

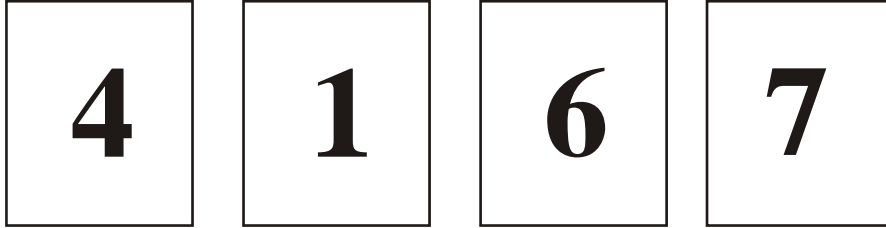
Name: _____

Teacher
Assessment



Section A **Factors, Multiples and Primes** **Grade G → D**

1. Jack is using these cards to make numbers.



(a) Write down the largest number he can make using all of the cards.

Answer

(1)

(b) Write down the smallest **even** number he can make using all of the cards.

Answer

(2)

(Total 3 marks)

2. A 24-hour digital clock shows the time at twenty-three minutes past seven in the morning.



(a) Fill in the clock below to show the time at twenty-three minutes past seven in the evening.



(1)

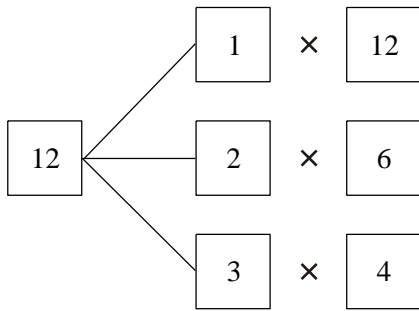
(b) Tick a box to say if each of the following statements is true or false.

	True	False
7 and 23 are both odd numbers	<input type="checkbox"/>	<input type="checkbox"/>
The sum of 7 and 23 is an odd number	<input type="checkbox"/>	<input type="checkbox"/>
7 is a factor of 23	<input type="checkbox"/>	<input type="checkbox"/>
23 minus 7 is a square number	<input type="checkbox"/>	<input type="checkbox"/>

(2)

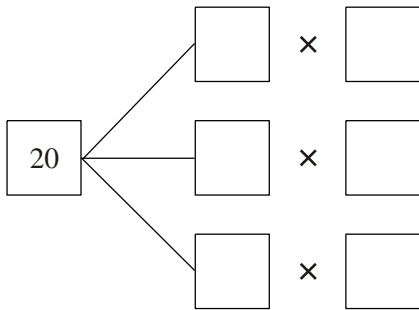
(Total 3 marks)

3. Here is a diagram to find the factors of 12.



The factors of 12 are 1, 2, 3, 4, 6, 12

Complete the diagram below to find the factors of 20.



Answer The factors of 20 are

(Total 4 marks)

4. (a) Write down all the factors of 8.

.....

Answer

(2)

(b) Write down any 3 multiples of 8

.....

Answer

(2)

(c) The first four square numbers are 1, 4, 9, 16.
Write down the ninth square number.

.....

Answer

(1)

(Total 5 marks)

5. (a) Write down two multiples of 4.

Answer and (1)

- (b) Write down two multiples of 7.

Answer and (1)

- (c) Write down a number which is a multiple of both 4 and 7.

Answer (1) (Total 3 marks)

6. Here is a list of numbers

6 8 11 15 25 28 30 33

From this list, write down

- (a) a multiple of 7,

Answer (1)

- (b) the two factors of 24,

Answer (2)

- (c) a square number,

Answer (1)

- (d) a prime number.

Answer (1)

(Total 5 marks)

7. Here is a list of numbers.

17 28 36 45 57 68 72 86

From this list, write down

- (a) two numbers which have a total of 100,

Answer (1)

- (b) two numbers which have a difference of 50,

Answer (1)

- (c) the number which is a multiple of 7,

Answer (1)

- (d) the number which is the product of 5 and 9.

Answer (1)

(Total 4 marks)

8. From this list of numbers

37 12 15 21 24 32 36 42

(a) write down the multiples of 8

Answer (2)

(b) write down the factors of 45

Answer (2)

(c) write down the square number.

Answer (1)

(Total 5 marks)

9. (a) Here is a list of numbers.

3 18 22 49 51 56 58 68

(i) Which two numbers from the list add up to 100?

.....

Answer (1)

(ii) Which two numbers from the list are multiples of 7?

Answer (2)

(b) Explain how you know that 62 is **not** divisible by 7.

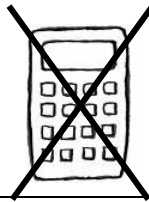
.....

.....

(1)
(Total 4 marks)

Success:

Target:



Section B **HCFs and LCMs** **Grade C**

1. (a) Find the Highest Common Factor (HCF) of 18 and 30.

.....
.....

Answer

(2)

(b) Find the Least Common Multiply (LCM) of 6 and 14.

.....
.....

Answer

(2)

(Total 4 marks)

2. Find the Highest Common Factor (HCF) of 24, 60 and 108.

.....
.....
.....
.....
.....
.....

Answer

(Total 3 marks)

3. Polly Parrot squawks every 12 seconds.
Mr Toad croaks every 21 seconds.
They both make a noise at the same time.

After how many seconds will they next make a noise at the same time?

.....
.....
.....

Answer seconds

(Total 2 marks)

4. Jenny is organising a barbecue.
There are 30 bread rolls in a pack.
There are 16 sausages in a pack.
She needs **exactly** the same number of bread rolls as sausages.
What is the smallest number of each pack she must buy?
You **must** show all your working.

.....
.....
.....
.....
.....

Answer packs of rolls
and packs of sausages
(Total 3 marks)

5. Tom, Sam and Matt are counting drum beats.

Tom hits a snare drum every 2 beats.
Sam hits a kettle drum every 5 beats.
Matt hits a bass drum every 8 beats.

Tom, Sam and Matt start by hitting their drums at the same time.
How many beats is it before Tom, Sam and Matt **next** hit their drums at the **same** time?

.....
.....
.....
.....

Answer beats
(Total 2 marks)

Success:

Target:



Section C **Prime Factor Decomposition** **Grade C**

1. Write 18 as the product of its prime factors.

.....
.....
.....

Answer
(Total 2 marks)

2. Write 28 as the product of its prime factors.

.....
.....
.....

Answer.....
(Total 2 marks)

3. Express 36 as a product of its prime factors.

.....
.....
.....

Answer
(Total 3 marks)

4. Write 75 as the product of its prime factors.

.....
.....
.....
.....

Answer
(Total 2marks)

5. Write 108 as the product of its prime factors.
Give your answer in index form.

.....
.....
.....
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.....
.....

Answer

(Total 3 marks)

6. Express 120 as the product of its prime factors.
Give your answer in index form.

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.....
.....
.....

Answer

(Total 3 marks)

7. Express 360 as a product of its prime factors.
Give your answer in index form.

.....
.....
.....
.....
.....
.....

Answer

(Total 3 marks)

Success:

Target:
