



GRADE 4 / WATCH MR DJ SOLVE

FACTORS, PRIMES AND COMPOSITES

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE****List every factor pair of 12. Classify it as prime or composite and explain.**

- 1 Test divisors 1 through 3.
- 2 1×12 , 2×6 , 3×4 .
- 3 12 has 6 positive factors.

Answer: **1×12 , 2×6 , 3×4 ; composite****REMEMBER** Use factor pairs to find every positive factor; classify by the number of factors.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.

GRADE 4 / WORKED METHODS**FACTORS, PRIMES AND COMPOSITES**

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

List factor pairs systematically**12: 1×12, 2×6, 3×4**

1. Try 1, 2 and 3 as the smaller factor.
2. Pairs are 1×12, 2×6 and 3×4.
3. Factors 1, 2, 3, 4, 6, 12: composite.

Factor pairs describe equal arrays

$$1 \times 12 = 12$$

$$2 \times 6 = 12$$

$$3 \times 4 = 12$$

GRADE 4 / WORKED METHODS

FACTORS, PRIMES AND COMPOSITES

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Separate factors and multiples

Factors of 5: 1, 5; multiples: 5, 10, 15...

1. A factor divides 5 with no remainder.
2. A positive multiple is 5 times a positive whole number.
3. A number can be both a factor and a multiple of itself.



GRADE 4 / PRACTICE

FACTORS, PRIMES AND COMPOSITES

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

1. List every factor pair of 13. Classify it as prime or composite and explain.

Grid area for working out the solution to Question 1.

My answer / conclusion: _____

2. List every factor pair of 24. Classify it as prime or composite and explain.

Grid area for working out the solution to Question 2.

My answer / conclusion: _____



GRADE 4 / PRACTICE

FACTORS, PRIMES AND COMPOSITES

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

3. List the first five POSITIVE multiples of 4. Explain how they differ from its factors.

Grid area for working out the answer to Question 3.

My answer / conclusion: _____

🔊 Medium

4. Find every common factor of 12 and 24. Show both factor lists.

Grid area for working out the answer to Question 4.

My answer / conclusion: _____



GRADE 4 / PRACTICE

FACTORS, PRIMES AND COMPOSITES

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔊 Medium

5. Is 1 prime, composite or neither? Use the definitions.

Grid area for question 5.

My answer / conclusion: _____

🔊🔊🔊 Spicy

6. Is every even whole number greater than 2 composite? Explain using a factor pair.

Grid area for question 6.

My answer / conclusion: _____



Date _____

FACTORS, PRIMES AND COMPOSITES

A cartoon fox mascot with orange fur, large eyes, and a purple collar, holding a yellow pencil.

Spicy 7. Pi says every odd number greater than 1 is prime. Refute with two examples and factor pairs.

My answer / conclusion: _____

GRADE 4 / PRACTICE

FACTORS, PRIMES AND COMPOSITES

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Extra Spicy
8. Why do square numbers have an unpaired middle factor when factors are ordered?

Use 36.

My answer / conclusion: _____