

**LO: To identify factors, multiples,
primes, squares and cubed numbers**

To solve BODMAS problems

Let's revise the key terms:

Factor: Numbers that go into that number. The factors of 12 are: 1,2,3,4,6,12

Multiples: The times tables of that number. The multiples of 12 are: 12,24,36,48..... they are limitless.

Prime: Numbers that only have two factors- themselves and 1. 12 is not prime... but 11 is!

Square: When a number is multiplied by itself e.g. 12 square (which is identified by a small hovering 2) is $12 \times 12 = 144$

Cubed: When a number is multiplied by itself three times e.g. 12 cubed is $12 \times 12 \times 12 = 1728$ (it is shown by a hovering 3)

TASK 1: Answer each of the questions about the following numbers

a)2

b)3

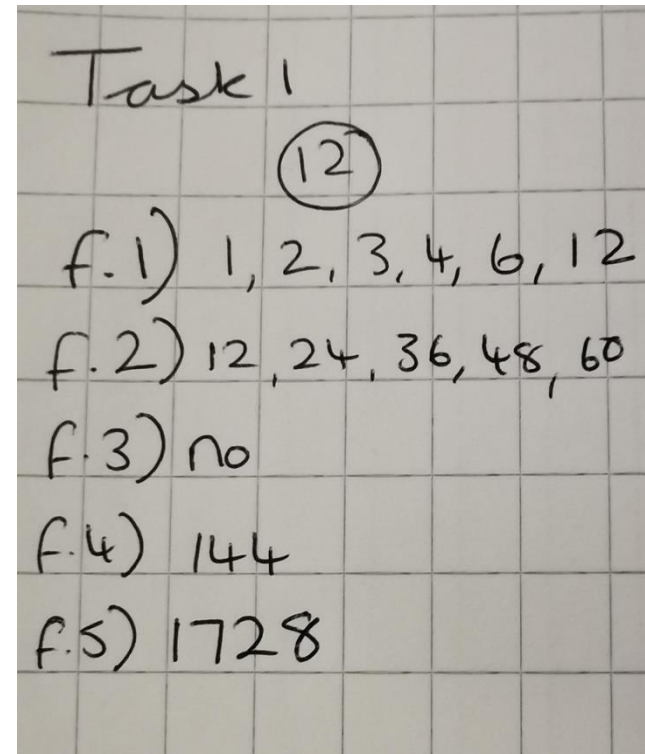
c)7

d)9

e)24

- .1 Write down all the factors of that number
- .2 Write down the first 5 multiples of that number
- .3 Is the number prime?
- .4 What is _____²
- .5 What is _____³

How to set out in your book:



TASK 1: ANSWERS

②

a.1) 1, 2

a.2) 2, 4, 6, 8, 10

a.3) Yes

a.4) 4

a.5) 8

③

b.1) 1, 3

b.2) 3, 6, 9, 12, 15

b.3) Yes

b.4) 9

b.5) 27

⑦

c.1) 1, 7

c.2) 7, 14, 21, 28, 35

c.3) Yes

c.4) 49

c.5) 343

⑨

d.1) 1, 3, 9

d.2) 9, 18, 27, 36, 45

d.3) No

d.4) 81

d.5) 72^9

②4

e.1) 1, 2, 3, 4, 6, 8, 12, 24

e.2) 24, 48, 72, 96, 120

e.3) No

e.4) 576

e.5) 13, 824

TASK 2: Write down all of the numbers between 1-100 that are prime.

TASK 2: ANSWERS

2 3 5 7 11 13 17
19 23 29 31 37 41
43 47 53 59 61 67
71 73 79 83 89 97

TASK 3: Fill in the blanks

$$\boxed{A}^2 = 81$$

$$\boxed{B}^2 = 36$$

$$\boxed{C}^2 = 4$$

$$1^2 = \boxed{D}$$

$$\boxed{E}^2 = 49$$

$$11^2 = \boxed{F}$$

$$\boxed{G}^2 = 9$$

$$\boxed{H}^3 = 125$$

$$\boxed{I}^3 = 64$$

$$\boxed{J}^2 = 64$$

$$23^2 = \boxed{K}$$

$$7^3 = \boxed{L}$$

TASK 3: ANSWERS

$$\boxed{9}^2 = 81$$

$$\boxed{6}^2 = 36$$

$$\boxed{2}^2 = 4$$

$$1^2 = \boxed{1}$$

$$\boxed{7}^2 = 49$$

$$11^2 = \boxed{121}$$

$$\boxed{3}^2 = 9$$

$$\boxed{5}^3 = 125$$

$$\boxed{4}^3 = 64$$

$$\boxed{8}^2 = 64$$

$$23^2 = \boxed{529}$$

$$7^3 = \boxed{343}$$

TASK 4: Common factors and multiples.

Write down all the common factors of these pairs of numbers:

$64/24$

$36/54$

$20/40$

Write down all the common multiples up to 100 of these pairs of number

$3/12$

$5/9$

$4/10$

TASK 4: Common factors and multiples.

Write down all the common factors of these pairs of numbers:

$$64/24 = 1, 2, 4, 8$$

$$36/54 = 1, 2, 3, 6, 9$$

$$20/40 = 1, 2, 4, 5, 10, 20$$

Write down all the common multiples up to 100 of these pairs of number

$$3/12 = 12, 24, 36, 48, 60, 72, 84, 96$$

$$5/9 = 45, 90$$

$$4/10 = 20, 40, 60, 80, 100$$

OK Let's recap on BODMAS

B	O	D	M	A	S
Brackets (...)	Orders \sqrt{x} x^2	Division \div	Multiplication \times	Addition $+$	Subtraction $-$

BODMAS is used when there is more than one operation in a calculation.

Watch the video below to recap on how to solve BODMAS problems:

<https://www.youtube.com/watch?v=8EMEOc7Iil>

TASK 5: Write out the calculation and answer in your book.

1. $8 \times (5 + 4) =$

2. $7 \times (4 + 8) =$

3. $6 \times (6 + 4) =$

4. $7 + 28 \div 4 =$

5. $6 + 72 \div 9 =$

6. $4 + 28 \div 7 =$

7. $(3 + 8) \times 5 =$

8. $(6 + 4) \times 8 =$

9. $(9 + 2) \times 7 =$

10. $32 \div (4 + 4) =$

11. $18 \div (7 + 2) =$

12. $54 \div (4 + 5) =$

13. $48 \div (14 - 8) =$

**REMEMBER
TO USE
BODMAS!**

TASK 5: ANSWERS

1) 72

2) 84

3) 60

4) 14

5) 14

6) 8

7) 55

8) 80

9) 77

10) 4

11) 2

12) 6

13) 8

TASK 6: Now try these really challenging BODMAS question. Write out the calculation and answer in your book. Show your method clearly.

$$a) 16 + 3 \times (7 - 5) - 4 =$$

$$b) 8^2 + 103 - (9 \times 12) =$$

$$c) (14 + 21) \times 2^2 - 40 \div 8 =$$

TASK 6: ANSWERS

18

59

135