Notes

Year 4

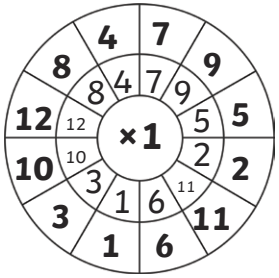
Multiplication and Division

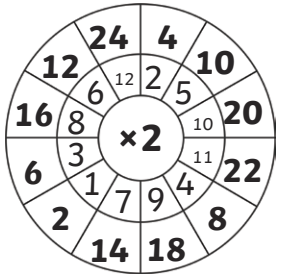
Maths Home Learning Activity Booklet

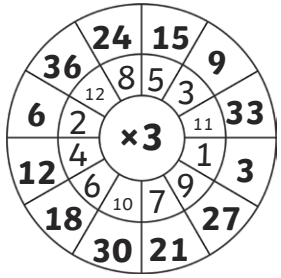
Answers

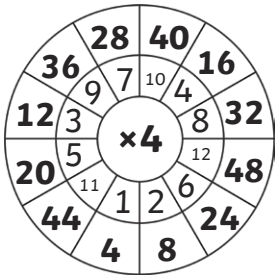
Multiplication Wheels

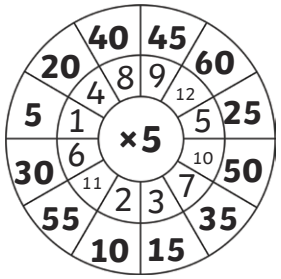
Multiply the numbers by the middle number.

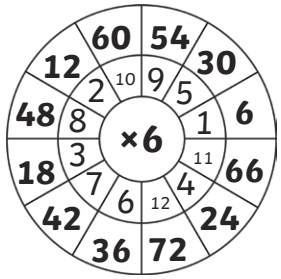


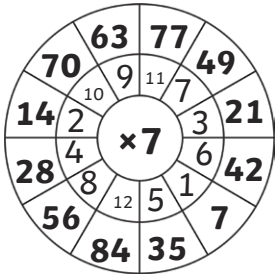


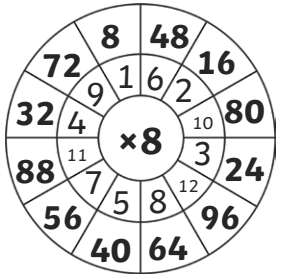


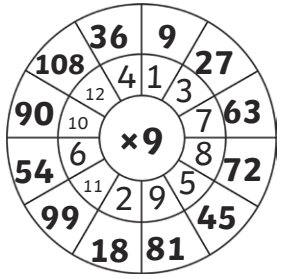


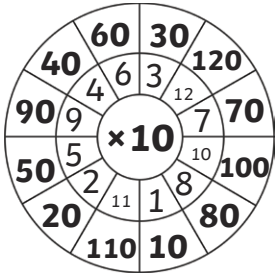


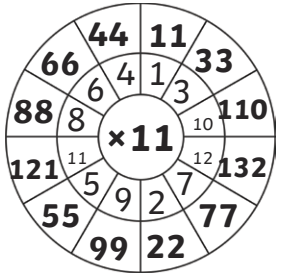


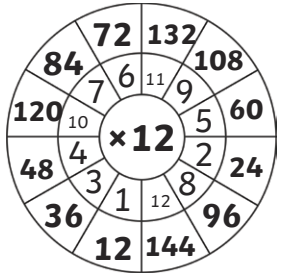












Problems Involving Scaling Worksheet

question	answer
1	£5.40
2	51cm
3	200g
4	48 squares
5	80 squares
6	£5.31
7	£68
8	100ml

Correspondence Type Word Problems:

question	answer
1	**72**
2	**25 possible combinations**
3	**7**
4	**20**
5	**Multiple possible answers:** **e.g. 50 cars and 25 bikes = 50 × 4 + 25 × 2 = 250**
6	**90 + 10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 145cm**
7	**Multiple possible answers:** **e.g. Raju + Sunnah = 35 Triplets = 3 35 × 2 + 3 × 3 = 79**
8	**12 possible combinations**

