

Maths Solvelt

Multiplication and Division

Primes and Squares



Aim

- I can prove or disprove statements about prime numbers.

Success Criteria

- I can identify prime numbers.
- I can identify square numbers.
- I can find examples to prove or disprove statements about prime numbers.

The Big Question

Can square numbers be made by adding two prime numbers together?



Contents

Beginning

Preparing

Exploring

Reviewing

The Big Question

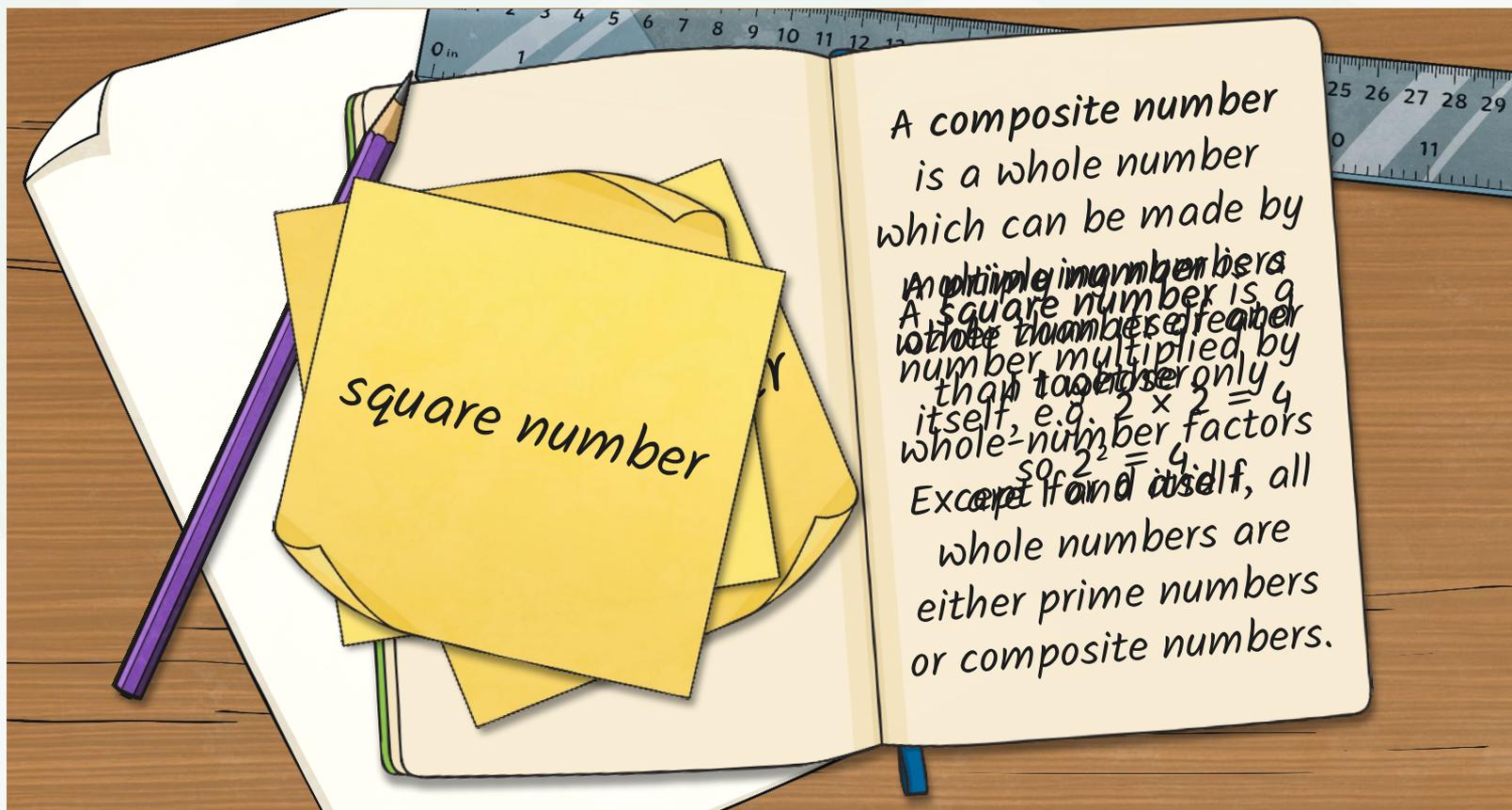
Beginning



Warm-Up



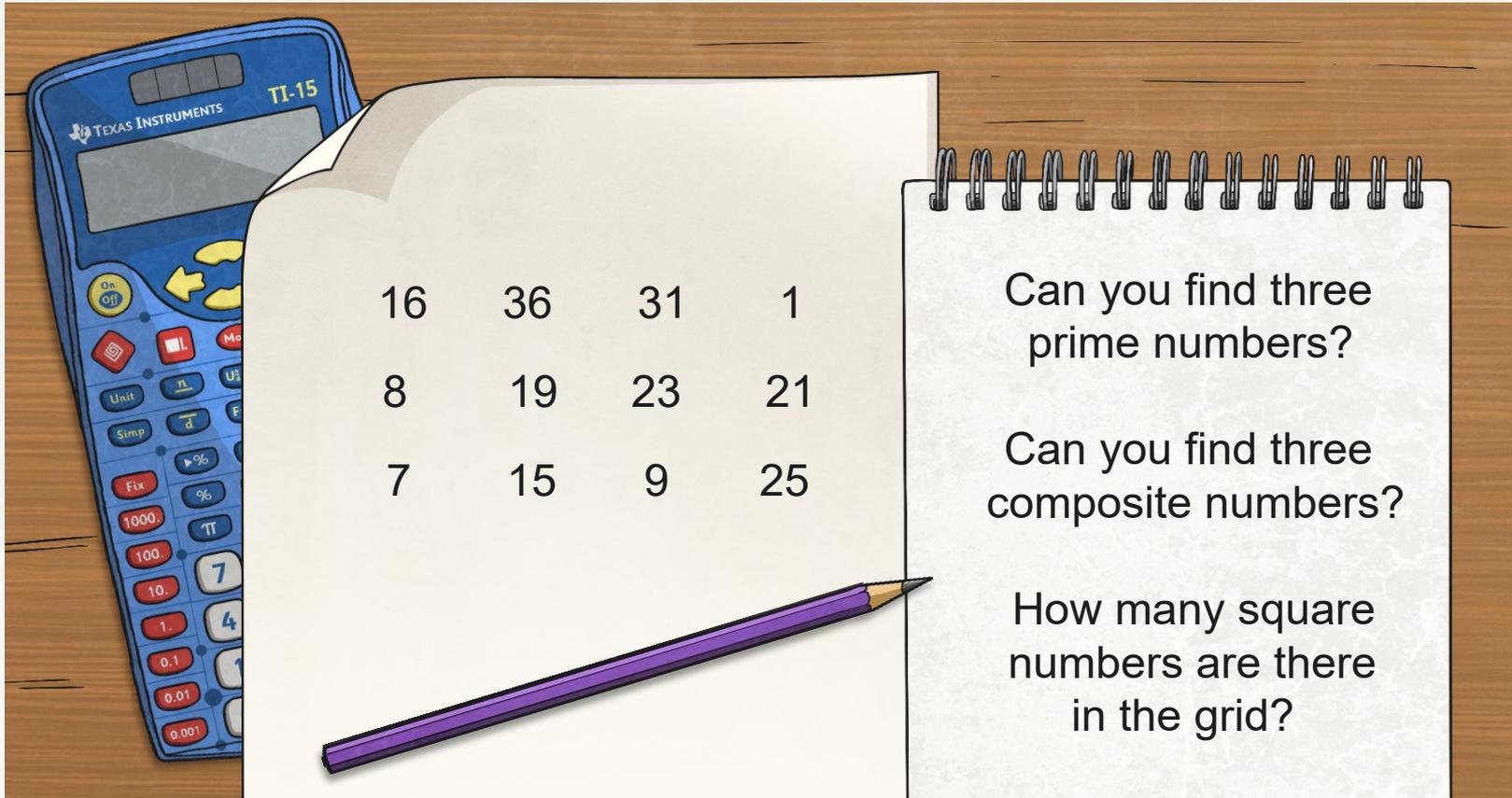
What do these words mean?



