

15.11.21

What is a multiple?

1 Calculate.

$$2,140 + 794 = \underline{\hspace{2cm}}$$

$$10,000 - 4,192 = \underline{\hspace{2cm}}$$

$$3,261 \times 7 = \underline{\hspace{2cm}}$$

$$276 \div 4 = \underline{\hspace{2cm}}$$

What is a multiple?

Multiple

A multiple is the result of multiplying a number by another number.

What do you think a common multiple is?

Multiples of 5

Multiples of 7

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

Which numbers are common multiple?

Aki visits gran every 4 days. Aki's mum visits her every 6 days. On which days do they both visit Gran?

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

Task

Find common multiples of:

2 and 3 up to 20

2 and 5 up to 30

5 and 10 up to 50

Find 3 common multiples for:

3 and 5

5 and 6

3 and 7

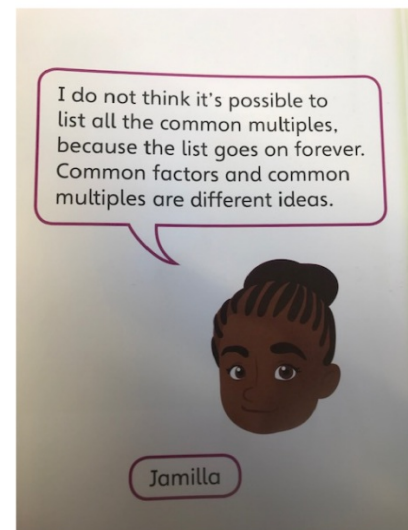
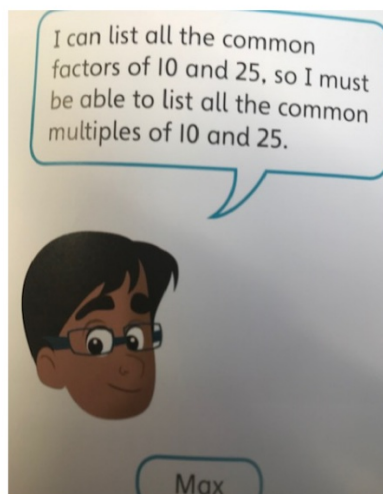
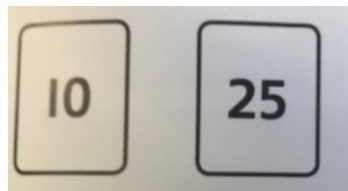
4 and 7

5 and 8

Circle the lowest common multiple

Plenary

Max and Jamilla are discussing common factors and common multiples.



16.11.21

Can you make a factor multiple chain?

4 Complete the addition pyramid.



What is a factor?

What is a multiple?

Each number in the chain has to be between 2 and 100.

Make a factor multiple chain with your partner using only 4 numbers.

Task

What are the smallest numbers that can make a chain?

What are the largest numbers that can make a chain?

Can you make a chain that ends with 100?

What is the largest possible difference between 2 adjacent numbers?

17.11.21

What is a prime number?

- 5 Amy completes the calculation $145 \div 6$
She gets a remainder of 7
Explain how you know Amy is incorrect.

What is a prime number?

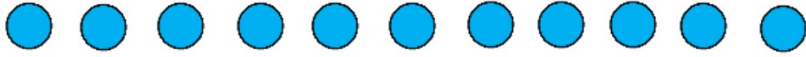
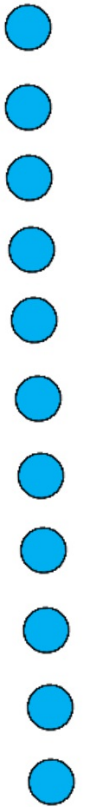
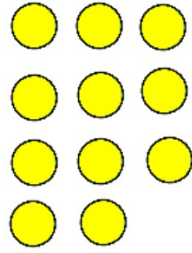
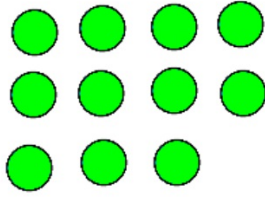
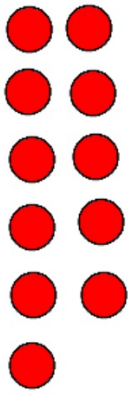
Prime Numbers

A prime number is a number that has two factors.

11 and 21

Are they both prime numbers?

How can I find out?



Task

How many prime numbers can you identify?

Circle the ones you find on the number grid you have.

Choose a prime number and convince me that it is prime.

Choose a number that is not prime and convince me.

Plenary

True or False

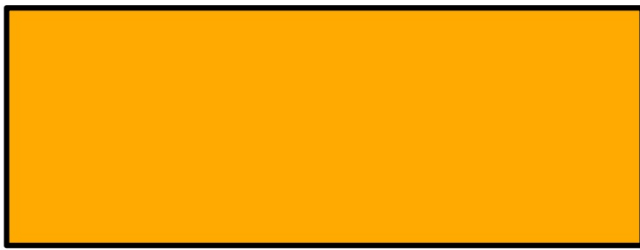
- 1) All prime numbers are odd numbers.
- 2) There are ten prime numbers less than 30.
- 3) All prime numbers have exactly two factors.
- 4) A square number cannot be a prime number.

