

Factors and Multiples - Worksheet

Skill

Group A - Factors

List all the factors of:

1) 2

2) 3

3) 7

4) 10

5) 12

6) 20

7) 24

8) 32

9) 50

10) 60

11) 75

12) 100

Group B - Multiples

Write down the first six multiples of:

1) 2

2) 3

3) 5

4) 7

5) 9

6) 10

7) 11

8) 20

9) 35

10) 50

11) 100

12) 250

Group C - HCF and LCM

Find the HCF and LCM of:

1) 5 and 6

2) 2 and 7

3) 3 and 8

4) 6 and 8

5) 9 and 12

6) 15 and 40

7) 12 and 20

8) 13 and 4

9) 18 and 6

10) 10, 12 and 15

11) 12, 24 and 30

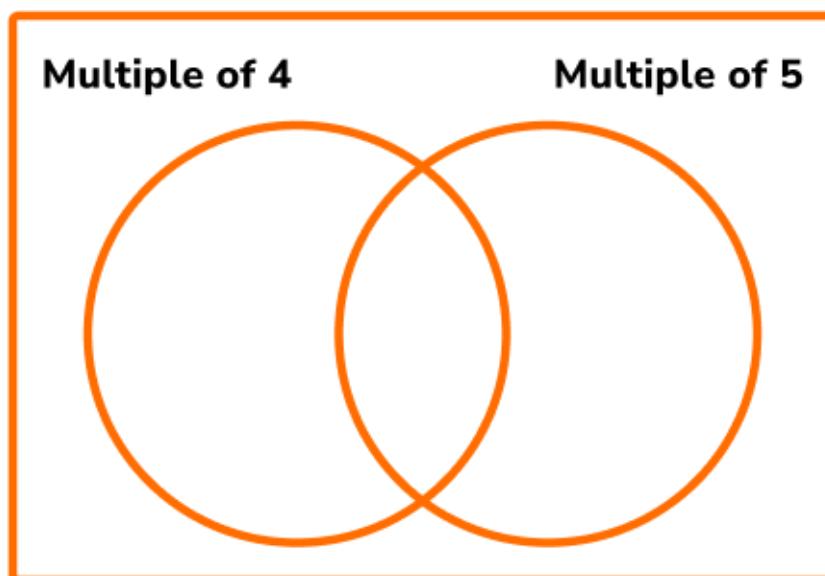
12) 9, 36 and 45

Factors and Multiples - Worksheet

Applied

- 1) A light flashes every 8 seconds. How many times will it flash in 6 minutes?
- 2) Find the smallest number over 200 that is a multiple of 7
- 3) (a) 21 27 30 45
Which number is the odd one out?

(b) Why?
- 4) Place the following numbers into the Venn diagram:
8, 10, 12, 16, 20, 21, 25, 40, 50



- 5) Tom says that 42, 36 and 50 have 6 as a common factor. Is he correct?
- 6) Find the first even number that is a multiple of 3 and 7
- 7) Oscar thinks of two numbers.
The lowest common multiple of the two numbers is 36
The highest common factor of the two numbers is 3
Both numbers are less than 15
Write down two possible numbers that Oscar could be thinking of.

Factors and Multiples - Exam Questions

- 1) Write down the first five multiples of 4

.....
(1 mark)

-
- 2) From the list of numbers
5, 9, 12, 14, 20, 23, 30, 36, 45

- (a) Write down the multiples of 7

.....
(1)

- (b) Write down the multiples of 5

.....
(2)

- (c) Write down the multiples of 12

.....
(2)
(5 marks)

-
- 3) Write down all the factors of 18

.....
(2 marks)

4)

A green light flashes every 8 seconds.

A blue light flashes every 12 seconds.

Both lights have just flashed together.

After how many seconds will both lights flash together?

.....
(2 marks)

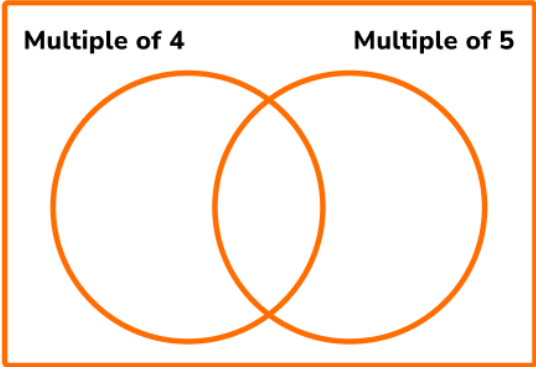
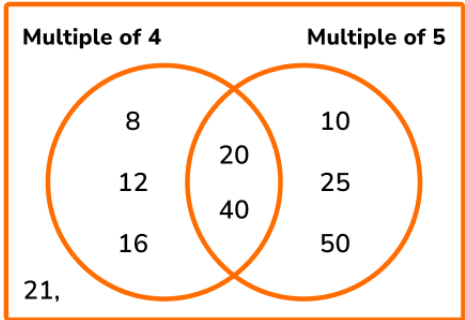
Factors and Multiples - Answers