Warm-Up



Work as a class to answer these questions:



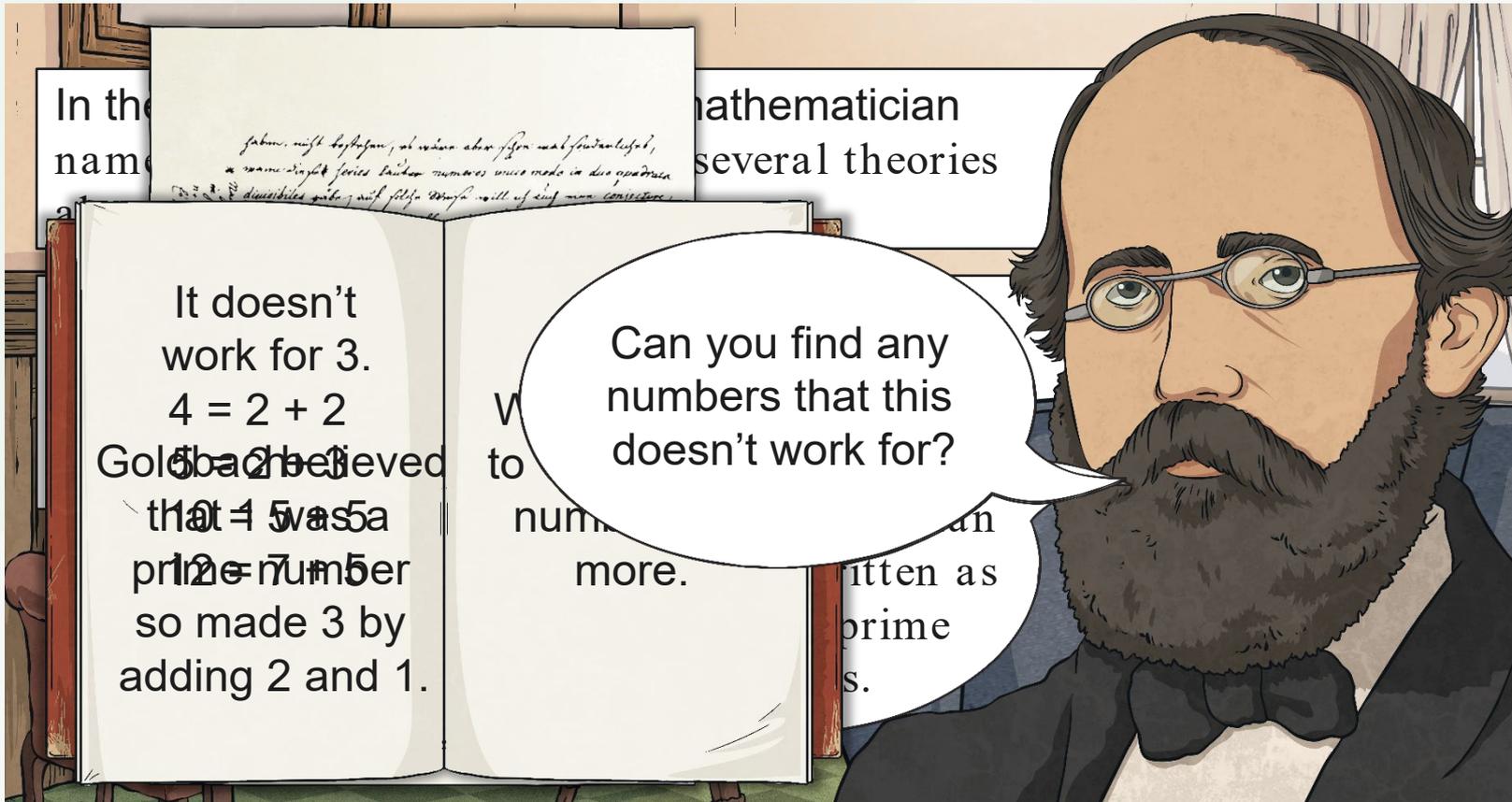
Preparing



Goldbach



Mathematicians like to solve problems,
but sometimes they are unable to prove their theories completely.