Multiplying Three Numbers

1. 2 × 1 × 2 =	**4**	2. 3 × 2 × 3 =	**18**
3. 3 × 0 × 3 =	**0**	4. 4 × 3 × 2 =	**24**
5. 4 × 3 × 4 =	**48**	6. 5 × 4 × 5 =	**100**
7. 2 × 8 × 2 =	**32**	8. 2 × 7 × 4 =	**56**
9. 5 × 2 × 4 =	**40**	10. 1 × 3 × 9 =	**27**
11. 2 × 4 × 8 =	**64**	12. 2 × 3 × 9 =	**54**
13. 9 × 2 × 5 =	**90**	14. 2 × 2 × 9 =	**36**
15. 4 × 4 × 4 =	**64**	16. 3 × 3 × 3 =	**27**
17. 6 × 2 × 6 =	**72**	18. 7 × 1 × 2 =	**14**
19. 4 × 2 × 8 =	**64**	20. 10 × 2 × 3 =	**60**

Multiplying by 1 and 0 and Dividing by 1

question	answer	question	answer
A.			
1	**12**	10	**31**
2	**82**	11	**0**
3	**0**	12	**0**
4	**25**	13	**50**
5	**342**	14	**50**
6	**212**	15	**3983**
7	**0**	16	**26**
8	**1**	17	**1**
9	**0**	18	**0**
B.			
1	**72 ÷ 1 = 72**		
2	**79 x 1 = 79**		
3	**65 x 0 = 0**		
C.			

Beginning Number	÷1	×1	×0	÷1	Ending Number
32	**32**	**32**	**0**	**0**	**0**

Beginning Number	÷1	×1	×1	×0	Ending Number
1	**1**	**1**	**1**	**0**	**0**

Beginning Number	×1	÷1	×1	÷1	Ending Number
10 000	**10 000**	**10 000**	**10 000**	**10 000**	**10 000**