	Question	Answer
	Skill Questions	
Group A	List all the factors of: 1) 2 2) 3 3) 7 4) 10 5) 12 6) 20 7) 24 8) 32 9) 50 10) 60 11) 75 12) 100	1) 1, 2 2) 1, 3 3) 1, 7 4) 1, 2, 5, 10 5) 1, 2, 3, 4, 6, 12 6) 1, 2, 4, 5, 10, 20 7) 1, 2, 3, 4, 6, 8, 12, 24 8) 1, 2, 4, 8, 16, 32 9) 1, 2, 5, 10, 25, 50 10) 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60 11) 1, 3, 5, 15, 25, 75 12) 1, 2, 4, 5, 10, 20, 25, 50, 100
Group B	Write down the first six multiples of: 1) 2 2) 3 3) 5 4) 7 5) 9 6) 10 7) 11 8) 20 9) 35 10) 50 11) 100 12) 250	1) 2, 4, 6, 8, 10, 12 2) 3, 6, 9, 12, 15, 18 3) 5, 10, 15, 20, 25, 30 4) 7, 14, 21, 28, 35, 42 5) 9, 18, 27, 36, 45, 54 6) 10, 20, 30, 40, 50, 60 7) 11, 22, 33, 44, 55, 66 8) 20, 40, 60, 80, 100, 120 9) 35, 70, 105, 140, 175, 210 10) 50, 100, 150, 200, 250, 300 11) 100, 200, 300, 400, 500, 600 12) 250, 500, 750, 1000, 1250, 1500

Factors and Multiples - Answers

Group C	Find the HCF and LCM of: 1) 5 and 6 2) 2 and 7 3) 3 and 8 4) 6 and 8 5) 9 and 12 6) 15 and 40 7) 12 and 20 8) 13 and 4 9) 18 and 6 10) 10, 12 and 15 11) 12, 24 and 30 12) 9, 36 and 45	1) HCF = 1, LCM = 30 2) HCF = 1, LCM = 14 3) HCF = 1, LCM = 24 4) HCF = 2, LCM = 24 5) HCF = 3, LCM = 36 6) HCF = 5, LCM = 120 7) HCF = 4, LCM = 60 8) HCF = 1, LCM = 52 9) HCF = 6, LCM = 18 10) HCF = 1, LCM = 60 11) HCF = 6, LCM = 120 12) HCF = 9, LCM = 180
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Factors and Multiples - Answers

	Question	Answer
	Applied Questions	
1)	A light flashes every 8 seconds. How many times will it flash in 6 minutes?	45
2)	Find the smallest number over 200 that is a multiple of 7	203
3)	a) 21 27 30 45 Which number is the odd one out? b) Why?	a) 30 b) It is the only number that has a factor of two. It is even.
4)	Place the following numbers into the Venn diagram: 8, 10, 12, 16, 20, 21, 25, 40, 50 	
5)	Tom says that 42, 36 and 50 have 6 as a common factor. Is he correct?	No. 50 does not have 6 as a factor, it is not a multiple of 6.
6)	Find the first even number that is a multiple of 3 and 7	42
7)	Oscar thinks of two numbers. The lowest common multiple of the two numbers is 36. The highest common factor of the two numbers is 3. Both numbers are less than 15 Write down two possible numbers that Oscar could be thinking of.	12 and 9

Factors and Multiples - Answers

	Question	Answer	
	Exam Questions		
1)	Write down the first five multiples of 4	4, 8, 12, 16, 20	(1)
2)	From the list of numbers 5, 9, 12, 14, 20, 23, 30, 36, 45		
(a)	Write down the multiples of 7	(a) 14	(1)
(b)	Write down the multiples of 5	(b) 5, 20, 30 and 45 2 correct multiples identified (1) 4 correct multiples identified (1)	(2)
(c)	Write down the multiples of 12	(c) 12 and 36 1 correct multiple identified (1) 2 correct multiples identified (1)	(2)
3)	Write down all the factors of 18	1, 2, 3, 6, 9, 18 3 correct factors identified (1) All 6 correct factors identified (1)	(2)
4)	A green light flashes every 8 seconds. A blue light flashes every 12 seconds. Both lights have just flashed together. After how many seconds will both lights flash together?	8, 16, 24, ... 12, 24, 36, ... 3 correct multiples of 8 and 12 listed (1) 24 seconds (1)	(2)

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