

Diving into Mastery - Diving

Adult Guidance with Question Prompts

Children should know how to recognise odd and even numbers. They can use equipment and pictures to represent odd and even numbers in different ways.

Which numbers are written in digits?

Which numbers are written in words?

What other representations can you see?

How can we tell if a number is odd or even?

What digits do odd/even numbers have in the ones column?

Should I tick the 10p coin? Why?

Should I circle the playing card? Why not?

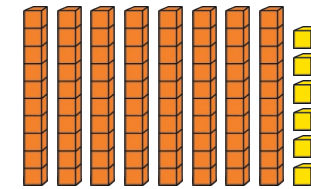
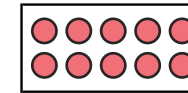
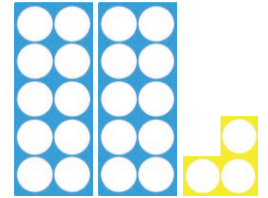
Odd and Even Numbers



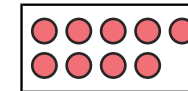
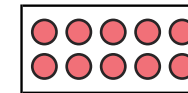
Circle the odd numbers and tick the even numbers.



one hundred

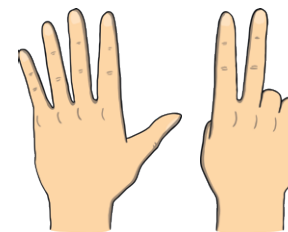
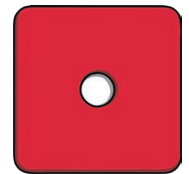


72

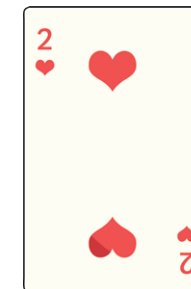


55

ten



47



six

Can you think of another number to add to each collection?

Diving into Mastery - Deeper

Adult Guidance with Question Prompts

It is common for children to forget it is only the ones digit they need to look at to decide if a number is odd or even. This activity provides an opportunity to discuss this and reinforce the learning. Use practical equipment, e.g. number shapes, counters or blocks, to prove that the number is odd.

Which digit do we need to look at to see if a number is odd or even?

Can you make this number using your equipment?

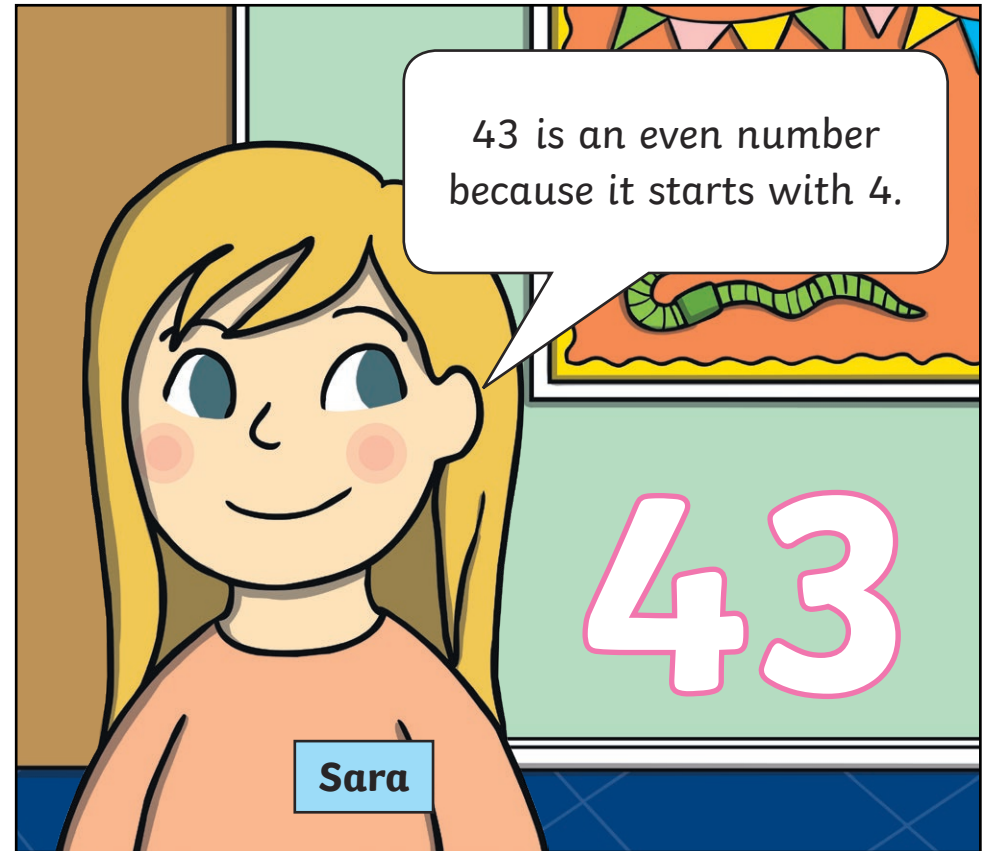
What is the ones digit in this number?

