

Grade 5 Mathematics Worksheet

Number Types, Factors and HCF

Name: _____

Date: _____ Class: _____

Instructions: Read each question carefully. Answer all questions and show your working where necessary.

Section A: Understanding Number Types

1. Match each number type to its correct definition. Write the correct letter beside each number type. (10 marks)

Number type	Answer
a. Natural numbers	_____
b. Whole numbers	_____
c. Integers	_____
d. Rational numbers	_____
e. Prime numbers	_____
f. Composite numbers	_____
g. Odd numbers	_____
h. Even numbers	_____
i. Squared numbers	_____
j. Factors	_____

Definitions

- A. Numbers that can be divided by 2 without a remainder.
- B. Numbers obtained by multiplying a whole number by itself.
- C. Numbers greater than 1 that have exactly two factors.
- D. Numbers that include negative numbers, zero and positive numbers.
- E. Numbers that divide exactly into another number.
- F. Positive counting numbers, starting at 1.
- G. Numbers that cannot be divided by 2 without a remainder.
- H. Numbers that can be expressed as a fraction of two integers, with a non-zero denominator.
- I. Numbers that include zero and the positive counting numbers.
- J. Numbers greater than 1 that have more than two factors.

Section B: Classifying Numbers

2. Write the correct number type for each number. (10 marks)

Choose from: natural, whole, integer, rational, odd, even, prime, composite, squared.

- a. 7 — _____
- b. 12 — _____
- c. 0 — _____
- d. -5 — _____
- e. $\frac{3}{4}$ — _____
- f. 9 — _____
- g. 15 — _____
- h. 16 — _____
- i. 22 — _____
- j. -8 — _____

Note: Some numbers belong to more than one number type. Give the type that best fits each question.

Section C: Odd, Even, Prime, Composite and Squared Numbers

3. Answer the following questions. (10 marks)

- a. List the first five odd numbers. _____
- b. List the first five even numbers, including zero. _____
- c. Write all the prime numbers between 1 and 20. _____
- d. Write all the composite numbers between 1 and 15. _____
- e. Write the first six squared numbers, starting with 1^2 . _____

Section D: Factors

4. List all the factors of each number. (10 marks)

- a. Factors of 12: _____
- b. Factors of 18: _____
- c. Factors of 20: _____
- d. Factors of 24: _____
- e. Factors of 30: _____

5. Complete the factor questions. True or false (5 marks)

- a. Is 7 a factor of 42? _____
- b. Is 5 a factor of 32? _____
- c. Is 9 a factor of 81? _____
- d. Is 6 a factor of 40? _____
- e. Is 8 a factor of 64? _____

Section E: Highest Common Factor (HCF)

6. Find the HCF of each pair of numbers. Show your working. (10 marks)

- a. HCF of 12 and 18 = _____
Working: _____
- b. HCF of 16 and 24 = _____
Working: _____
- c. HCF of 20 and 30 = _____
Working: _____
- d. HCF of 15 and 25 = _____
Working: _____
- e. HCF of 18 and 27 = _____
Working: _____

7. Solve the word problems. (5 marks)

- a. A teacher has 24 pencils and 36 erasers. She wants to make the greatest possible number of identical gift packs, using all the items with none left over. How many gift packs can she make?

Answer: _____

- b. Two ribbons are 28 cm and 42 cm long. They must be cut into equal pieces of the greatest possible length, with no ribbon left over. What is the length of each piece?

Answer: _____

Total: 60 marks

Good luck!

