Understand and use multiples

1

35

7	7	7	7	7
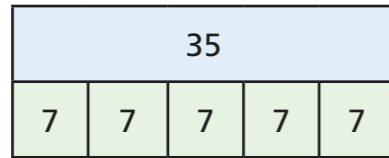
a) Explain how the bar model shows that 35 is a multiple of 7

It shows that 5×7 = 35

b) Find three more multiples of 7 other than 35

_E.g. 42, 21, 7_

c) Find a multiple of 7 greater than 1,000   e.g. 7,000

d) Explain to a partner why 40 is not a multiple of 7

2 Draw a bar model to illustrate why 48 is a multiple of 8

48

8	8	8	8	8	8

3 Find any five multiples of these numbers. E.g.

a) 5 _5, 10, 15, 20, 25_

b) 11 _11, 22, 33, 44, 55_

c) 17 _17, 34, 51, 68, 85_

4

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

a) Circle all the multiples of 12 in the hundred square.

b) Draw a square around all the multiples of 8

c) List all the common multiples of 12 and 8 between 1 and 100

_24, 48, 72, 96_

Discuss how you found the common multiples with a partner.

d) What is the lowest common multiple of 12 and 8?

_24_

5 Find the lowest common multiple of these numbers.

a) 4 and 5

_20_

b) 15 and 10

_30_

c) 9 and 7

63

d) 9, 6 and 2

18

6 Tick all the multiples of 30

| 5 | 0 | 3,003 | 90 ✓ | 180 ✓ | 6 |

| 300 ✓ | 1,000 | 930 ✓ | 3,000 ✓ | 30 ✓ | 130 |

7 495 is a multiple of 15

Find the first three multiples of 15 above 500

_510,   525,   540_

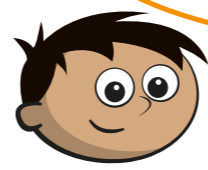**8** Teddy and Rosie are discussing whether 6 is a multiple or a factor of 6

I think 6 is a factor of 6

I think 6 is a multiple of 6

Who do you agree with? ___Both___

Explain why.

9

To find the lowest common multiple of two numbers, you can multiply them.

Tick the pairs of numbers that Amir's method will work for.

7 and 9 ✓   10 and 8   12 and 4   6 and 8

10 What is the lowest common multiple of 3, 5 and 20?

60

Discuss the most efficient way to find the answer.