Is three odd or even?

So is 43 odd or even?

Is Sara correct? Explain why not.

Odd and Even Numbers



Is she right? Prove it using your equipment.
Choose a different number and ask a friend to find out if it is odd or even.

Diving into Mastery – Deepest

Adult Guidance with Question Prompts

Children investigate general statements linking odd and even numbers with multiplication. They provide examples to prove their answer.

What odd numbers could we choose to check what answer we get when we multiply odd by odd?

Encourage children to choose odd factors from the five times table, e.g. 5×1 or 5×3 . Alternatively, they could use odd factors from the one times table.

What even numbers could we use to investigate even \times even?

Children could choose from the two or ten times tables, e.g. 2×4 , 2×6 , 10×8 or 10×10 .

Can you tell me a calculation with one odd and one even number multiplied together?

Children could draw on any of the times tables they know as long as there is an odd factor and an even factor, e.g. 5×2 , 2×7 or 10×9 .

Is the answer odd or even?

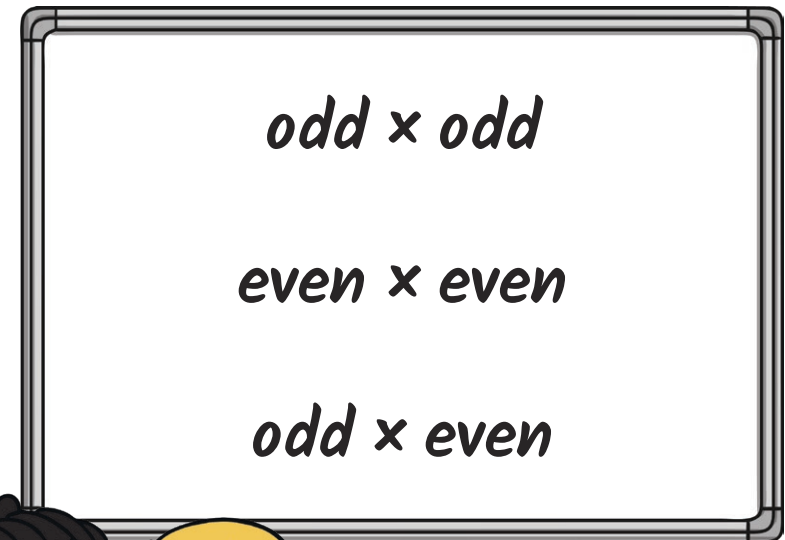
Is that always the case?

Why do you think that is?

Odd and Even Numbers



Investigate what happens when you carry out these calculations using facts from the 2, 5 or 10 times tables.



Is each answer odd or even?

Is that always the case? Why?

Give 5 examples for each one.