# Varied Fluency
# Step 2: Factors

## National Curriculum Objectives:

Mathematics Year 5: (5C5a) Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers

## Differentiation:

**Developing** Questions to support finding factors of numbers using knowledge of the 2, 3, 5, and 10 times table. Where the question is multiple choice, there are fewer options available. All answers are restricted to within the differentiation parameters.
**Expected** Questions to support finding factors of numbers using knowledge of times table facts up to 12 x 12.
**Greater Depth** Questions to support finding factors of numbers using knowledge of known times table facts to 12 x 12 and beyond.

More Year 5 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

# Factors

**1a.** Draw lines to match the factor pairs of 12.

2    12

1    6

3    4

*VF*

# Factors

**1b.** Draw lines to match the factor pairs of 20.

2    20

1    4

5    10

*VF*

**2a.** True or false? All of these numbers are factors of 15.

3    1

10    5

*VF*

**2b.** True or false? All of these numbers are factors of 10.

5    2

1    10

*VF*

**3a.** Circle the number that is NOT a factor of 25.

3    1    5

*VF*

**3b.** Circle the number that is NOT a factor of 36.

2    3    5

*VF*

**4a.** Use the numbers 2, 3, 5 or 10 to complete the missing factors of 6.

1    [ ]    [ ]    6

*VF*

**4b.** Use the numbers 2, 3, 5 or 10 to complete the missing factors of 18.

1    [ ]    [ ]    6    9    18

*VF*

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**Varied Fluency – Factors – Year 5 Developing**

# Factors

## Factors

**5a.** Draw lines to match the factor pairs of 16. Which pair is the odd one out?

| 4 | | 6 |
|---|---|---|
| 3 | | 8 |
| 2 | | 4 |

VF

**5b.** Draw lines to match the factor pairs of 18. Which pair is the odd one out?

| 2 | | 5 |
|---|---|---|
| 3 | | 9 |
| 4 | | 6 |

VF

**6a.** True or false? All of these numbers are factors of 22.

| 4 | 1 | 22 |
|---|---|----|
| 2 | 6 | 11 |

VF

**6b.** True or false? All of these numbers are factors of 24.

| 2 | 6 | 3 |
|---|---|---|
| 8 | 4 | 12 |

VF

**7a.** Circle the numbers that are NOT factors of 14.

7    1    4
  6    14
    2

VF

**7b.** Circle the numbers that are NOT factors of 21.

7    2    11
  3    21
    1

VF

**8a.** Complete the missing factors of 27.

| 1 | | | 27 |
|---|---|---|----|

VF

**8b.** Complete the missing factors of 35.

| 1 | | | 35 |
|---|---|---|----|

VF

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**Varied Fluency – Factors – Year 5 Expected**

# Factors

## Factors

**9a.** Draw lines to match the factor pairs of 32. Which pair is the odd one out?

| | |
|---|---|
| 2 | 8 |
| 5 | 32 |
| 4 | 16 |
| 1 | 6 |

VF

**9b.** Draw lines to match the factor pairs of 44. Which pair is the odd one out?

| | |
|---|---|
| 2 | 15 |
| 4 | 44 |
| 1 | 11 |
| 3 | 22 |

VF

**10a.** True or false? All of these numbers are factors of 40.

2   10   8   40

4   5   1   20

VF

**10b.** True or false? All of these numbers are factors of 45.

15   1   5   10

25   3   9   45

VF

**11a.** Circle the numbers that are NOT factors of 50.

10   2   50

4   5

25   1   12

VF

**11b.** Circle the numbers that are NOT factors of 46.

2   6   46

1   4

8   23   3

VF

**12a.** Complete all of the factors of 36.

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**12b.** Complete all of the factors of 48.

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# Varied Fluency
## Factors

### Developing
1a. **(1, 12), (2, 6), (3, 4)**
2a. **False – 10 is not a factor of 15.**
3a. **3**
4a. **2 and 3**

### Expected
5a. **(2, 8), (4, 4)**
**The odd one out is (3, 6).**
6a. **False – 4 and 6 are not factors of 22.**
7a. **4 and 6**
8a. **3 and 9**

### Greater Depth
9a. **(1, 32), (2, 16), (4, 8)**
**The odd one out is (5, 6).**
10a. **True**
11a. **4 and 12**
12a. **1, 2, 3, 4, 6, 9, 12, 18 and 36**

# Varied Fluency
## Factors

### Developing
1b. **(1, 20), (2, 10), (4, 5)**
2b. **True**
3b. **5**
4b. **2 and 3**

### Expected
5b. **(2, 9), (3, 6)**
**The odd one out is (4, 5).**
6b. **True**
7b. **2 and 11**
8b. **5 and 7**

### Greater Depth
9b. **(1, 44), (2, 22), (4, 11)**
**The odd one out is (3, 15).**
10b. **False – 10 and 25 are not factors of 45.**
11b. **3, 4, 6 and 8**
12b. **1, 2, 3, 4, 6, 8, 12, 16, 24 and 48**