known as interrogative words or WH words, question openers are used to ask certain types of questions. Examples include what, when, why, where, who and how.

## Common Multiples

A multiple is a number that can be divided equally by another number. When two or more numbers share a multiple, it is called a common multiple. For example, the common multiples of 3 and 4 are 12 and 24 etc.

## Passive Verb

A sentence is written in the passive voice when the subject of the sentence has something done to it by someone or something. For example, The gazelle was being chased by the cheetah.

## Expanded Noun Phrase

An expanded noun phrase is a phrase made up of a noun and at least one adjective. If more than one adjective is included to describe the noun, a comma should be included to separate the sentence.

## Further Support and Resources

## Video Tutorials from Qualified Teachers

For further support and guidance try our video tutorials for your year group by clicking this link.

## More Home Learning Packs

Weekly learning packs are now in production. Sign up to our mailing list to find out when they're ready by clicking here.

Visit kids.classroomsecrets.co.uk for online games to support learning.

## Answers - Rounding Numbers

## Developing Varied Fluency

1a. A and B
2a. $3,429,450$ and $2,814,304$
3a.

| Number | Rounds to <br> $4,000,000$ | Rounds to <br> $5,000,000$ |
| :---: | :---: | :---: |
| $4,144,831$ | $\checkmark$ |  |
| $4,531,258$ |  | $\checkmark$ |
| $4,776,012$ |  | $\checkmark$ |

4a. 8,000,000

## D - Reasoning and Problem Solving

1a. 2,503,104 as it rounds to 3,000,000 the other numbers round to 2,000,000.
2a. Kevin - 5,515,633, Michael - 4,672,145 or $5,413,692$, Anna $-4,672,145$ or $5,413,692$ 3a. Alfie is incorrect because he has rounded to the nearest 100,000. His answer should be 5,000,000.

## Expected Varied Fluency

1a. A and C
2a. 1,625,900 and two million, three hundred and fifty-five thousand, eight hundred and five
3a.

| Number | Rounds to <br> $2,900,000$ | Rounds to <br> $3,000,000$ |
| :---: | :---: | :---: |
| $2,858,790$ | $\checkmark$ |  |
| $3,015,830$ |  | $\checkmark$ |
| $2,945,745$ | $\checkmark$ |  |

4a. 2,710,000; 2,700,000; 3,000,000
E-Reasoning and Problem Solving
1a. To the nearest million, the odd one out is 4,514,212 (represented pictorially). To the nearest hundred thousand, the odd one out is 3,894,170 (written in words).
2a. Jade - 3,502,005 or 3,495,811;
Maxine - 3,415,667 or 3,495,811; Justin $3,502,005$ or $3,495,811$
3a. Savanna is incorrect because she has rounded to the nearest ten thousand. Her answer should be 2,100,000.

Greater Depth answers on next page

## Answers - Rounding Numbers

## Developing Varied Fluency

1b. A and B
2b. $3,501,715 ; 4,098,275$; and $3,799,140$
3b.

| Number | Rounds to <br> $8,000,000$ | Rounds to <br> $9,000,000$ |
| :---: | :---: | :---: |
| $8,652,683$ |  | $\checkmark$ |
| $8,348,135$ | $\checkmark$ |  |
| $8,514,763$ |  | $\checkmark$ |

4b. 4,000,000
D - Reasoning and Problem Solving
1b. 4,152,260 (represented pictorially) the other numbers round to 5,000,000. 2b. Stephen $-8,414,793$ or $7,641,383$, Paul $-8,414,793$ or $7,641,383$, Sophie 7,321,562
3b. Susan is incorrect because she has rounded down not up. Her answer should be 8,000,000.

## Expected Varied Fluency

1b. B and C
2b. $4,465,715$ and four million, five hundred and two thousand, five hundred and thirty
3b.

| Number | Rounds to <br> $4,900,000$ | Rounds to <br> $5,000,000$ |
| :---: | :---: | :---: |
| $4,896,344$ | $\checkmark$ |  |
| $4,995,051$ |  | $\checkmark$ |
| $5,003,688$ |  | $\checkmark$ |

4b. 5,260,000; 5,300,000; 5,000,000
E - Reasoning and Problem Solving
1b. To the nearest hundred thousand, the odd one out is 947,301 .
To the nearest ten thousand, the odd one out is $1,042,240$ (represented pictorially).
2b. Ellis $-4,509,012$ or $4,513,433$ or
$4,499,785$; Toni - 4,509,012 or $4,513,433$ or $4,499,785$; Saanvi - 4,509,012 or 4,513,433 3b. Trevan is incorrect because there are 5 thousands which means the number rounds up. His answer should be 5,500,000.

Greater Depth answers on next page

## Answers - Greater Depth

 Rounding Numbers
## Answers - Greater Depth

 Rounding Numbers
## Varied Fluency

1a. B and C
2a. 6,962,DCC $(6,962,700)$ and $7,039,815$
$3 a$.

| Number | Rounds to <br> $7,700,000$ | Rounds to <br> $7,800,000$ |
| :---: | :---: | :---: |
| $7,795, \mathrm{DXXV}(525)$ |  | $\checkmark$ |
| $7,704, \mathrm{DCCCXCI}(891)$ | $\checkmark$ |  |
| $7,804,000$ |  | $\checkmark$ |

4a. (9,003,679) 9,004,000; 9,000,000;
9,000,000; 9,000,000

## Reasoning and Problem Solving

1a. To the nearest million, the odd one out is $2,513,674$ (numbers and Roman numerals). When rounded to the nearest hundred thousand, the odd one out is 2,364,133.
2a. Andrew $-4,453,255$ or $4,506,244$ or 4,510,361
Pippa - 4,453,255
Rose - 4,506,244 or 4,510,361
3a. Harrison is incorrect because 4,505, CMXCII $(4,505,992)$ rounded to the nearest hundred thousand is $4,500,000$, but rounded to the nearest ten thousand it is 4,510,000.

