Maths Lessons – Week 7 – SATs Revision

This pack includes your 3 maths lessons for the week. The pack includes:

- ✓ 'Quick Ten' maths starters to warm your brains up
- ✓ 3 maths lessons
- ✓ worksheets

Read through the document carefully as it will give you instructions on what to do. Your work this week is revising the formal methods for multiplication and division. If you need a reminder about how to do formal multiplication/division, have a look on the My Maths lessons. Good luck Year 6!

Lesson 1 – Multiplication

Starter – Quick 10

Answer these 10 questions, which cover areas of maths you have already been taught, as quickly as possible. Time yourself and see if you can beat your score next time.

Question	Answer	Question	Answer
EXAMPLE: 2 X 4 =	8		
1. 1001 – 100 =		6. 40 x 60 =	
2. 2 squared=		7. 1 /4 + 9/12 =	
3. 7 x 5 =		8. 4 + 15 x 7 =	
4. 4/9 + 1/9=		9. 6.087 – 0.081 =	
5. 25% of 211 =		10. 7.81 ÷ 100 =	

LONG MULTIPLICATION 1   13

TARGET   To use a formal written method for long multiplication.

Examples

```
    5 4 5
    1 7 5 8
×        2 7
  1 2 3 0 6   (1758 × 7)
  3₅1₁1₆0     (1758 × 20)
  4 7 4 6 6
```

```
      2 5 1
    4 3 9 2
×        3 6
  2 6 3 5 2
1 3₁1₂7 6 0
1 5 8 1 1 2
  1   1
```

A

Copy and complete.

1
```
    68
×   13
      (68 × 3)
____  (68 × 10)

____
```

2
```
   492
×   18
      (492 × 8)
____  (492 × 10)

____
```

3
```
    36
×   24
      (36 × 4)
____  (36 × 20)

____
```

4
```
   267
×   35
      (267 × 5)
____  (267 × 30)

____
```

Work out

5 63 × 42   **9** 174 × 34

6 57 × 26   **10** 219 × 28

7 49 × 19   **11** 438 × 17

8 85 × 23   **12** 365 × 45

B

Copy and complete.

1
```
   1247
×    26
      (1247 × 6)
____  (1247 × 20)

____
```

2
```
   2538
×    14
      (2538 × 4)
____  (2538 × 10)

____
```

3
```
   1673
×    38
      (1673 × 8)
____  (1673 × 30)

____
```

4
```
   3496
×    25
      (3496 × 5)
____  (3496 × 20)

____
```

Work out

5 5728 × 16   **9** 6257 × 43

6 4359 × 37   **10** 1985 × 24

7 2584 × 29   **11** 4874 × 39

8 3046 × 35   **12** 7169 × 48

C

Work out

1 24 135 × 28

2 57 248 × 19

3 42 186 × 34

4 16 259 × 45

5 35 367 × 26

6 49 526 × 37

7 21 687 × 85

8 52 958 × 64

9 249 × 183

10 376 × 256

11 458 × 149

12 864 × 572

13 327 × 265

14 483 × 174

15 739 × 328

16 562 × 437

17 One can weighs 387 g. There are 36 cans in a box. What is the total weight of 25 boxes in kilograms?

Lesson 2 – Division

Starter – Quick 10

Answer these 10 questions, which cover areas of maths you have already been taught, as quickly as possible. Time yourself and see if you can beat your time from lesson 1.

Question	Answer	Question	Answer
EXAMPLE: 2 X 4 =	**8**		
1. 11 087 – 100 =		6. 70 x 80 =	
2. 4 squared=		7. 2 /3 + 7/9 =	
3. 6 x 2 =		8. 45 – (7 x 4) =	
4. 11/6 - 8/6=		9. 140.078 – 9.927 =	
5. 25% of 2458 =		10. 2.95 ÷ 100 =	

Activity 2 – Target Maths – Pick either A, B or C depending on your confidence level.

LONG DIVISION 1

TARGET To use the formal written method of long division.

