

NUMBER AND PLACE VALUE

Objectives

- Recognise the place value in a two-digit number (tens and ones)
- Use place value and number facts to solve problems
- Recognise odd and even numbers
- Compare and order number using $<$ and $=$

Before they tackle the problem, ensure children have...

- Mastered an understanding of the value of each digit in a two-digit number
- Secured their understanding that addition can be done in any order because it is commutative

SETTING THE SCENE

Display 0 to 9 digit cards.



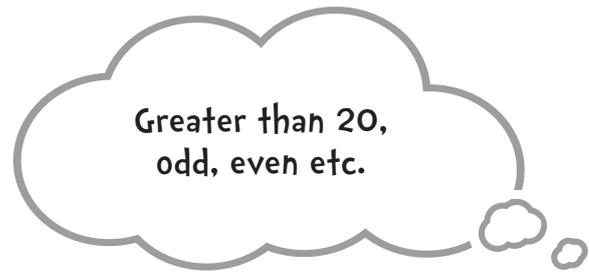
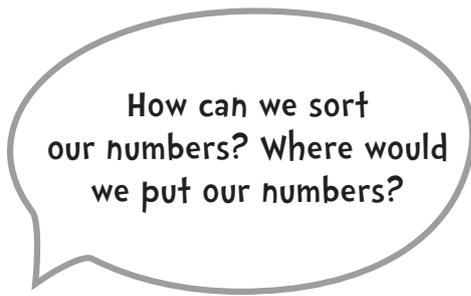
Which two-digit numbers
can you make?

Can the children order them? How did they order them? Which number is third?

Encourage the children to explore the numbers made. What is the value of the ones digit in each of your numbers? What is the value of the tens digit in each of your numbers? What's your largest odd number? Largest even number? Do you have any multiples of 5? 10?

Use the digit cards to create some two-digit numbers where the tens digit is one more than the ones digit eg 54. Can you use all of the digit cards? Use $<$ and $>$ to order some of your numbers. What do you notice about all of our numbers? What if the tens digit was two more than the ones digit – do you think we would be able to use all of the digit cards?

Display a blank Venn diagram.



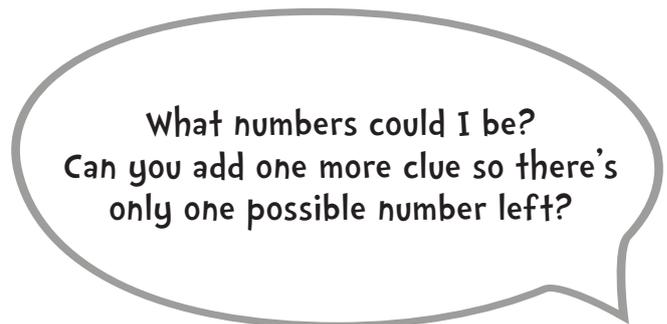
EXPLORE

Provide the children with the following clues:

I am an odd number.

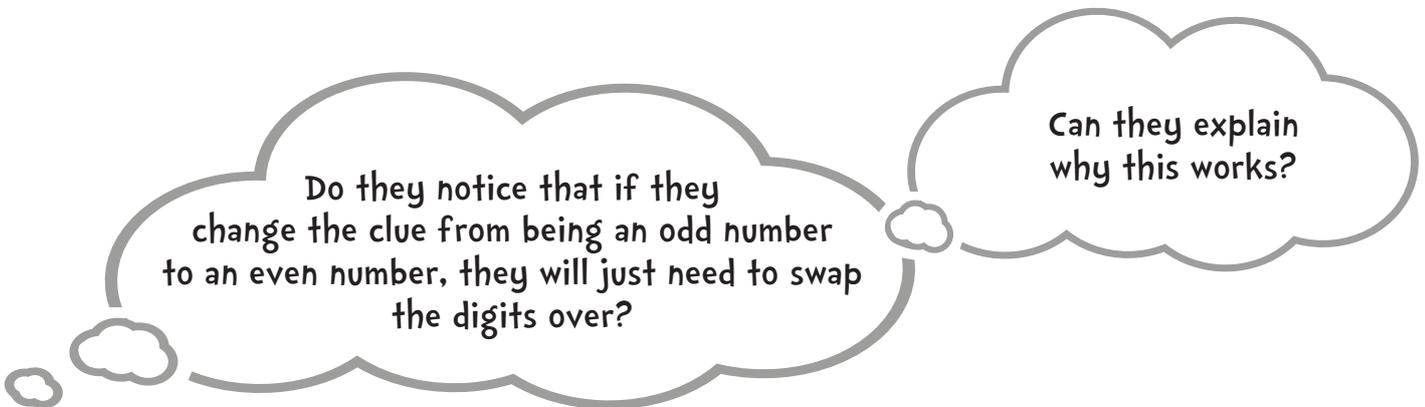
I am a two-digit number.

My digits add up to nine.



TAKING IT FURTHER

Investigate – If you change one of the clues, how would the numbers change? Would you still be able to use all of the digit cards?



Suggested answer

If the digits add up to 5, I won't be able to use all of the cards because some of them are bigger than 5. If my number is an even number, then I will just need to swap the digits around because they will still add up to nine.

OUTCOME

The children will be able to use their knowledge of numbers and place value to help them justify their thinking and aid their reasoning.

The children will reason about numbers and be able to order and compare numbers using a variety of categories.