

A Matter of Factor

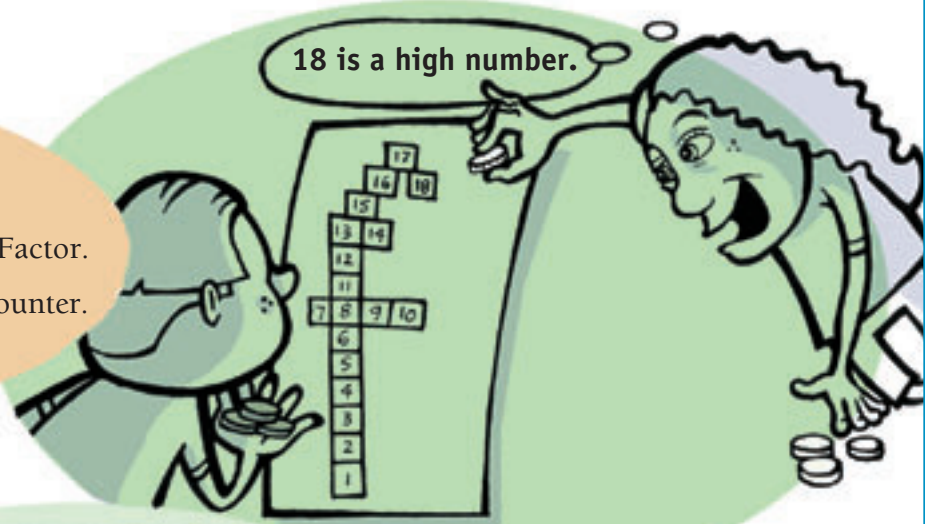
You need counters (two colours) a classmate
 a photocopy of the game board

Activity

Stacey and Laird are playing a game of Factor.

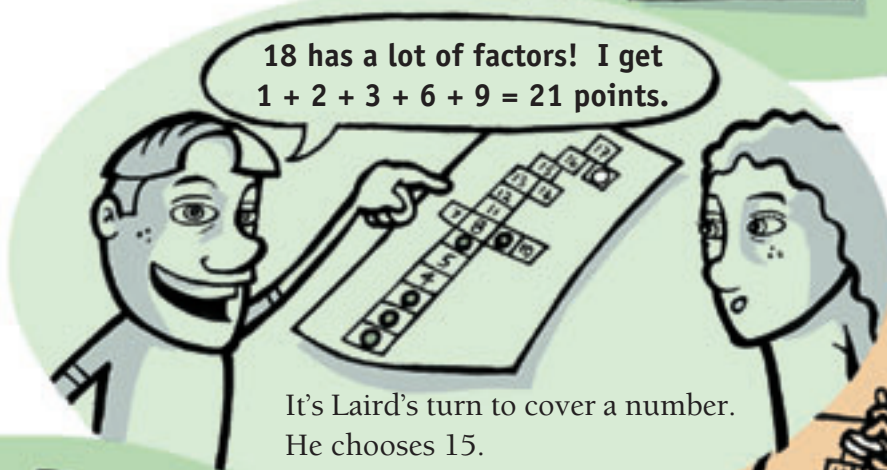
Stacey goes first and covers 18 with a counter.

Her score is 18.



18 has a lot of factors! I get
 $1 + 2 + 3 + 6 + 9 = 21$ points.

Laird uses his counters to cover all the uncovered factors of 18.

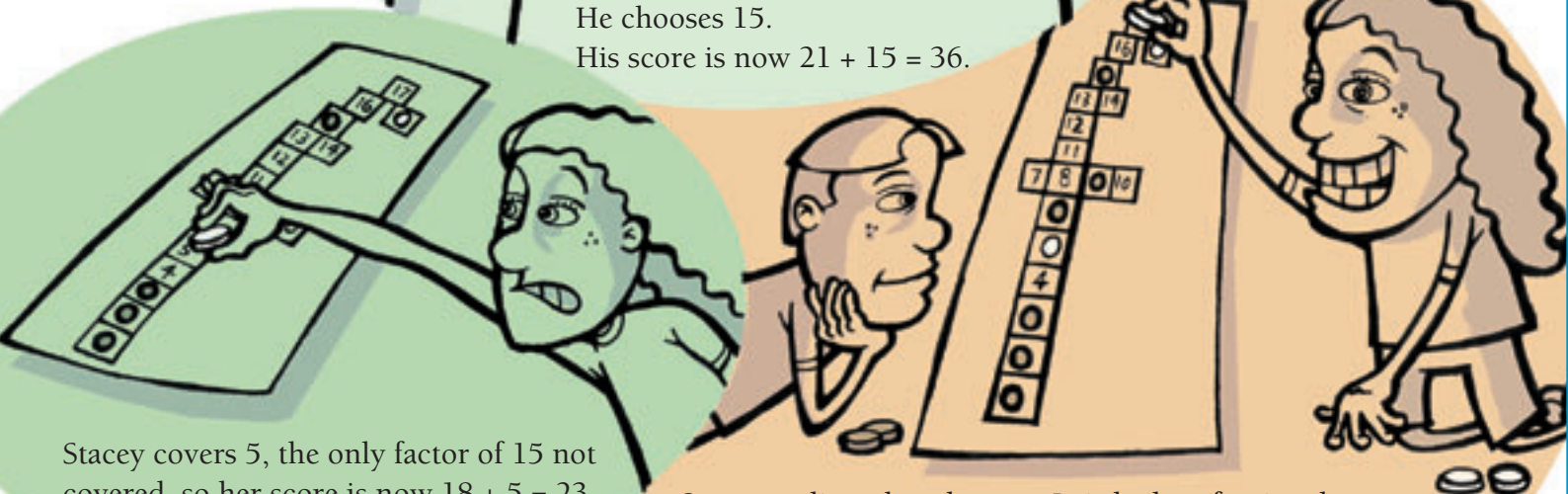


It's Laird's turn to cover a number.

He chooses 15.

His score is now $21 + 15 = 36$.

Stacey covers 5, the only factor of 15 not covered, so her score is now $18 + 5 = 23$.



Stacey realises that she gave Laird a lot of points by choosing 18. This time she covers 17 on the board. (Her score is now $23 + 17 = 40$.)

How many factors of 17 are left for Laird to cover?



Game

1. Play a game of Factor on the 1–18 game board with a classmate.
After the first number is chosen, take turns covering factors and choosing a new number until all the numbers on the board are covered.
The winner is the person with the highest score.
2. Now play the game using up to 24 on the game board.
3. Now play Factor on the full 36 game board.