

And describe the properties of prime, composite and square numbers...

identify and describe the properties of prime, composite and square numbers and use these properties to solve problems and simplify calculations

Learning intention

- identify and describe the properties of prime, composite and square numbers and use these properties to solve problems and simplify calculations

Teach and model

- using the definition of a prime number to explain why one is not a prime number
- testing numbers by using division to distinguish between prime and composite numbers, recording the results on a number chart to identify any patterns
- representing composite numbers as a product of their factors, including prime factors when necessary and using this form to simplify calculations involving...

Check understanding

- Explain the main idea in and describe the properties of prime, composite and square numbers... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.