

Unit 1

• SESSION 1 •

TOTAL TIME

30
MINUTES

OBJECTIVES

- Read and write whole numbers to at least 1000.
- Know what each digit represents, and partition three-digit numbers into a multiple of 100, a multiple of ten and ones
- Order whole numbers to at least 1000, and position them on a number line.

VOCABULARY

three-digit number
multiple of 100
multiple of 10
multiple of 1
hundreds
tens, ones
partition
digit
represents

RESOURCES

place value cards (resource sheet 2);
1-6 paperclip
spinner (resource sheet 1)

HOMEWORK

Play *Spinning Digits* using a 1-6 spinner (resource sheet 1)

STARTER

5
MINUTES

Remind children that they have three types of place value cards: multiples of 100, multiples of 10 and multiples of 1. Show an example of each and how they fit together to make a three-digit number. They are to use their place value cards to show you three-digit numbers such as the following: 125, 329, 937, 568. Avoid numbers that have a zero among their digits at this stage. Tell the group to read aloud the number. *What does each digit represent?* For example, in the number 125 the one represents 100, the two represents 20 and the five represents 5.

KEY QUESTION

■ What does each digit represent?

MAIN ACTIVITY

20
MINUTES

Write the number 400 on the board and tell the group to read it together. Now ask everyone to use their place value cards to make this number. Ask them to tell you what each digit represents (4 hundreds, no tens and no ones). Repeat for 450 and then 452. Ensure that everyone understands that the zero tells us that there are no tens or no ones.



Write 405 on the board and ask the children to make this number. Ask what each digit represents.

Now write a selection of numbers on the board, including ones that have zero as one of their digits; for example 567, 420, 999, 104, 745, 280.

Take each number in turn and ask the group to read the number together and then to use the place value cards to make it.

Now partition each number into hundreds, tens and ones and record as follows:

$567 = 500 + 60 + 7$; $420 = 400 + 20$; $999 = 900 + 90 + 9$, and so on.

When asking the children to read the numbers, ensure that they read them as 'one hundred and four' rather than 'one, zero, four' or 'one, oh, four' as this will help them to understand how the numbers are put together.

Explain Activity Sheet 1.1, which the children will have to complete before the next session. Introduce the *Spinning Digits* game for homework.

KEY QUESTIONS

- In the number 801, what digit is in the tens place?
- What does each digit represent in this number?

PLENARY

5
MINUTES

Ask everyone to hold up a three-digit number with either no tens or no ones in it. They read their numbers and explain what the zero in each represents. Repeat several times in order to gauge their confidence.

Unit 1

SESSION 2

TOTAL TIME

30
MINUTES

OBJECTIVES

- Read and write whole numbers to at least 1000
- Know what each digit represents, and partition three-digit numbers into a multiple of 100, a multiple of ten and ones
- Order whole numbers to at least 1000, and position them on a number line

VOCABULARY

three-digit number
multiple of 100
multiple of 10
less than
more than
between

RESOURCES

counting stick;
place value cards
(resource sheet 2)

STARTER

5
MINUTES

Use the counting stick to count in tens from 0 to 100. Then point to 50, 10, 60, 40 and 90 in turn, asking the children which number is at that point and how they know.

Now count from 100 to 200 in tens. Point to 150, 110, 190, 140 and 160 in turn, asking the group which number is at that point. How do they know?

KEY QUESTIONS

- How do you know that this number is 90 (it is ten less than 100)?
- How do you know that this number is 60 (it is ten more than 50)?

MAIN ACTIVITY

20
MINUTES

Use the counting stick to count from 0 to 100 in tens again. Point to halfway between 0 and 10 (the 5) and ask the group what number lies there and how they know. Then point to other multiples of five, putting the same questions.

Now point to positions either side of the divisions to indicate 49, 51, 1, 99, 9, 11, 19, 21, 29 and 31, each time asking the children to say which number you are pointing to and how they know.

Repeat this process, this time with 100 at one end of the stick and 200 at the other. Again, start by counting in tens, then pointing to multiples of five, and then to numbers just before and after the divisions.



Now count in hundreds from 0 to 1000 using the counting stick. Point to several of the divisions asking which number belongs at each. Point to halfway between 0 and 100 and ask what number belongs there, then halfway between 100 and 200, 200 and 300 and so on. When the children are confident, ask them to come and point to where given multiples of 50 are, explaining their reasoning each time.

If time allows, ask children to come and point to where they think numbers such as the following might be: 1, 999, 25, 125, 225, 510, 490.

Explain Activity Sheet 1.2, which the children will have to complete before the next session.

