

Year 7 Maths

Topic 4 Factors, Multiples and Primes



Students are learning about Factors, Multiples and Primes at this point in Year 7 because this topic contains immense historical and modern mathematical significance. The topic builds on primary school knowledge and is also useful for upcoming fractions work.

Previous topic: Constructions

Next topic: Fractions

Core knowledge/skills/concepts

- Understanding the difference between factor and multiple
- Listing factors and multiples
- Prime numbers up to 100
- Tests of divisibility (2,3,4,5,6,8,9)
- HCF and LCM by listing factors and multiples

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Topic 4 Factors, Multiples and Primes



Essential vocabulary

Composite numbers
Divisibility
Factors
HCF (Highest Common Factor)
Index notation
LCM (Least Common Multiple)
Multiples
Prime factor
Prime numbers
Prime factorization
Product

Threshold concepts

- Understanding the difference between factor and multiple
- Listing factors and multiples
- Prime numbers up to 100
- HCF and LCM by listing factors and multiples

Opportunities for reading

How and when will the core learning be assessed?

Mid-topic Assessment, End of Topic Assessment, Assessment 2 (January) and Assessment 3 (May)

Links to other topics/subjects

Factors and multiples is revisited in Year 9.
Factors and multiples are used heavily in Fractions (topic 5) and Ration & Proportion (topic 11)
Number Topics in Year 8 include: Indices; Fractions, Decimals and Percentages.

Curriculum 'Glossary' and guidance



Students are learning about..... at this point in Year 7 because...

The 'why this and why now?' question

Previous topic: To support understanding of how the curriculum is sequenced

Next topic:

Core knowledge/skills/concepts

Aspects that must be known without compromise and retained in the long-term memory (think of it as a checklist for teachers and students to work towards securing)

Essential vocabulary

Tier 2 as well as Tier 3

Tier 2= valuable academic words that appear across the school curriculum e.g evaluate, authority, indicate (our 'word of the week' comes for Tier 2 vocabulary lists)

Tier 3= subject specific vocabulary

Threshold concepts

'Gateway' concepts that are essential for students to be able to progress onto more complex ideas. In other words, they require mastery before moving onto other concepts.

Opportunities for reading

How and when will the core learning be assessed?

Formative assessment to inform responsive teaching and TRIO opportunities as well as summative assessment.

Links to other topics/subjects

(we will create time to come together to really explore these)