Examples

853 ÷ 24

```
         35
   24)853
      720   (24 × 30)
      ───
      133
      120   (24 × 5)
      ───
       13
```
Answer 35 r 13
or $35\frac{13}{24}$

4259 ÷ 18

```
        236
   18)4259
      36▾
      ──
      65
      54▾
      ──
      119
      108
      ───
       11
```
Answer 236 r 11
or $236\frac{11}{18}$

5091 ÷ 35

$145\frac{16}{35}$
```
   35)5091
      35
      ───
      159
      140
      ───
      191
      175
      ───
       16
```
Answer 145 r 16
or $145\frac{16}{35}$

A
Work out
1. 325 ÷ 25
2. 312 ÷ 13
3. 400 ÷ 18
4. 709 ÷ 22
5. 720 ÷ 31
6. 514 ÷ 24
7. 550 ÷ 17
8. 680 ÷ 29
9. 378 ÷ 27
10. 588 ÷ 14
11. 390 ÷ 19
12. 442 ÷ 26
13. 529 ÷ 15
14. 560 ÷ 42
15. 672 ÷ 21
16. 481 ÷ 33

B
Work out
1. 1997 ÷ 13
2. 3925 ÷ 32
3. 4080 ÷ 17
4. 5568 ÷ 24
5. 6783 ÷ 41
6. 4900 ÷ 35
7. 6764 ÷ 19
8. 9247 ÷ 28
9. 7973 ÷ 36
10. 9182 ÷ 52
11. 8004 ÷ 23
12. 9527 ÷ 45
13. 5076 ÷ 39
14. 6951 ÷ 27
15. 7544 ÷ 46
16. 10825 ÷ 29

17. There are 16 sausages in each pack. How many packs can be made from 8750 sausages?

18. A group booking of 36 plane tickets costs £6696. What does each ticket cost?

19. Each bag holds 25 coins. How many bags are needed for 6784 coins?

C
Work out
1. 18 600 ÷ 15
2. 10 469 ÷ 24
3. 12 043 ÷ 37
4. 65 284 ÷ 26
5. 84 637 ÷ 18
6. 92 421 ÷ 27
7. 14 589 ÷ 34
8. 10 607 ÷ 16
9. 91 276 ÷ 38
10. 13 618 ÷ 43
11. 79 054 ÷ 29
12. 120 268 ÷ 36
13. 68 379 ÷ 54
14. 90 240 ÷ 42
15. 114 044 ÷ 28
16. 105 888 ÷ 65

Lesson 3 – Apply

Starter – Quick 10

Answer these 10 questions, which cover areas of maths you have already been taught, as quickly as possible. Time yourself and see if you can beat your time from lesson 1.

Question	Answer	Question	Answer
EXAMPLE: 2 X 4 =	8		
1. 148, 099 – 1000 =		6. 70 x 50 =	
2. 10 squared=		7. 3/21 + 7/3 =	
3. 9 x 8 =		8. 20 + 12 ÷ 4 =	
4. 14/15 - 4/15=		9. 12.95 – 0.737 =	
5. 75% of 844 =		10. 0.008 x 100 =	

Activity 3: Answer the test base questions

Q1.

Layla makes jewellery to sell at a school fair.

Each bracelet has **53** beads.

She makes **68** bracelets.

Each necklace has **105** beads.

She makes **34** necklaces.

How many beads does Layla use **altogether?**

3 marks

Q2.

Dev has a bag of 50p coins and Holly has a bag of 20p coins.

50p coins

Dev's bag

20p coins

Holly's bag

Both bags have the same amount of money in.

There are **thirty** 50p coins in Dev's bag.

How many 20p coins are there in Holly's bag?

Show your method

20p coins

2 marks

Q3.

A box contains trays of melons.

There are 15 melons in a tray.

There are 3 trays in a box.
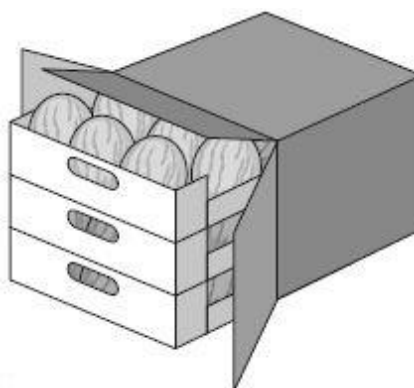
A supermarket sells **40** boxes of melons.