KEY QUESTIONS

- How do you know where 450 is (it's halfway between 400 and 500)? What about 999 (it's the number before 1000)?

PLENARY

5
MINUTES

Consider the key questions above.

Ask the children to show you a number between 100 and 200 using place value cards. Each child then reads her or his number. Now ask everyone to show you a number between 100 and 200 that is closer to 100 than 200, then closer to 200 than 100. Ask some children to read out their numbers.

Repeat the process for numbers between 900 and 1000. *What is the smallest whole number between 900 and 1000? What is the largest?* How do they know?

Name

Date

Dear Parents/Carers,

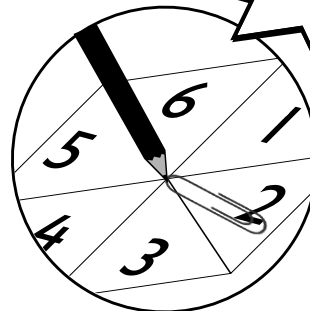
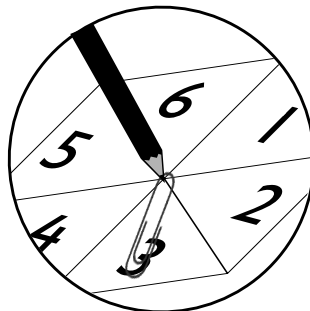
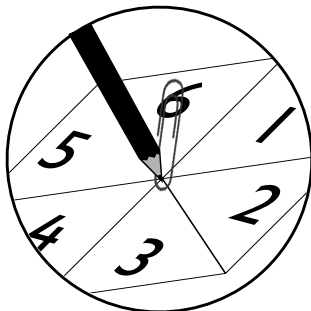
In our mathematics lessons, we have been learning about how three-digit numbers are made, for example that 326 is made from 300 and 20 and 6. Please help your child by playing the following game.

Thank you for your help.

Your child's teacher

Spinning Digits

- Take it in turns to spin the paperclip three times on the spinner.
- Write down the numbers you get, such as 3, 2 and 6.
- Decide which digits you want to be the hundreds, tens and ones, for example, 600 and 30 and 2. Write the resulting number 632.
- The aim is to get the biggest three-digit number.
- The first person to win three rounds wins the game.



632

Name

Date

Activity
sheet

1.1

$$\boxed{4} \boxed{2} \boxed{7} = \boxed{400} + \boxed{20} + \boxed{7}$$

$$427 = 400 + 20 + 7$$

1. Complete these number sentences.

$$346 = 300 + \boxed{} + 6$$

$$218 = \boxed{} + 10 + 8$$

$$120 = \boxed{} + 20$$

$$307 = 300 + \boxed{}$$

2. Make up four of your own, using any cards you like.

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3. Now make up four of your own, using just two place value cards.

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Name

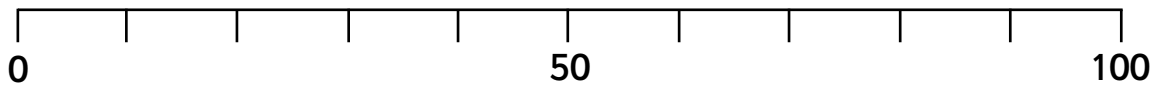
Date

Activity
sheet

1.2

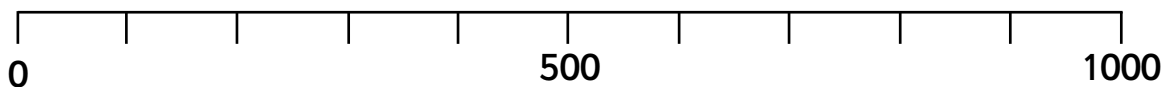
1. Write the numbers in the correct place on the number line.