19. 271 × 5 = 1355

20. 834 × 4 = 3336

21. 352 × 3 = 1056

22. 742 × 3 = 2226

23. 185 × 4 = 740

24. 400 × 3 = 1200

25. 169 × 2 = 338

26. 576 × 6 = 3456

27. 136 × 5 = 680

28. 482 × 3 = 1446

29. 506 × 3 = 1518

30. 411 × 5 = 2055

31. 749 × 6 = 4494

32. 146 × 2 = 292

33. 822 × 2 = 1644

34. 673 × 2 = 1346

35. 907 × 5 = 4535

36. 129 × 2 = 258

37. 883 × 2 = 1766

38. 861 × 4 = 3444

39. 854 × 6 = 5124

40. 645 × 5 = 3225

Multiplying 3-Digit by 1-Digit Numbers

1. 214 × 4 = 856

2. 301 × 4 = 1204

3. 825 × 6 = 4950

4. 656 × 5 = 3280

5. 540 × 3 = 1620

6. 978 × 5 = 4890

7. 216 × 2 = 432

8. 209 × 4 = 836

9. 966 × 4 = 3864

10. 345 × 3 = 1035

11. 146 × 4 = 584

12. 938 × 2 = 1876

13. 676 × 5 = 3380

14. 278 × 3 = 834

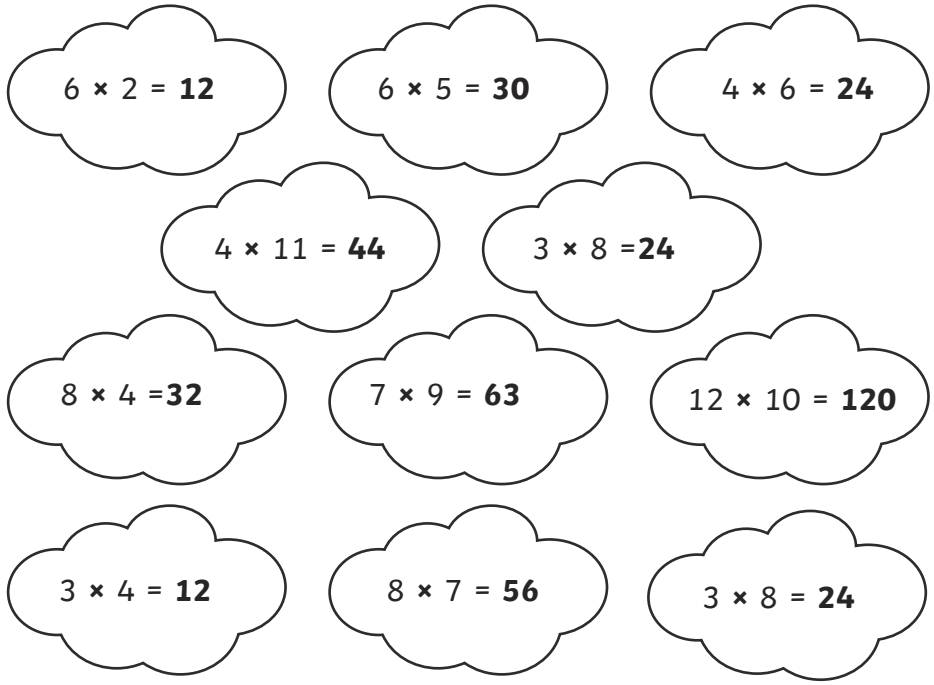
15. 159 × 3 = 477

16. 846 × 4 = 3384

17. 536 × 4 = 2144

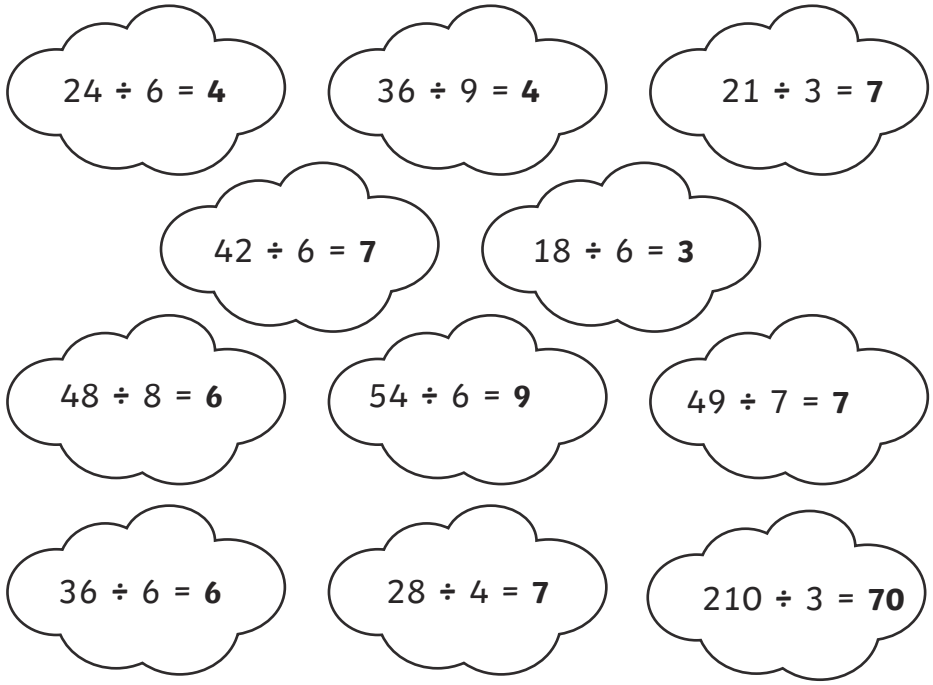
18. 365 × 2 = 730

Multiplying Mentally Using Known Facts



6 × 20 = **120**	40 × 11 = **440**	6 × 50 = **300**	40 × 6 = **240**	3 × 80 = **240**
80 × 4 = **320**	7 × 90 = **630**	120 × 10 = **1200**	3 × 40 = **120**	80 × 7 = **560**
600 × 2 = **1200**	4 × 1100 = **4400**	600 × 5 = **3000**	4 × 600 = **2400**	300 × 8 = **2400**
8 × 400 = **3200**	700 × 9 = **6300**	12 × 1000 = **12000**	300 × 4 = **1200**	8 × 700 = **5600**
60 × 20 = **1200**	40 × 110 = **4400**	60 × 50 = **3000**	40 × 60 = **2400**	30 × 80 = **2400**
80 × 40 = **3200**	70 × 90 = **6300**	120 × 100 = **12000**	30 × 40 = **1200**	80 × 70 = **5600**

Dividing Mentally Using Known Facts



Missing Numbers 2-Digit × 1-Digit Multiplication

Question	Answer
1	6, 4
2	1
3	1, 6
4	4, 5
5	0
6	9, 5
7	2
8	7
9	5, 4
10	1, 3
11	1
12	6
13	2
14	1
15	9
16	1, 4
17	8, 4
18	5
19	2