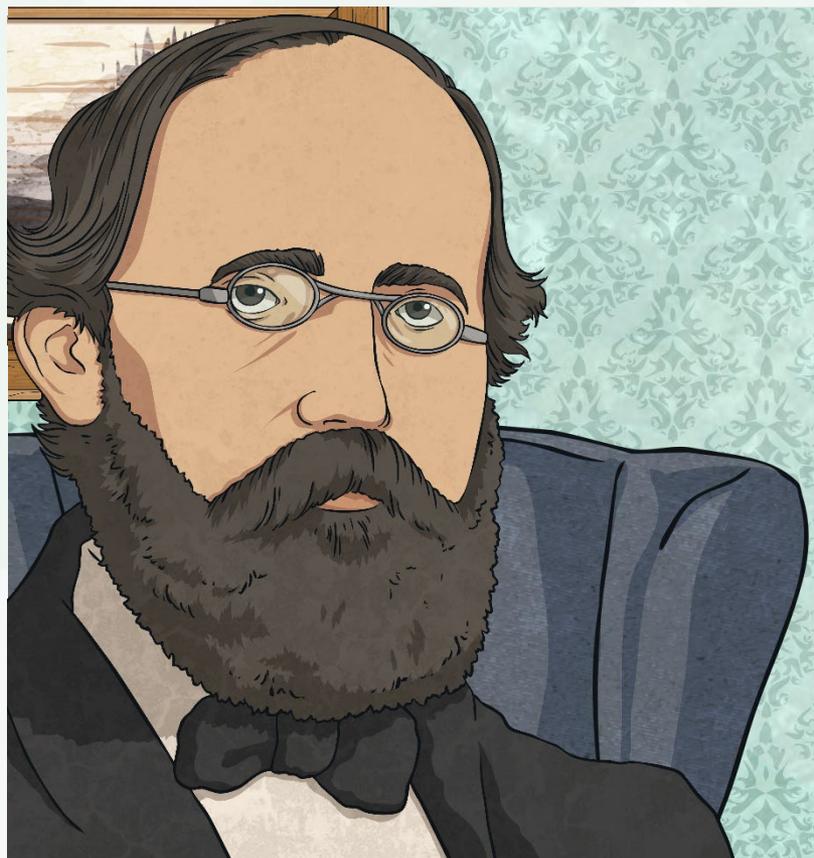
Exploring



Exploring



Can square numbers be made by adding two prime numbers together?

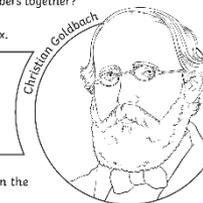


Primes and Squares

I can prove or disprove statements about prime numbers.

Can square numbers be made by adding two prime numbers together?

- 1) Write down the prime numbers to 100 in this box.



- 2) Write down the squares of the numbers 2 to 10 in the first column of this table.

$2^2 = 4$	$4 = 2 + 2$
$3^2 =$	
$4^2 =$	
$5^2 =$	
$6^2 =$	
$7^2 =$	
$8^2 =$	
$9^2 =$	
$10^2 =$	

- 3) Can you make all of the square numbers by adding two prime numbers together? Use the second column of the table to write down ways of making the numbers. The first one is done as an example.
- 4) Can all of these numbers be made by adding two prime numbers together? Explain why you think this.



Reviewing



Reviewing



Can square numbers be made by adding prime numbers together?



The Big Question



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