How many melons does the supermarket sell?

melons

2 marks

Q4.

Emma saves £3.50 each week.

How much has she saved after 16 weeks?

£

1 mark

Q5.

3 pineapples cost the same as 2 mangoes.

One mango costs £1.35
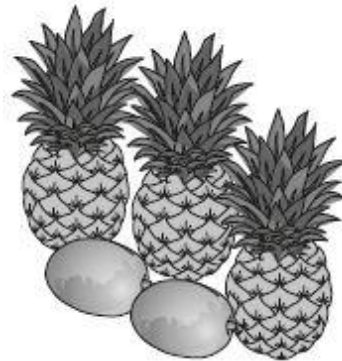
How much does **one** pineapple cost?

Show
your
method

£

Q6.

Ally and Jack buy some stickers.

Pack of 12 stickers
£10.49

12 stickers
99p each

Ally buys a pack of 12 stickers for £10.49

Jack buys 12 single stickers for 99p each.

How much more does Jack pay than Ally?

Show
your
method

£

Q7.

A shop sells food for birds.

£3.79 for a bag   £1.35 for a bag   £8.95 each

Lara has £10 to spend on peanuts.

How many bags of peanuts can she get for £10?

1 mark

Amir has £20

He wants to buy a bird-feeder and 4 bags of bird seed.

How much **more** money does he need?

Show your method

£

2 marks

Q8.

Forest School sells badges for charity.

For each badge sold, **£1.20** is given to a charity.

How much does the charity get when **12** badges are sold?

£

1 mark

If the charity got **£24**, how many badges were sold?

1 mark

Q9.

Shenaz buys a pack of **24 cans** of cola for **£6.00**

What is the cost of **each can**?
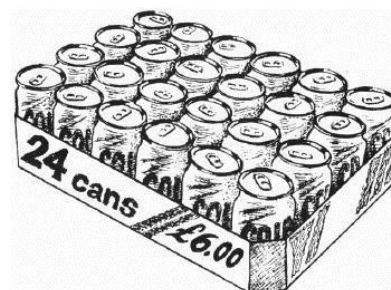
Show
your
method

2 mark

Q10.

There are **12 pencils** in a box.

A school buys **24 boxes**.

How many **pencils** does the school buy?

Show your method

2 marks

ANSWERS:

Activity 1: Multiplication Answers

Page 13

A

1 884	5 2646	9 5916
2 8856	6 1482	10 6132
3 864	7 931	11 7446
4 9345	8 1955	12 16 425

B

1 32 422	5 91 648	9 269 051
2 35 532	6 161 283	10 47 640
3 63 574	7 74 936	11 190 086
4 87 400	8 106 610	12 344 112

C

1 675 780	7 1 843 395	13 86 655
2 1 087 712	8 3 389 312	14 84 042
3 1 434 324	9 45 567	15 242 392
4 731 655	10 96 256	16 245 594
5 919 542	11 68 242	17 348·3 kg
6 1 832 462	12 494 208	

Activity 2: Division Answers

Page 18

A

1 13	5 23 r 7	9 14	13 35 r 4
2 24	6 21 r 10	10 42	14 13 r 14
3 22 r 4	7 32 r 6	11 20 r 10	15 32
4 32 r 5	8 23 r 13	12 17	16 14 r 19

B

1 153 r 8	6 140	11 348	16 373 r 8
2 122 r 21	7 356	12 211 r 32	17 546
3 240	8 330 r 7	13 130 r 6	18 £186
4 232	9 221 r 17	14 257 r 12	19 272
5 165 r 18	10 176 r 30	15 164	

C

1 1240	5 4702 r 1	9 2402	13 1266 r 15
2 436 r 5	6 3423	10 316 r 30	14 2148 r 24
3 325 r 18	7 429 r 3	11 2726	15 4073
4 2510 r 24	8 662 r 15	12 3340 r 28	16 1629 r 3

Activity 3: Test Base Answers

Q1.