## Varied Fluency

1b. A and C
2b. $3,899,516$ and three million, nine hundred and one thousand and six
3b.

| Number | Rounds to <br> $3,900,000$ | Rounds to <br> $4,000,000$ |
| :---: | :---: | :---: |
| 3,906, DXII(512) | $\checkmark$ |  |
| $3,960,215$ |  | $\checkmark$ |
| $3,851, \mathrm{CI}(101)$ | $\checkmark$ |  |

4b. $(6,412,999) 6,413,000 ; 6,410,000$;
6,400,000; 6,000,000

## Reasoning and Problem Solving

1b. To the nearest hundred thousand, the odd one out is $6,551,222$. When rounded to the nearest ten thousand, the odd one out is $6,491,506$ (words and Roman numerals).
2b. Jack - 2,004,999
Madeline - 2,504,584 or 2,504,499
Kieran - 2,504,584 or 2,504,499
3b. Abigail is incorrect because
6,030, DCCXLII $(6,030,742)$ rounded to the nearest ten thousand is $6,030,000$, but rounded to the nearest thousand is 6,031,000.

## Answers - Fractions to Decimals 1

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## Developing Varied Fluency (p8)

1a. 4, 7
2a. True
3a. $A=0.8, B=0.9, C=0.6$
4a. $A=0.5, B=0.4, C=0.7$

## D - Reasoning and Problem Solving (p9)

1a. Neither are correct. They are equivalent.
2a. 0.5, 0.01, 0.3, 0.9. Order: 0.01, 0.3, 0.5, 0.9 .

3a. Various answers, for example: $\frac{2}{10}=0.2$; $\frac{4}{10}=0.4$

## Expected Varied Fluency (p10)

1a. 7, 0, 3
2a. False. It is 0.7
3a. $\mathrm{A}=0.8, \mathrm{~B}=0.25, \mathrm{C}=0.3$
4a. $A=0.6, B=0.8, C=0.25$

E-Reasoning and Problem Solving (p11)
1a. Chuan is correct. $\frac{4}{5}$ is 0.8 which is greater than 0.7.
2a. 0.5, 0.2, 0.6, 0.4. Order: $0.2,0.4,0.5,0.6$.
3a. Various answers, for example:
$\frac{16}{32}=0.5 ; \frac{17}{34}=0.5 ; \frac{18}{36}=0.5$

## Greater Depth Varied Fluency (p12)

1a. 1, 5, 7, 5
2a. True
3a. $A=0.125, B=0.75, C=0.875$
4a. $A=0.3, B=0.8, C=0.45$

GD - Reasoning and Problem Solving
1a. Alesha is correct. $\frac{3}{8}$ is 0.375 which is less than 0.625 .
2a. $0.375,0.625,0.625,0.75$.
Order: $0.75,0.625,0.625,0.375$
3a. Various answers, for example:
$\frac{4}{32}=0.125 ; \frac{12}{32}=0.375 ; \frac{20}{32}=0.625$

## Developing Varied Fluency

1b. 1, 0
2b. False. It is 0.07
3b. $A=0.7, B=0.05, C=0.9$
4b. $A=0.9, B=0.7, C=0.1$

D - Reasoning and Problem Solving
1b. Cian is correct. $\frac{2}{100}$ is 0.02 which is less than 0.2.
2b. $0.8,0.4,0.05,0.3$. Order: $0.8,0.4,0.3$, 0.05 .

3b. Various answers, for example:
$\frac{42}{100}=0.42 ; \frac{48}{100}=0.48 ; \frac{54}{100}=0.54$

## Expected Varied Fluency

1b. 6, 4, 7
2b. True
3b. $A=0.6, B=0.25, C=0.2$
4b. $A=0.4, B=0.8, C=0.6$

E-Reasoning and Problem Solving
1b. Scarlett is correct. $\frac{2}{5}$ is 0.4 which is greater than 0.2.
2b. 0.7, 0.6, 0.15, 0.9. Order: 0.9, 0.7, 0.6, 0.15 .

3b. Various answers, for example:
$\frac{12}{20}=0.6 ; \frac{12}{25}=0.48 ; \frac{18}{30}=0.6$
Greater Depth Varied Fluency (p12)
1b. 1, 2, 2, 5
2b. True
3b. $A=0.8, B=0.375, C=0.6$
4b. $A=0.75, B=0.625, C=0.375$
GD - Reasoning and Problem Solving
1b. Neither are correct. They are equivalent.
2b. $0.875,0.75,0.8,0.375$.
Order: $0.375,0.75,0.8,0.875$.
3b. Various answers, for example:
$\frac{2}{8}=0.25 ; \frac{6}{8}=0.75 ; \frac{4}{16}=0.25$

## Answers - Four Quadrants

## Developing Varied Fluency

1a. A (-2, 2), B $(1,3), C(3,1)$
2a. $A(1,3), B(3,3), C(3,1), D(1,1)$
3a. Rectangle
D - Reasoning and Problem Solving
1a. Eliza is not correct because $(3,4)$ should be $(3,3)$ to make a square.
2a. Various answers, for example:
(1, 2); (1, 4); $(4,2)$; $(4,4)$ or
(1, 2); $(4,2) ;(1,0) ;(4,0)$
3a. Use the coordinates that are given to deduce that $A=(-1,2)$.

