



KIRF: I can identify prime numbers up to 50

A prime number is a number with only two factors- itself and one. The aim is for children to recall the prime numbers to 50 instantly.

Concrete:

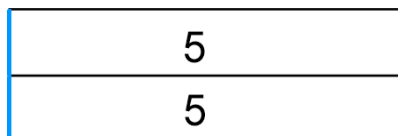
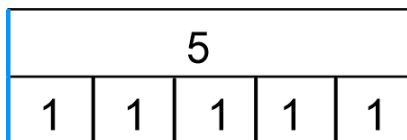
5 is a prime number



What can this look like?

Pictorial:

5 is a prime number



Abstract:

Prime numbers to 20

2 3 5 7
11 13 17 19

Questions to ask at home

What is a **prime number**?

What is a **composite number**?

What are the **prime numbers** to 20?

Key vocabulary

Composite number- A whole number that can be made by multiplying other whole numbers.

Factor- A number that multiplies with another to make a product.

Multiple -The result of multiplying a number by an integer.

Prime number - A whole number with only two factors, one and the number itself.

Things to try

Use counters or other small objects e.g. pasta, choose a number e.g. 17, show all the factor pairs using the objects organised into arrays to **prove** that the number chosen is prime or composite.

Make a set of cards for the numbers from 2 to 50. How quickly can your child sort these into prime and composite numbers? How many even prime numbers can they find? How many odd composite numbers can they find?

Roll 2 dice. Use the numbers rolled to make a 2-digit number e.g. if 1 and 3 are rolled, 31 or 13 could be made. Play with a partner, the first person to identify whether the number rolled is prime or composite calls out which they think it is. They then have to prove they're correct by listing all the factors, scoring 1 point for each factor. The first person to 20 points is the winner.

If your child feels confident with primes then these resources from nrich will help challenge and develop their thinking. <https://nrich.maths.org/1153> <https://nrich.maths.org/7468>

Websites:

<https://www.bbc.co.uk/bitesize/topics/zfq7hyc/articles/z2q26fr>

https://www.transum.org/Maths/Game/Prime_Pairs/

<https://www.primarygames.com/math/matheggsp/prime/>