Award **THREE** marks for the correct answer of 7,174

If the answer is incorrect, award **TWO** marks for:

- evidence of an appropriate complete method which contains no more than **ONE** arithmetic error, e.g.

$$\begin{array}{r} 53 \\ \times\ \ 68 \\ \hline 3504\ \textit{(error)} \end{array} \qquad \begin{array}{r} 105 \\ \times\ \ 34 \\ \hline 3570 \end{array}$$

3,504 + 3,570 = 7,074

Award **ONE** mark for:

- evidence of an appropriate method with more than **ONE** arithmetic error.

OR

- sight of 3,604 as evidence of long multiplication step (68 × 53) completed correctly.

OR

- sight of 3,570 as evidence of long multiplication step (105 × 34) completed correctly.

> *Answer need not be obtained for the award of **ONE** mark.*
>
> *A misread of a number may affect the award of marks. No marks are awarded if there is more than **ONE** misread or if the mathematics is simplified.*
>
> ***TWO** marks will be awarded if an appropriate method with the misread number is followed through correctly.*
>
> ***ONE** mark will be awarded for evidence of an appropriate method with the misread number followed through correctly with no more than **ONE** arithmetic error.*

Up to 3m

[3]

Q2.

Award **TWO** marks for the correct answer of 75

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg:

- 30 × 50 = 1500
  1500 ÷ 20

OR

- 30 × 50p = £15
  5 20p coins make £1
  5 × 15

OR

- 50p ÷ 20p = 2.5
  30 × 2.5

> *Answer need not be obtained for the award of **ONE** mark.*

Up to 2

[2]

Q3.

Award **TWO** marks for the correct answer of 1800

If the answer is incorrect, award **ONE** mark for evidence of appropriate complete method with no more than one arithmetic error, e.g.

- 40 × 15 = 500 *(error)*
  500 × 3 = 1500

> ***Do not** accept sight of a correct multiplication, e.g. 40 × 15 × 3, for **ONE** mark unless part of the calculation is evaluated*

correctly.

*Misreads are **not** allowed.*

If no answer is given, the first part of the calculation must be evaluated correctly for the award of **ONE** mark, e.g.

- 15 × 3 = 45
  45 × 40 =

OR

- 40 × 15 = 600
  600 × 3 =

OR

- 40 × 3 = 120
  120 × 15 =

Up to 2m

[2]

Q4.

£56

Accept also £56 00 (with clear space between 6 and 0) or £56.00p.

[1]

Q5.

Award **TWO** marks for the correct answer of £0.90

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- £1.35 × 2 = £2.70
  £2.70 ÷ 3

*Accept for **ONE** mark an answer of £90p **OR** £0.9 as evidence of an appropriate method.*

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

[2]

Q6.

Award **TWO** marks for the correct answer of £1.39

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

- 12 × 99p = £11.88
  £11.88 − £10.49

*Accept for **ONE** mark an answer of £139 **OR** £139p as evidence of an appropriate method.*

Answer need not be obtained for the award of ONE mark.

<div align="right">

Up to 2m

[2]
</div>

Q7.

   (a)   7

> *Accept 7 r 55p.*
> ***Do not*** *accept 7 r 55*

<div align="right">

1
</div>

   (b)   Award **TWO** marks for the correct answer of £4.11

      If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg
4 × 3.79 = 15.16
8.95 + 15.16 = 24.11
24.11 – 20

> *Accept for **ONE** mark £411 **OR** £411p as evidence of appropriate method.*
> *Answer need not be obtained for the award of **ONE** mark.*

<div align="right">

Up to 2

[3]
</div>

Q8.

   (a)   £14.40

> ***Do not*** *accept £14.4*

<div align="right">

1
</div>

   (b)   20

> ***Do not*** *accept £20*

<div align="right">

1

[2]
</div>

Q9.

Award **TWO** marks for the correct answer of 25p **OR** £0.25 **OR** 25 pence.

   If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg 600 ÷ 24 = wrong answer.

> *Accept £0 25 **OR** £0.25p **OR** £0 25p **OR** 25 **OR** 0.25 **OR** £0-25.*
> *Calculation must be performed for the award of **ONE** mark.*

<div align="right">

Up to 2

[2]
</div>

Q10.

Award **TWO** marks for the correct answer of 288

   If the answer is incorrect, award **ONE** mark for an appropriate calculation such as

12 × 24 = incorrect answer