## Expected Varied Fluency

1a. A (-4, -1), B (-1, 3), C (2, 3), D (2, -2)
2a. A $(-3,3), B(-1,3), C(-1,2), D(-3,2)$,
E (3, -1), F (3, -3), G (1, -3), H (1, -1)
3a. Trapezium and parallelogram

## E-Reasoning and Problem Solving

1a. Holly is not correct because ( $-2,-4$ ) should be ( $-2,-3$ ) to make a parallelogram.
2a. Various answers, for example:
(2, -1); $(4,-1)$; $(1,-3)$; $(3,-3)$ or
(2, -1); (5, -1); (1, -4); (4, -4)
3a. Use the coordinates that are given to deduce that $A=(1,-2) ; B=(4,-4)$.

## Greater Depth Varied Fluency

1a. A (-4, 3), B (-4, -3), C (-3, -4), D (3, 4), E (4, -3)
2a. A ( $-3,3$ ), B ( $-2,4), C(1,4) D(1,1)$,
E ( $-3,1$ ), F (-1, -2), G (2, -2), H (3, -3),
I (2, -4), J (-1, -4)
3a. Pentagon and irregular hexagon

## GD - Reasoning and Problem Solving

1 a. Sam is not correct because $(2,3)$ should be $(1,3)$ to make a hexagon with a vertical line of symmetry.
2a. Various answers, for example:
A trapezium: (-3, -4); (-2, -2); (2, -2); (3, -4)
or (-3, -4); (-2, -2); (-2, 1); $(-4,3)$
or $(-3,-4) ;(-2,-2) ;(1,-2) ;(2,-4)$
or (-3, -4); (-2, -2); (0, -2); (1, -4)
An irregular pentagon: (-3, -4); (-3, -3);
(-2, -1); (1, -1); (2, -4)
3a. Use the coordinates that are given to deduce that $\mathrm{A}=(3,0) ; \mathrm{B}=(1,-2)$;
C = (-3, 2); D = (-14).

## Answers - Four Quadrants

## Developing Varied Fluency

1b. A $(-4,2), B(-1,3), C(3,4)$
2b. A (-3, 3), B ( $-2,3$ ), C ( $-2,1$ ), D ( $-3,1$ )
3b. Square
D - Reasoning and Problem Solving
1b. Jacob is not correct because (-1, 2) should be ( $-1,1$ ) to make a rectangle.
2b. Various answers, for example:
$(-2,3)$; $(-3,1)$; $(-2,1)$ or
$(-2,3) ;(-3,1) ;(-1,1)$
3b. Use the coordinates that are given to deduce that $A=(3,2)$.

## Expected Varied Fluency

1b. A ( $-3,2$ ), B ( $-1,-2), C(3,-1), D(4,1)$
2b. A ( 1,3 ), B $(3,3), C(3,0), D(1,0)$,
E (-3, -1), F (-2, -1), (-3, -4), H (-2, -4)
3b. Kite and arrowhead (irregular quadrilateral)

## E-Reasoning and Problem Solving

1b. Max is not correct because $(-2,4)$ should be $(-2,5)$ or $(3,5)$ should be $(3,4)$ to make a trapezium.
2b. Various answers, for example:
(-3, -1); (-5, -4); (-1, -4); (-3, -5) or
(-3, -1 ); ( $-5,-3$ ); ( $-2,-3$ ); ( $-3,-4$ )
3b. Use the coordinates that are given to deduce that $A=(-2,4) ; B=(-1,2)$.

## Greater Depth Varied Fluency

1b. A (-5, 2), B (-2, -5$), C(2,5), D(2,-5)$, E (5, -2)
2b. A (-4, 2), B ( $-3,1$ ), C ( $-2,2$ ), D ( $-2,-1$ ), E (-3, -2), F (-4, -1), G (-1, 1), H (2, -1),
I (4, -4), J (1, -2)
3b. Octagon and scalene triangle

## GD - Reasoning and Problem Solving

1b. Daisy is not correct because (-1, -2)
should be $(-1,-1)$ to make a pentagon with a vertical line of symmetry.
2b. Various answers, for example: hexagon:
(2, 2); (0, 2); (-1, 0);
(0, -2); $(2,-2) ;(3,0)$
octagon: (2, 2); (0, 2); (-1, 0);
(1, -2); (0, -4); (2, -4); (3, -2); (3, 0)
pentagon: (2, 2); (2, 0); (0, -1);
(-2, 1); (0, 3)
3b. Use the coordinates that are given to
deduce that $A=(1,1) ; B=(1,-2)$;
$C=(-2,-2) ; D=(-2,1)$.

