

Worksheet 1

Factors and Multiples

1. **Definition:** Factors

Factors of a number are whole numbers that can divide into any number **exactly** without leaving any remainder.

$$\begin{array}{r} \text{Eg:} \quad 20 = 1 \quad \times \quad 20 \\ \quad \quad \dots \times 10 \\ \quad \quad 4 \quad \times \quad \dots \end{array}$$

There the factors of 20 are,,,,

Try it 1! Find the factors of 125.

.....,,,,

2. **Definition:** Multiples

When any number is multiplied by a non-zero number,

Eg: Multiples of 3 are: _____

Multiples of 5 are: _____

Concluding:

When we express 12 as a product of two whole numbers such as

$$12 = 3 \times 4$$

then the following are true

- 3 is a factor of 12,
- is a factor of 12
- is a multiple of 3
- 12 is a multiple of
-

The following are different ways to express 12 as a product of two of its factors:

$$12 = 1 \times \dots$$

$$12 = 2 \times \dots\dots\dots$$

$$12 = \dots\dots \times \dots\dots\dots$$

Thus 12 has 6 factors, namely, _____

3. The UEFA Euro 2020 are held in years that are multiples of 2. In which years will the next four Euro 2020 be held after the UEFA Euro in 2020?



2020, _____

4.

Tasks

1. Do the following task with a partner. Consider the following whole numbers, list their factors in the table below.

Number	Factors
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	

Number	Factors
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	

5. Classify each of the above numbers according to the number of factors they have. You may want to use the table below to help you organise.

Number of factors	Numbers
1	
2	
3	
4	
5	
More than or equal to 6	



RECALL

- Multiples of 2 are 2, 4, 6, 8, ...
- Multiples of 3 are 3, 6, 9, 12, ...
- Multiples of 5 are 5, 10, 15, 20, ...