18.11.21

What are squared and cubed numbers?

What is a squared number?

Build a square using 4 dots

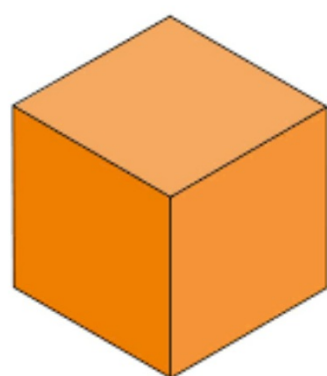


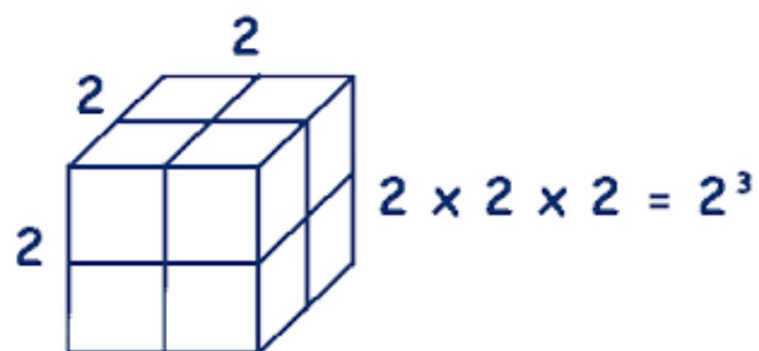
Build a square using 9 dots

What number sentence represents this?

What about 25 dots?

If squared numbers build a square what do cubed numbers do?





What is 3^3 ?

Use cubes to help you

What is 5^3 ?

-
- 3 cubed 4 squared
- 8 squared 4 cubed
- 11 squared 5 cubed

Task

Create square numbers from 1^2 - 12^2 using spots.

Write the number sentences that your square represents.



$$2^2 \text{ or } 2 \times 2 = 4$$



$$3^2 \text{ or } 3 \times 3 = 9$$

			1			1
						8
	3×3			3^3		27
	4×4				$4 \times 4 \times 4$	
		25		5^3		
					$6 \times 6 \times 6$	
8^2						

Plenary

Place 5 odd and 5 even numbers in the table.

	Not Cubed	Cubed
Over 100		
100 or less		

19.11.21

What is the order of operations?

How would you solve this calculation?

$$3 + 5 \times 2 =$$

Order of operations

Brackets

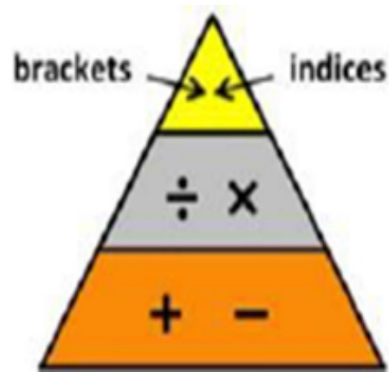
Order

Division

Multiplication

Addition

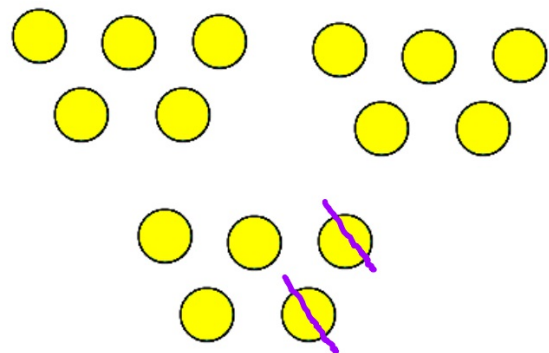
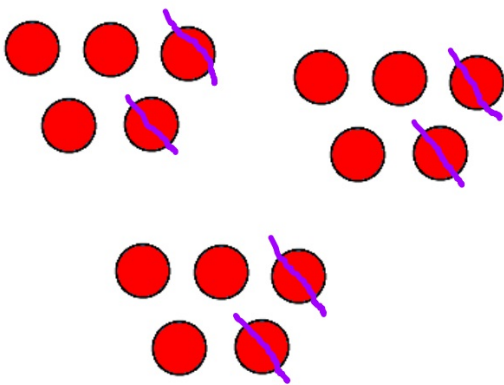
Subtraction



$$3 + 5 \times 2 =$$

$$3 \times 5 - 2 =$$

Which is correct



Can you solve

$$3 + 4 \times 2 =$$

$$100 - 25 \times 2 =$$

$$11 \times 2 + 3 \times 11 =$$

What do you do first?

$$2 \times 15 \div 3 =$$

Task

$$3 \times 2 + 5 =$$

$$3 + 2 \times 5 =$$

$$3 \times 5 + 2 =$$

$$3 \times 12 - 3 =$$

$$20 + 20 \times 2 =$$

$$10 \times 2 \times 3 =$$

Challenge

Write BODMAS statements that equal 15.