## Answers - Fraction of an Amount

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## Developing Varied Fluency

1a. 22, 42
2a. 11, 16, 125, 7
3a. $40>30,12<13$
4a. 19, 16
D - Reasoning and Problem Solving
1a. 72
2a. No, Kian is not correct. He has 10 red and 16 blue stickers.
$3 a . \frac{1}{2}$ of $10=5 ; \frac{1}{5}$ of $10=2$
Expected Varied Fluency
1a. 480, 93
2a. $24,77,162,51$
3a. $120>110,420=420$
4a. 88, 108

## E-Reasoning and Problem Solving

1a. 126
2a. Tia has read the most pages.
3a. $\frac{5}{6}$ of $720=600 ; \frac{5}{7}$ of $840=600$;
$\frac{6}{7}$ of $840=720$

## Greater Depth Varied Fluency

1a. 2,460; 468
2a. 160; 770; 2,400; 795
3a. $1,800<1,984 ; 630>600$
4a. 260; 378

## GD - Reasoning and Problem Solving

1a. 300
2a. Che knows the most employees. (Che 576; Mia 480)
3a.

$$
\begin{aligned}
& \frac{30}{40} \text { of } 200=\frac{18}{30} \text { of } 250 \\
& \frac{18}{30} \text { of } 200=\frac{24}{50} \text { of } 250
\end{aligned}
$$

## Developing Varied Fluency

1b. 7, 23
2b. 12, 37, 30, 48
3b. $6<16,330>90$
4b. 8, 49
D - Reasoning and Problem Solving
1b. 65
2b. No, Paula is not correct. She will have spent $£ 5$ on lunch and $£ 9$ on flowers.
3b. $\frac{1}{6}$ of $30=5 ; \frac{1}{5}$ of $30=6$

## Expected Varied Fluency

1b. 28,260
2b. 142, 45, 23, 170
3b. 97 < 132, 644 < 645
4b. 168,285

## E -Reasoning and Problem Solving

1b. 153
2b. Simon has spent the most money.
3b. $\frac{4}{6}$ of $660=440 ; \frac{5}{6}$ of $660=550$;
$\frac{4}{5}$ of $550=440$
Greater Depth Varied Fluency
1b. 1,121; 288
2b. 198; 2,200; 1,645; 810
3b. 664 > 624; 285 < 288
4b. 424; 160
GD - Reasoning and Problem Solving
1b. 1,400
2b. Moses has the most money.
(Leo £900; Moses $£ 1,320$ )
3b.

$$
\begin{aligned}
& \frac{11}{55} \text { of } 300=\frac{22}{88} \text { of } 240 \\
& \frac{25}{50} \text { of } 300=\frac{55}{88} \text { of } 240
\end{aligned}
$$

## Answers - Find Pairs of Values 2

## Developing Varied Fluency

1a. $a=16$ and $b=4$
2a. 19 and $14 ; 15$ and $10 ; 12$ and $7 ; 8$ and 3
3a. $b=9$ and $c=4$
4a. Various answers, for example: if $a=9$, then $b=0$; if $a=8$, then $b=2$; if $a=7$, then $b=4$.

## D - Reasoning and Problem Solving

1a. Katya is incorrect because $2 \times 7=14$; 14 + $4=18$ so $d=4$ not 5 .
2a. A, C or D could be true. For example:
A. $a=5$; C. $a=3$; D. $a=5$

3a. Various answers, for example: $m=6$,
$s=4 ; m=7, s=2 ; m=5, s=6$

## Expected Varied Fluency

1a. $a=94$ and $b=11$
2a. 45 and 12; 61 and 28; 56 and 23; 72 and 39 3a. $b=8$ and $c=27$
4a. Various answers, for example: if $a=12$,
then $b=15$; if $a=10$, then $b=25$; if $a=8$, then $b$ $=35$.

E-Reasoning and Problem Solving
1a. Vivian is incorrect because $5 \times 7=35 ; 50-$ $35=15.15 \div 3=5$ so $i=5$.
2a. A or $D$ could be true. For example:
A. $a=15$; B. $a=7$

3a. Various answers, for example:
$m=30, s=10 ; m=40, s=5 ; m=10, s=20$

## Greater Depth Varied Fluency

1a. $a=64$ and $b=6$
2a. 4.5 and $10 ; 0.5$ and $6 ; 6.5$ and $12 ;-4.5$ and 1
3a. $y=15.5$ and $v=5$
4a. Various answers, for example: If $a=8$, then $b=0.5$; if $a=6$, then $b=3.5$; if $a=4$, then $b=$ 6.5.

## GD - Reasoning and Problem Solving

1a. Gillian is incorrect because $7 \times \frac{1}{2}=$ $3.5 ; 12.5-3.5=9.9 \div 2=4.5$ so $y=4.5$.
2a. A, B, C or D could be true. For example: A. $a=-7$; B. $a=-5$; C. $a=-10$; D. $a=-4$
3a. Various answers, for example: $m=5$, $s=3.75 ; m=6, s=2.75 ; m=4, s=4.75$

## Developing Varied Fluency

1b. $h=5$ and $i=6$
2b. 10 and 8 ; 12 and $6 ; 14$ and $4 ; 17$ and 1
3b. $a=2$ and $c=15$
4b. Various answers, for example: if $c=14$, then $d=1$; if $c=16$, then $d=2$; if $c=18$, then $d$ $=3$.

## D - Reasoning and Problem Solving

1b. Jesse is incorrect because $2 \times 10=20 ; 20$ -
$8=12$ so $d=8$ not 2 .
2b. B or C could be true. For example:
B. $b=6$; C. $b=2$

3b. Various answers, for example: $k=4$,
$b=5 ; k=3, b=6 ; k=7, b=2$

## Expected Varied Fluency

1b. $h=15$ and $i=11$
2b. 23 and 18; 25 and 16; 28 and 13; 32 and 9
3b. $a=8$ and $c=27$
4b. Various answers, for example: if $c=19$, then $d=1$; if $c=20$, then $d=4$; if $c=21$, then $d$ $=7$.

