**Factors, Multiples, Highest Common Factor, Lowest Common Multiple**

Find the HCF and LCM of each set of numbers

1. Liz has two pieces of string, one 18 cm long and the other 24 cm long. She wants to cut them up to produce smaller pieces of string that are all of the same length, with no string left over. What is the greatest length, in cm, that she can make them?
2. Helen is organising a party and she needs party plates and straws. There are 30 party plates in a pack. There are 120 straws in a pack. She needs exactly the same number of plates as straws. What is the minimum number of each pack she must buy?
3. Charlie is training for her next Channel swim. She has to visit her doctor every 14 days and her nutritionist every 10 days for regular check-ups. If on the 10th May she had both appointments, what will the next date be when both appointments fall on the same day?
4. A box measures 24 cm by 18 cm by 15 cm. The box is to be filled with cubes of equal size. What is the length of the side of the largest cube that could be used to fillthe box?

**Stretch**

Find out when you might use Highest Common Factor and Lowest Common Multiple in real life?

**Research**

Find the HCF and LCM of each set of numbers

1. 12 and 30
2. 15 and 25
3. 8 and 24
4. 14 and 35
5. 16, 24 and 30
6. 48 and 128

**Skills practice**

1

2

4

20

10

5

1

2

3

12

6

4

**To find the HCF, write down all the factors of both numbers then find the highest number in both lists.**

e.g. HCF of 12 and 20

12 20

HCF of 12 and 20 = 4

**To find the LCM, write down multiples of both numbers until you find the lowest number in both lists.**

e.g. LCM of 12 and 20

* Multiples of 12: 12, 24, 36, 48, 60, …
* Multiples of 20: 20, 40, 60, 80, …

LCM of 12 and 20 = 60

**Memory**

Unscramble the anagrams and write down the definition of each word.

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**Literacy**