# Mathematics Arithmetic Assessment 



Teacher Pack

Classroom
secrets $*$

## Arithmetic Assessment Marking Guidance

Marks should be awarded in the following way:

- For one-mark questions, the correct answer must be indicated either in or alongside the answer box, within the area provided for working out the answer, or alongside the question itself.
- For two-mark questions, two marks are awarded for the correct answer (indicated either in or alongside the answer box, within the area provided for working out the answer, or alongside the question itself) or, if the answer is incorrect, one mark can be awarded for the complete use of a correct formal method with no more than one arithmetic error.

Answers can be given in any form (for example, as a diagram, symbol or words) as long as the meaning can be understood.

Answers should usually be given as a single value in their simplest form. For example, 51 x 10 should be given as 510 , not $500+10$. Marks can be awarded for answers that are equivalent, but these must be accurate. For example, $\frac{1}{8}$ must be given as 0.125

For answers involving fractions, correct equivalent fractions can be awarded a mark or marks. For example $\frac{1}{2}$ can be given as $\frac{3}{6}$. Where an answer is given as a mixed number, the fraction paired with the integer must be a proper fraction. For example, $2 \frac{2}{7}$ is acceptable, but $3 \frac{9}{5}$ would not be awarded a mark or marks. Mixed number answers can be awarded a mark or marks where they are given as improper fractions. For example, $1 \frac{2}{7}$ can be given as $\frac{9}{7}$.

Where more than one answer is given, all answers given must be correct. A mark or marks cannot be awarded for a mixture of correct and incorrect answers.

Where a comma is used as a thousands separator within an answer, and is positioned incorrectly, the mark or marks can be awarded if the digits are in the correct order. If any other symbol is used (for example, a decimal point or an apostrophe) the mark or marks cannot be awarded.

Where an answer is miscopied from the end of working to the answer box, a mark or marks can still be awarded if the incorrect answer in the answer box is due to transposed digits in a number (for example, 165 is written as 516) or only one digit has been changed in a number of 4 or more digits (for example, 1,943 is written as 1,948 ).

## Arithmetic Assessment Content Domains

The questions in each of these assessments cover the content domains from the 2022 key stage 2 arithmetic paper. The content domain coverage is listed below. If two or more domain references are given, the primary reference is given first.

A guidance document giving further information about content domains can be found on the Standards and Testing Agency's website.

| Question | Domain reference |
| :---: | :---: |
| 1. | 4 C 2 |
| 2. | 4C6b |
| 3. | 3N2b |
| 4. | 4C6b |
| 5. | 3 Cl |
| 6. | 4F8/5F10 |
| 7. | 4C6b |
| 8. | 4C6b |
| 9. | 4 C 2 |
| 10. | 5C6b |
| 11. | 4c6b |
| 12. | 4C6b |
| 13. | 4C6b |
| 14. | 5 C 2 |
| 15. | $4 \mathrm{C7}$ |
| 16. | 6F9a |
| 17. | 6C7b |
| 18. | 6F4 |
| 19. | 6C7a |
| 20. | 6F9a |
| 21. | 6F4 |
| 22. | 5F5 |
| 23. | FF8/5F10 |
| 24. | 6F5b |
| 25. | 6F4 |
| 26. | FF8/5F10 |
| 27. | 6 R 2 |
| 28. | 6 R 2 |
| 29. | 6C7b |
| 30. | 6R2 |
| 31. | 6F4 |
| 32. | 6F4 |
| 33. | 6F4 |
| 34. | 6F4 |
| 35. | 6C9 |
| 36. | 5F5 |

## Arithmetic Assessment Answers

These answers are for KS2-2022 Pack 1 Set 1

1. 4,998
2. 597
3. 813
4. 1,100
5. 594
6. 10.38
7. 40
8. 107
9. $\frac{11}{18}$
10. 44.794
11. 1,120
12. 240
13. 38
14. 237
15. 3,679
16. 16,800
17. $\frac{1}{63}$
18. 60
19. 240
20. 170
21. $4 \frac{10}{21}$
22. 693,000
23. $6 \frac{2}{3}$
24. 2,748
25. $10 \quad \frac{4}{5}$
26. 0.395
27. 8 r33
28. $\frac{5}{6}$
29. 56,066
30. 35,580
31. 6
32. 49
33. 3.707
34. $\frac{1}{27}$

## Arithmetic Assessment Answers

These answers are for KS2-2022 Pack 1 Set 2

1. 3,600
2. 556
3. 724
4. 1,200
5. 315
6. 11.09
7. 70
8. 124
9. $\frac{15}{56}$
10. 21.781
11. 585
12. 480
13. 46
14. 201
15. $\frac{1}{28}$
16. 2,562
17. 7,200
18. $2 \frac{11}{28}$
19. 30
20. 120
21. 300
22. 594,000
23. $7 \frac{8}{9}$
24. $6 \frac{7}{8}$
25. 4,072
26. 6
27. 320
28. 0.957
29. 22 r8
30. $\frac{7}{8}$
31. 36,708
32. 58,340
33. $3 \frac{1}{5}$
34. 54
35. 1.718
36. $\frac{1}{25}$

## Arithmetic Assessment Answers

These answers are for KS2-2022 Pack 1 Set 3

1. 7,912
2. 0
3. 443
4. 700
5. 340
6. 7.94
7. 30
8. 148
9. 1,635
10. 88,000
11. 40
12. 300
13. 360
14. 495,000
15. 3,496
16. $2 \frac{21}{40}$
17. $8 \frac{2}{3}$
18. 0.215
19. 54 r 9
20. $\frac{3}{4}$
21. 27,838
22. 24,370
23. $2 \frac{5}{7}$
24. 32
25. 1.419
26. $\frac{1}{42}$

## Arithmetic Assessment Answers

These answers are for KS2-2022 Pack 1 Set 4

1. 3,858
2. $\frac{16}{63}$
3. 0
4. 54.581
5. 987
6. 500
7. 426
8. 15.96
9. 90
10. 143
11. $\frac{2}{63}$
12. 1,753
13. 61,600
14. $1 \frac{14}{15}$
15. 70
16. 120
17. 320
18. 594,000
19. $6 \frac{6}{7}$
20. 5,408
21. $9 \frac{3}{4}$
22. 0.952
23. 26 r6
24. $\frac{7}{8}$
25. 36,946
26. 22,450
27. $3 \frac{2}{5}$
28. 24
29. 4.139
30. $\frac{1}{20}$

## Arithmetic Assessment Answers

These answers are for KS2-2022 Pack 1 Set 5

1. 7,605
2. 0
3. 446
4. 900
5. 980
6. 17.14
7. 80
8. 135
9. 3,854
10. 5,600
11. 100
12. 350
13. 240
14. 792,000
15. 3,396
16. $3 \frac{19}{45}$
17. 0.456
18. 6 r8
19. $\frac{7}{9}$
20. 20,087
21. 34,650
22. $3 \frac{4}{7}$
23. 32
24. 3.005
25. $\frac{1}{72}$