## E-Reasoning and Problem Solving

1b. Ralph is incorrect because $2 \times 15=30$; $40-$ $30=10.10 \div 5=2$ so $y=2$.
2b. B, C or D could be true. For example:
B. $a=10$; C. $a=8$; D. $a=6$

3b. Various answers, for example: $s=10$,
$l=20 ; s=5, l=30 ; s=11, l=18$

## Greater Depth Varied Fluency

1b. $h=15$ and $i=8$
2b. 11 and 0.5 ; 10 and 2.5 ; 9 and 4.5 ; 8 and 6.5
3b. $s=8$ and $r=7$
4b. Various answers, for example: If $c=13$, then $d=11.5$; if $c=10$, then $d=8.5$; if $c=8$, then $d=6.5$.

## GD - Reasoning and Problem Solving

1b. Faisan is incorrect because $2 \times 2.5=5$; 5 -$10=-5.10 \div 5=2$ so $b=2$.
2b. A, B, C or D could be true. For example: A. $b=2.5$; B. $b=0.5$; C. $b=10.5$; D. $b=4.5$
3b. Various answers, for example: $m=1$,
$h=3.5 ; m=2, h=2.5 ; m=3, h=1.5$

1. Zargle and Bleeblox are alien friends from different planets, who were born on the same day and each live to be about 1,000 years old. However, they don't celebrate their birthdays every year.


They'd like to throw a party together. Investigate how many years it could be before they both celebrate their birthdays in the same year. Find 5 possible answers.
Various answers, for example: Zargle and Bleeblox could celebrate their birthdays together after $84,168,252,336$ or 420 years. Accept any multiple of 84 up to 1,000 .

They have another friend, Glarbol, who also shares the same birthday. If Glarbol was to share the birthday party too, how many times could all three aliens celebrate their birthdays together in the same year?


All three aliens could only celebrate their birthdays twice together after 420 years or 840 years, as they only live to 1,000 and the next common multiple of 5,7 and 12 is 1,260.
2. Look at the two grids below. Identify groups of 3 numbers from grid $\mathbf{A}$ in the same row or column that share a common multiple from grid B. For example: 8, 13 and 16 share the common multiple 416.

Pick 5 numbers from grid $B$ and find a different combination of numbers for each.

| Grid A |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 8 | 13 | 10 | 16 |
| 15 | 5 | 17 | 11 | 9 |
| 4 | 9 | 3 | 18 | 5 |
| 19 | 7 | 15 | 7 | 12 |
| 8 | 4 | 6 | 20 | 13 |


| Grid B |  |  |
| :---: | :---: | :---: |
| 285 | 495 | 504 |
| 420 | 560 | 260 |
| 390 | 416 | 312 |

Various answers, for example:
5,11 and 9 with $495 ; 3,15$ and 13 with $390 ; 4,13$ and 20 with $260 ; 6,4$ and 13 with 312 ; 15,7 and 12 with 420

## Answers - Expanded Noun Phrases

## Developing Varied Fluency

1a. A: The rusty trailer with the flat tyre sat unused on the driveway.
B: A large heard of sheep grazed casually in the field.
C: As the sun rose in the clear, blue sky, the farmer tended to the animals.
2a. Sentence A
3a. tall, athletic boy
4a. The confident, enthusiastic boy walked out onto the stage to perform in the talent show.

D - Application and Reasoning
1a. Various answers, for example:
The intelligent scientist panicked as his tricky experiment started to go wrong.
2a. Various answers, for example:
The crafty, gun-wielding criminal was apprehended as he attempted to steal the rare diamond.
3a. She is incorrect. She has used adverbs to describe how the professor spoke therefore, it is not an expanded noun phrase.

## Expected Varied Fluency

1a. A: The old car with the rusty door had been left abandoned in the carpark.
B: The ravens soared majestically in the clear, cloudless sky.
C: The over-excited, friendly dog circled my legs before pouncing onto my lap.
2a. Sentence B.
3a. old, decrepit house
4a. Various possible answers, for example: The experienced pilot landed the plane safely despite the treacherous weather conditions.

## E-Application and Reasoning

1a. Various answers, for example: The short, athletic boy finished third in the race, just seconds behind his friend.
2a. Various answers, for example: As they approached the castle with the broken tower, they noticed the mighty, oak door was already open.
3a. She is incorrect. All three of the adjectives used have a similar meaning and therefore don't add any new information to the sentence or make it any more concise.

## Answers - Expanded Noun Phrases

## Developing Varied Fluency

1b. A: The tall blossom tree stood proudly at the end of the garden.
B: The fast, red-striped sports car sped off along the racing tracks.
C: The cute, tabby kitten rolled around excitedly on the grass.
2b. Sentence B
3b. the infectious smile
4b. The student with the impeccable behaviour had been sent to the headteacher.

## D - Application and Reasoning

1b. Various answers, for example:
The calm, brave astronaut put on her space suit and sat down, ready for take-off.
2b. Various answers, for example: The kind, caring teacher organised a surprise, fun-filled trip for the end of the school year.
3b. He is incorrect. All three of the adjectives used have a similar meaning and therefore don't add any new information to the sentence or make it any more concise.