20	9, 4

Question	Answer
21	2
22	9, 3
23	4
24	1
25	5, 2
26	1, 6
27	3, 5
28	7
29	8
30	8, 5
31	4
32	5, 2
33	9
34	3
35	7, 5
36	4, 2
37	2
38	5
39	2, 6
40	4

Three Digit × One Digit Multiplication

question	answer
1	**501**
2	**411**
3	**1044**
4	**957**
5	**3145**
6	**2502**
7	**1170**
8	**5553**
9	**972**

The Commutative Law of Multiplication

In most cases it is better to multiply the larger by the smaller so 17 × 4 = 68; however children may justify why they keep the 5 at the beginning of the calculation e.g. 5 × 27 because they know that 5 × 20 = 100.

17 × 4 = 68	8 × 21 = 168	28 × 8 = 224	21 × 5 = 105
3 × 24 = 72	3 × 18 = 54	7 × 17 = 119	8 × 26 = 208
5 × 17 = 85	28 × 9 = 252	15 × 8 = 120	9 × 24 = 216
29 × 6 = 174	2 × 15 = 30	5 × 27 = 135	7 × 29 = 203
4 × 18 = 72	12 × 4 = 48	3 × 24 = 72	27 × 6 = 162
7 × 11 = 77	29 × 5 = 145	17 × 3 = 51	5 × 17 = 85
19 × 3 = 57	7 × 27 = 189	4 × 14 = 56	
7 × 30 = 210	4 × 29 = 116	6 × 24 = 144	

The Commutative Law of Multiplication

question	answer
1	2 × 5 × 12 = 10 × 12 = 120
2	13 × 2 × 2 = 26 × 2 = 52
3	5 × 4 × 10 = 20 × 10 = 200
4	5 × 2 × 5 = 10 × 5 = 50
5	5 × 5 × 4 = 25 × 4 = 100
6	5 × 12 × 10 = 60 × 10 = 600
7	5 × 2 × 14 = 10 × 14 = 140
8	0 × 13 × 7 = 0 × 7 = 0
9	2 × 2 × 2 × 11 = 8 × 11 = 88
10	10 × 10 × 136 = 100 × 136 = 13 600
11	2 × 5 × 3 × 4 × 1 = 10 × 3 × 4 × 1 = 10 × 12 × 1 = 120

Multiplying Two-Digit Numbers by One-Digit Numbers

1. 24 × 4 = 96	2. 22 × 5 = 110	3. 18 × 5 = 90	4. 26 × 3 = 78
5. 12 × 5 = 60	6. 48 × 2 = 96	7. 41 × 9 = 369	8. 31 × 7 = 217
9. 44 × 7 = 308	10. 32 × 7 = 224	11. 62 × 3 = 186	12. 66 × 4 = 264
13. 82 × 4 = 328	14. 87 × 8 = 696	15. 94 × 8 = 752	16. 53 × 8 = 424
17. 85 × 4 = 340	18. 75 × 3 = 225	19. 68 × 6 = 408	20. 78 × 7 = 546