

Number

Understanding the number system

The times tables

- 1 Complete the times tables grid below. Consider how you find each term. Is there more than one strategy that can help to complete the grid?

×	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

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2 Complete the multiplication grid.

×						
				24		
					81	
				22		
		42				
			15			
	32				72	

Divisibility rules

3 Here are some numbers:

123, 99, 82, 128, 679, 500, 999, 1134

Which of these numbers are:

3a multiples of 3?

3b multiples of 6?

3c multiples of 7?

3d multiples of 9?

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Multiples and factors

4 List the factors of the following numbers:

4a 10

4b 15

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4c 16

4d 17

4e 20

4f 60

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4g 100

4h 360

4i 500

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HCF and LCM

5 Find the HCF of

5a 6 and 9

Factors of 6:

Factors of 9:

HCF:

5b 14 and 18

Factors of 14:

Factors of 18:

HCF:

5c 30 and 24

Factors of 30:

Factors of 24:

HCF:

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5d 15 and 10

Factors of 15:

Factors of 10:

HCF:

6 Find the LCM of

6a 5 and 3

Multiples of 5:

Multiples of 3:

LCM:

6b 9 and 6

Multiples of 9:

Multiples of 6:

LCM:

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6c 8 and 10

Multiples of 8:

Multiples of 10:

LCM:

6d 12 and 9

Multiples of 12:

Multiples of 9:

LCM:

6e 15 and 20

Multiples of 15:

Multiples of 20:

LCM:

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6f 6 and 11

Multiples of 6:

Multiples of 11:

LCM:

Primes

- 7** Complete the 'Sieve of Eratosthenes' to find the primes by circling first the number two, then shading in its multiples, before moving on three, then five etc. on the grid below:

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

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Prime factor trees

8 Complete factor trees for the following numbers:

8a 20

8b 100

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8c 88

9 Draw as many different factor trees for 40 as you can.

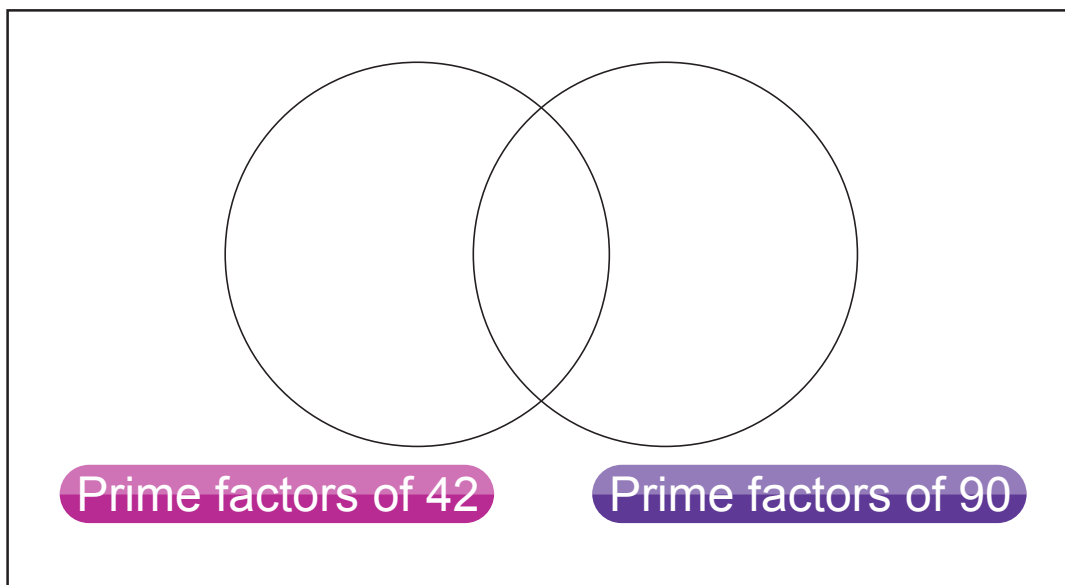
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Primes, HCF and LCM

- 10** Use a Venn diagram of the prime factors to find the HCF and LCM of 42 and 90

Prime factor trees:



HCF (42, 90) =

LCM (42, 90) =