## Expected Varied Fluency

1b. A: The large, over-grown garden was full of weeds and wild flowers.
B: The injured athlete that was sat with the medics watched over the race enviously.
C: The ancient city of Rome is home to attractions such as the Trevi Fountain and St. Peter's Basilica.
2b. Sentence B
3b. round, brilliant cut diamond
4b. Various possible answers, for example: The lanky girl with the petite frame smiled happily as she took to the podium after winning first place.

## E-Application and Reasoning

1b. Various answers, for example: Johnny picked up his rucksack and prepared himself for the hike that was sure to be a challenge. 2b. Various answers, for example: The lazy ginger cat sat under the blossoming tree at the end of the garden, trying to find some shade.
3b. He is correct. He has used a range different adjectives to describe the noun and creates a concise sentence.

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## Answers - Greater Depth Expanded Noun Phrases

## Application and Reasoning

1a. Various answers, for example: Shaking with fear, the timid, frail boy - who felt like he was about to throw up - attached his safety harness and prepared himself to face the zipwire.
2a. Various answers, for example: Without warning, an inexplicable bang sounded from the next room, making the children that were silently working, jump up in shock.
3a. She is incorrect. Sentence B uses expanded noun phrases to describe the features of the house in a concise way that makes sense.

## Varied Fluency

1a. A: An almighty roar came from the fierce lion, which was stalking around the fenced-in enclosure waiting to be fed.
B: Waiting for the bus, the impatient commuters took shelter from the unexpected, freezing rain drops that battered the ground relentlessly.
2a. Sentence A
3a. sweltering hot sun.
4a. Various possible answers, for example: Before setting off, we made sure that we packed a range of different sandwiches and a some cool, fizzy drinks for the trip. mak

## Answers - Greater Depth <br> Expanded Noun Phrases

## Varied Fluency

1b. A: Without warning, a bright flash of lightning lit up the sky and was followed by a deafening crack of thunder that shook the house.
B: The derelict building with the broken
windows and cracked brickwork was the scariest place that the children had ever dared to venture.
2b. Sentence A
3b. over-excited, noisy
4b. Due to the adverse weather conditions, the upset students had to abandon the school trip until a later date.

## Application and Reasoning

1b. Waiting patiently for her friends to
arrive, Isabel placed the cupcakes with the intricately decorated icing onto the cake stand ready for the tea party.
2b. Various answers, for example: As they reached the summit, the hikers stood on the edge of the steep, snow-capped mountain taking in the views that spread out before them.
3b. He is correct. Sentence B uses expanded noun phrases to describe the house in a concise way that makes sense.

## Answers - Identifying Word Classes in Sentences

## Developing Varied Fluency

1a. A. Nouns = pages, dog, book; Verbs = tore, stepped; B. Nouns = water, glass; Verbs = spilt, was, knocked
2a. Adjectives
3a. Subject = Susan; Object = stable
4a. Nouns = passengers, children, plane; Verbs = could, board; Adverbs = first;
Adjectives = young

## D - Application and Reasoning

1a. Various answers, for example: The busy (adjective) train (noun) arrived (verb) late (adverb).
2a. No, an adjective would not fit in this sentence.
3a. True. Without a verb the sentences have no meaning or sense. For example, 'The gift shop a good choice of cards.'

## Expected Varied Fluency

1a. A. Nouns = dog, house, footprints, floor; Verbs = ran, leaving. B. Nouns = doll, eye, hair; Verbs = had, had fallen
2a. Adverbs
3a. Subjects = everyone, he; Objects = clown, circus
4a. Subjects = driver; Objects = journey, Nouns = driver, break, journey, food, café; Verbs = took, could rest, have; Adverbs = briefly; Adjectives = lorry, long, some; Determiners = the, a, his, the; Conjunctions = so; Prepositions = from, at

## E-Application and Reasoning

1a. Various answers, for example: The silly (adjective) dog (subject, noun) ran (verb) excitedly (adverb) around (preposition) the corner (object) but (conjunction) he came back obediently (adverb).
2a. Yes, adding an adverb is possible. Various possible answers, for example: The adverb 'slowly' could be added at the start of the sentence.
3a. False. Each sentence can omit the noun and still make sense. If the noun is removed, it is also necessary to remove the preposition and determiner in the example 'Sit down at once!'

## Answers - Identifying Word Classes in Sentences

## Developing Varied Fluency

1b. A. Nouns = question, test; Verbs = was;
B. Nouns = chair, pieces; Verbs = broke, fell

2b. Verbs
3b. Subject = Mark; Object = batteries
4b. Nouns = school, uniform, year; Verbs = decided, change; Adverbs = suddenly; Adjectives = new, next

## D - Application and Reasoning

1b. Various answers, for example: The tiny (adjective) puppy licked (verb) her face (noun) excitedly (adverb).
2b. Yes, an adverb could be added. For example, 'quickly' could be added to the start of the sentence or after 'stairs'.
3b. False. The adjectives make the meaning of the sentences clearer but they do not need to have them. For example, 'Can you bring me your book?'