10, 90, 40, 60, 5, 99, 55, 25, 49



2. Write the numbers in the correct place on the number line.

100, 200, 300, 250, 600, 900, 50, 650, 999

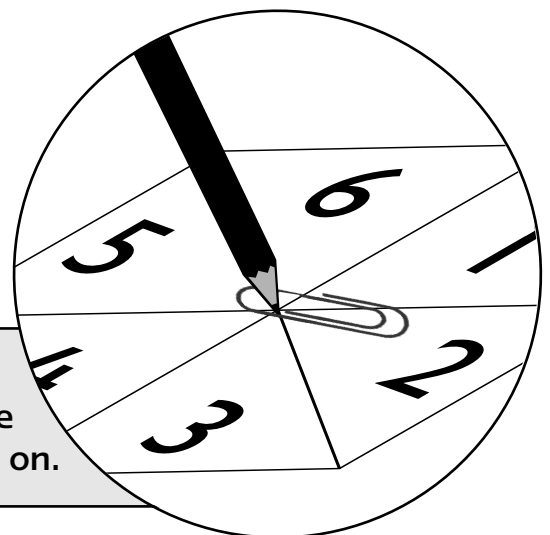
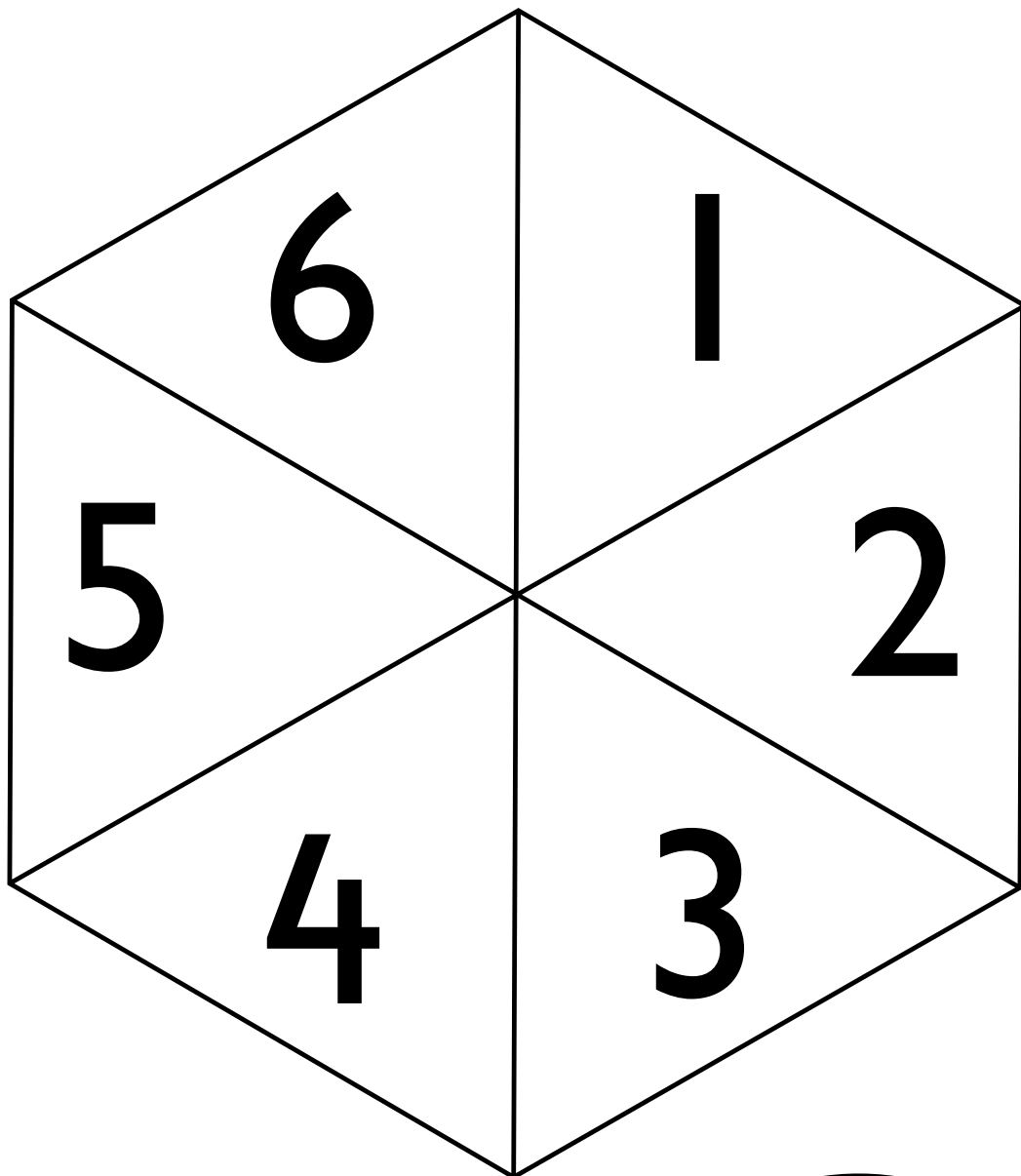


Unit 1

RESOURCE SHEET 1

UNIT

1



Hold the pencil fixed and flick the paper clip around. Read the number that the paper clip stops on.

1	01	100
2	02	200
3	03	300
4	04	400
5	05	500
6	09	600
7	07	700
8	08	800
9	06	900