

Prime and Composite

4th Grade

Numbers with exactly two factors, and everything else.

**A prime number has exactly two factors: 1 and itself.
A composite number has more than two.**

2, 3, 5, 7, 11, 13, 17, 19, 23, 29...

7

prime

Only 1×7 . No other pair works.

12

composite

1×12 , 2×6 , 3×4 — six factors in all.

2

prime

The only even prime, because every other even number divides by 2.

1

neither

It has only one factor, so it fails the 'exactly two' test.

THE COMMON MISTAKE

✗ **1 is prime**

✓ **1 is neither prime nor composite**

Prime means exactly two different factors. 1 has only one.

To test a number, try dividing by primes up to its square root. That is enough.