## Expected Varied Fluency

1b. A. Nouns = car, puddle; Verbs = looked, drove. B. Nouns = song, radio, building site; Verbs = blared
2b. Prepositions
3b. Subjects = Cameron, postman; Objects = letter, post box
4b. Subjects = mouse; Objects = hall; Nouns = mouse, hall, hole, corner, cat, room; Verbs = scurried, being; Adverbs = quickly; Adjectives = brave, same; Determiners = a, the, a, the, the; Conjunctions = despite; Prepositions = across, from, in

## E-Application and Reasoning

1b. Various answers, for example: An (determiner) enormous (adjective) turnip (subject) was pulled (verb) quickly (adverb) from (preposition) the ground (object) although (conjunction) it took three people (noun).
2b. Yes, adding a conjunction is possible. Various possible answers, for example: The conjunction 'despite' could be added at the start of the sentence or 'but' could replace the comma.
3b. False. The adjectives make the meaning of the sentences clearer but they do not need to have them. For example, 'Cameras are operating in this area.'
Greater Depth answers on next page

## Greater Depth answers on next page

## Answers - Greater Depth Identifying Word Classes in Sentences

# Answers - Greater Depth Identifying Word Classes in Sentences 

## Varied Fluency

1a. A. Nouns = Year 9, Year 10, trip, Paris, month; Verbs = are going
B. Nouns = River Thames, river, England; Verbs = know, is
2a. Determiners
3a. Subject $\mathrm{s}=$ decision; Object $=$ council They are also nouns.
4a. Subjects = house, gates; Objects = estate, security; Nouns = house, estate, gardens, outbuildings, property, gates, security; Verbs = was situated, were guarded, could, enter; Adverbs = privately; Adjectives = immaculate, łwo, large; Determiners = its, the, the, the; Conjunctions = and, so that; Prepositions = with, behind, by

## Application and Reasoning

1a. Various answers, for example: During the test, the (determiner) teacher (noun, subject) walked (verb) around (preposition) the
classroom (noun, object) so (conjunction) she could see if all (adjective) the children were working silently (adverb).
2a. Yes, a preposition can be added. Various possible answers, for example: The word 'inside' could go at the end of the sentence. There is only one possibility of where the preposition could go.
3a. False. Each sentence can omit the object and still be understood. For example, 'The farmer was tired'.

## Varied Fluency

1b. A. Nouns = police, morning, house, street; Verbs = were called, was burgled B. Nouns = dog, freedom, run, gate; Verbs = made, was
2b. Conjunctions
3b. Subjects = girls; Object s= skills
They are also nouns.
4b. Subjects = Dan, water; Objects = shower; Nouns = Dan, shower, bathroom, morning, water; Verbs = took, got, stopped, working, was, running, was; Adverbs = suddenly, still; Adjectives = cold, downstairs, yesterday, extremely; Determiners = a , the, the; Conjunctions = which, although; Prepositions = in

## Application and Reasoning

1b. Various answers, for example:
So that (conjunction) she (subject) could (verb) look after an elderly (adjective) patient (object) who had taken ill suddenly (adverb) in the waiting room, the doctor had to rush out (preposition) of her (determiner) appointment (noun).
2b. Yes, an object could be added.
Various possible answers, for example: the word 'table' could be added after 'blew off'. There is only one possibility of where an object could go.
3b. True, the sentence would not make sense if the conjunction is taken out. For example, 'You finish you cannot go outside.'

## Answers - Using the Passive Verb

## Developing Varied Fluency

1a. True
2a. Jenny read the book.
3a. The game was won by Stan.
4a. The ball was thrown by Ben.

## D - Application and Reasoning

1a. kicked
2a. Various answers, for example: The bread was sold by the baker.
3a. Tia is not correct, she has not used 'were' before the past tense verb. The correct sentence is: The keys were lost by the girl.

## Expected Varied Fluency

1a. True
2a. The lion chased the antelope in the jungle.
3a. The flowers in the garden were watered by Nina.
4a. The delicious chocolate cake was eaten.

## E - Application and Reasoning

1a. written
2a. Various answers, for example: The huge parcel was taken in the van by the postman. 3a. Katie is not correct, she has swapped the position of the subject and the object in the sentence and not changed to the passive verb. The correct sentence is: The rabbit was hunted by the fox in the woods.

## Greater Depth Varied Fluency

1a. False, the correct sentence is: The stained glass window was smashed this morning because the tennis ball was thrown too hard. 2a. The man fed the horse before he rode it through the enormous, grassy fields.
3a. The warm, fluffy coat was put on by Harry before the brown, wooden door was opened. 4a. The coffee was put in the cup and the hot water was poured in.

## GD - Application and Reasoning

1a. Various answers, for example: The new board game was played and the points were counted.
2a. Various answers, for example: The football match was planned and lots of goals were scored.
3a. Bella is not correct, she has only turned the first part of the sentence into the passive form. The correct sentence is: The white envelope was sealed then the postage stamp was stuck on.

## Answers - Using the Passive Verb

## Developing Varied Fluency

1b. True
2b. Sarah made the cake.
3b. The rabbit was trapped by the fox.
4b. The picture was drawn by Kate.

## D - Application and Reasoning

## 1b. read

2b. Various answers, for example: The money was found by Tom.
3b. Seth is not correct, he has swapped the position of the subject and the object in the sentence and not changed to the passive verb.

## Expected Varied Fluency

1b. True
2b. The postman delivered the letter yesterday morning.
3b. The tall, red gate was opened slowly by Abdul.
4b. The car key was found under a rock.

