

A Bit Stuck? Array or disarray?

Work in pairs

Things you will need:

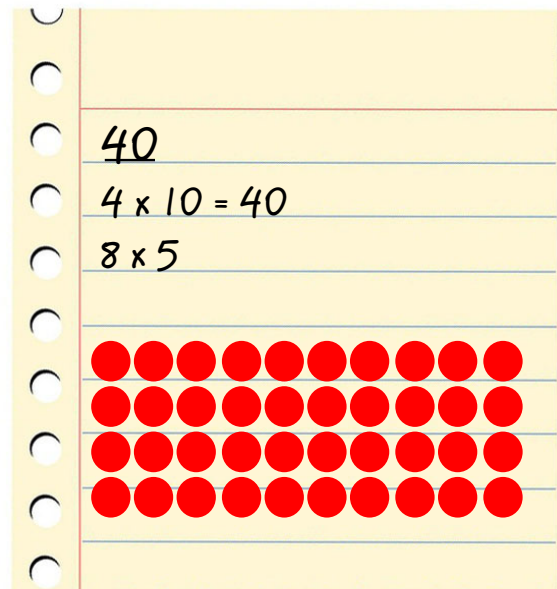
- 50 counters or other similar small objects, e.g. coins, raisins, sugar cubes
- A pencil and paper



What to do:

16, 40, 12, 15, 25, 41, 48, 36, 50

- Choose a number.
Take this number of counters.
Arrange the counters into an array (rectangle).
Write the matching multiplication.
- Now rearrange them into as many different arrays as you can.
Write the matching multiplication each time.
- Score one point for each multiplication you write.
- Choose another number and do the same.
Try to score as many points as you can.
- Carry on choosing different numbers and making as many arrays as you can.
Write the matching multiplication each time.
- Which numbers do you think will score lots of points?
Which number do you think won't score many points?



S-t-r-e-t-c-h:

Find the number between 40 and 50 with the greatest number of factors, i.e. the greatest number of possible arrays.

Learning outcomes:

- I can make different arrays for a given number and write the matching multiplications.
- I understand that multiplication works both ways, e.g. $4 \times 6 = 6 \times 4$.
- I am beginning to identify pairs of factors.