

Objective: Solve problems involving all four operations including using their knowledge of factors and multiples, squares and cubes.

Year 6 Task:

This task is taken from the NRich website and can be used with children to support their developing knowledge of multiples and factors. Included on the website are worked solutions and tips on how to get started. Follow the link to find the task:

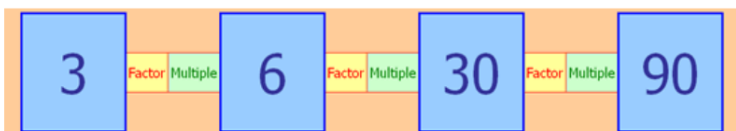
https://nrich.maths.org/5578?utm_source=primary-map

Alternatively, this task can be completed using pen and paper. Good luck!

Factor-multiple Chains

Age 7 to 11 ★★

Here is an example of a factor-multiple chain of four numbers:



Can you see how it works? Perhaps you could make some statements about some of the numbers in the chain using the words "factor" and "multiple".

In these chains, each blue number can range from 2 up to 100 and must be a whole number.

You may like to experiment with [this spreadsheet](#) which allows you to enter numbers in each box. Perhaps you can make some more chains for yourself.

What are the smallest blue numbers that will make a complete chain?

What are the largest blue numbers that will make a complete chain?

What numbers cannot appear in any chain?

What is the biggest difference possible between two adjacent blue numbers?

What is the largest and the smallest possible range of a complete chain? (The range is the difference between the largest and smallest values.)