## E-Application and Reasoning

1b. eaten
2b. Various answers, for example: The money in the bank was stolen by the notorious thief. 3b. Greg is not correct, he has not used 'were' before the past tense verb. The correct sentence is: The trainers were left in the hallway by Lucy.

## Greater Depth Varied Fluency

1b. False, the correct sentence is: The cheese sandwiches were finished before the cakes and biscuits were brought out of the kitchen.
2b. Jamie washed the dirty dishes after he ate the delicious roast dinner.
3b. The beautiful song lyrics were written by Grace before the dramatic music was composed.
4b. Flowers were picked from the soil then new seeds were planted.

## GD - Application and Reasoning

1b. Various answers, for example: The eggs were fried then the butter was spread on the toast.
2b. Various answers, for example: The rules were explained and the new game was started.
3b. Alex is not correct because he has only turned the second part of the sentence into the passive form. The correct sentence is: The kitchen floor was mopped then the colourful tiles were wiped.

1. What does the image represent? The world. It shows landmarks from different countries. It gives an impression that the world is small.
2. What do the landmarks represent? Different countries of the world.
3. If the image were used as an advert, what might it be advertising? Travel agents, airports, ports, accept other suitable answers.
4. The image has a key message in it. Explain what you think this message is. That the world is small and interconnected.
5. Use three adjectives to describe the image. Various answers.
6. Why do you think different modes of transport are shown in the image? To show the ways in which you can visit the landmarks.
7. The image represents different countries around the world. What else could it represent? Different languages, different cultures or places to visit on holiday.
8. What key landmarks are in the image? Eiffel Tower, St Basil's Cathedral, Stonehenge, Big Ben, The London Eye, The Colosseum, CN Tower, Statue of Liberty, Porte d'Aix, The Golden Buddha, Himeji Castle, Neuschwanstein Castle.
9. Are there any key landmarks that you think should be included in the image? Why? Accept other famous landmarks, such as Taj Mahal, Pyramids of Giza, Tower of Pisa
10. The weather in the image is varied. Why do you think this is? Explain your reasoning. To reflect the different weather across the world at any one time.
11. What feelings might the picture make you feel? Give three examples. Personal response. Students may use words like excited, hopeful, keen, adventurous.
12. The image has many famous landmarks in it. Where else might you have seen images of these landmarks? Media; social media, newspapers, TV programmes. Encyclopaedias, posters, books, films, may have seen them in person.

## Vocab 1 - ANSWERS

| accommodation | a room, group of rooms or building in which <br> someone can stay |
| :--- | :--- |
| ambiance | the character or atmosphere of a place |
| amenities | a desirable or useful feature of a place, e.g. a <br> hospital nearby |
| availability | freedom to do something, otherwise <br> unoccupied |
| cancellation | the action of cancelling something |
| convenience | something that contributes to an easy way of <br> life |
| globetrotter | including all nations across the world who travels widely and often |
| international | accept more reservations that there is space <br> for, sometimes happens on flights |
| overbooking | visually attractive, often in a quaint way |
| picturesque | recovery of illness or exertion, often done on <br> holiday |
| recuperation | analized place of great beauty |


|  | $1 \text { i }$ | n | $\dagger$ | e | r | n | d | $\dagger$ | i | $\bigcirc$ | n | a | 1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{2} \mathrm{C}$ | $\bigcirc$ | n | V | e | n | i | e | n | C | e |  |  |  |  |  |  |
|  |  |  |  | ${ }^{3} 0$ | V | e | r | b | 0 | $\bigcirc$ | k | i | n | g |  |  |
|  |  |  |  |  | ${ }^{4} \mathrm{~g}$ | I | 0 | b | e | $\dagger$ | r | 0 | $\dagger$ | $\dagger$ | $e$ | $r$ |
|  |  |  | ${ }^{5}$ | e | C | U | $p$ | e | r | d | $\dagger$ | i | $\bigcirc$ | n |  |  |
|  |  | ${ }^{6} \mathrm{c}$ | a | n | C | e | I | I | a | $\dagger$ | i | $\bigcirc$ | n |  |  |  |
|  |  |  |  |  |  | ${ }^{7} \times$ | d | n | a | d | U |  |  |  |  |  |
|  |  | ${ }^{8} \mathrm{a}$ | m | b | i | e | n | C | e |  |  |  |  |  |  |  |
|  |  |  |  |  | ${ }^{9}$ a | m | e | n | i | $\dagger$ | i | e | S |  |  |  |

The hidden word is aeroplane

## World Travel - SPAG ANSWERS (p56)

Which sentence is punctuated correctly? Tick one.
Once at the hotel Maria decided, to take an excursion, to see the elephant sanctuary only two days later.


Once at the hotel, Maria decided to take an excursion to see the elephant sanctuary only two days later.


Once at, the hotel Maria decided to take an excursion to see the elephant, sanctuary only two days later.

Once at the hotel Maria decided to take an excursion to see the elephant sanctuary only two days later.

$\square$

Rewrite the sentence below using a subordinate clause. She travelled up the Eiffel Tower.
She travelled up the Eiffel Tower, which took longer than she thought.
Rewrite the sentence below in the passive voice.
Many people like travelling.
Travelling is what many people like to do.
Complete each sentence below with either 'is' or 'are'.
They are enjoying their holiday this year.
This swimming costume is new for my trip to Bali.
These gloves are needed for the ski slopes.
The people on the aeroplane are relieved to be travelling now after a delay in taking-off.

Classroom
secrets $*$
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