

# Factors and Multiples

Practice worksheet · KS3

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. List all the factors of 12

\_\_\_\_\_

2. List all the factors of 20

\_\_\_\_\_

3. List all the factors of 30

\_\_\_\_\_

4. List all the factors of 45

\_\_\_\_\_

5. Write the first 4 multiples of 5

\_\_\_\_\_

6. Write the first 4 multiples of 9

\_\_\_\_\_

7. Write the first 5 multiples of 12

\_\_\_\_\_

8. Is 3 a factor or a multiple of 15?

\_\_\_\_\_

9. Is 24 a factor or a multiple of 8?

\_\_\_\_\_

10. List all the factors of 16

\_\_\_\_\_

11. A number's factors are 1, 2, 3, 4, 6 and 12. What is the number?

\_\_\_\_\_

12. Which one of these is a multiple of 6: 16, 26, 36 ?

\_\_\_\_\_

13. List all the factors of 49

stretch

\_\_\_\_\_

14. A teacher puts 36 chairs into equal rows. List every number of rows that works.

stretch

\_\_\_\_\_

15. List all the factors of 100

stretch

\_\_\_\_\_

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# Answers

## Factors and multiples

1.  $1 \times 12, 2 \times 6, 3 \times 4 = 1, 2, 3, 4, 6, 12$
2.  $1 \times 20, 2 \times 10, 4 \times 5 = 1, 2, 4, 5, 10, 20$
3.  $1 \times 30, 2 \times 15, 3 \times 10, 5 \times 6 = 1, 2, 3, 5, 6, 10, 15, 30$
4.  $1 \times 45, 3 \times 15, 5 \times 9 = 1, 3, 5, 9, 15, 45$
5. start at 5, add 5 each time  $= 5, 10, 15, 20$
6. start at 9, add 9 each time  $= 9, 18, 27, 36$
7. start at 12, add 12 each time  $= 12, 24, 36, 48, 60$
8. 3 fits into 15 exactly ( $3 \times 5 = 15$ )  $=$  a factor
9. 8 fits into 24 exactly, so 24 is what you reach counting up in 8s  $=$  a multiple
10.  $1 \times 16, 2 \times 8, 4 \times 4 = 1, 2, 4, 8, 16$
11. the largest factor of a number is always the number itself  $= 12$
12.  $6 \times 6 = 36$ ; counting up in 6s never lands on 16 or 26  $= 36$
13.  $1 \times 49, 7 \times 7 = 1, 7, 49$
14. each way is a factor pair of 36, stopping at  $6 \times 6 = 1, 2, 3, 4, 6, 9, 12, 18, 36$
15.  $1 \times 100, 2 \times 50, 4 \times 25, 5 \times 20, 10 \times 10 = 1, 2, 4, 5, 10, 20, 25, 50, 100$