Rounding to the nearest ten or hundred

National Curriculum attainment target

• Round any number to the nearest 10 or 100

Lesson objective

• Round any number to the nearest 10 or 100

Previous related lesson

None

Prerequisites for learning

Pupils need to:

• have a good understanding of three- and four-digit numbers

Vocabulary

round, multiple of ten, multiple of hundred

Future related lesson

Unit 9, Week 1, Lesson 2

Success criteria

Pupils can:

• read the number

• focus on the tens or ones digit

• decide whether to round up or down

Getting Started

• Choose an activity from Number – Number and place value.

• Choose an activity from *Fluency in Number Facts: Y3/Y4* – Number and place value.

Teach

Collins
Connect
**Year 4, Unit 5,
Week 1**

Resources

mini whiteboard, pen and eraser (per child)

• Ask: **What happens when numbers are rounded? What does this mean?** Discuss children's answers. Establish that "rounding" means changing a number to a multiple of ten or hundred or thousand. These numbers all end in zeros which are round. This is a good way to remember what rounding is.

• Say: **When we round numbers there are mathematical rules to follow. First, we are going to round to the nearest tens number.**

• Draw a number line from 760 to 770 and mark 10 intervals. Label 762 in the appropriate place. Ask: **What two tens numbers is 762 between?** Establish that is between 760 and 770. Show the number line on the board.

• Ask: **Is 762 nearer to 760 or 770?** Establish that it is nearer to 760.

• Say: **762 would be rounded down to 760 as this is the ten it is nearest to. 762 rounded to the nearest ten is 760.**

• Say: **Tell me another number that would be rounded down to 760.** Share children's ideas and underline all the numbers that would be rounded down.

• Ask: **What do you think we should do about 765, as it is halfway between the two tens numbers?**

• Share children's ideas and see if they know the rule. Say: **The mathematical rule is that when rounding to the nearest ten, if a number ends in five, it is always rounded up. So 765 rounded to the nearest ten is 770.**
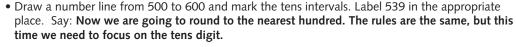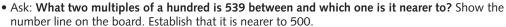
• Ask: **What other numbers would be rounded up to 770?** Put a star under all the numbers that would be rounded up to 770.

• Ask: **So when rounding numbers to the nearest ten, what digit do we need to focus on?** Establish that it is the ones digit that shows whether a number is rounded up or down.

• Ask: **Which ones digits are rounded down? Which ones digits are rounded up? Expect whole-class responses.**

• Write 571,827, 1346 and 3084 on the board. Write the ones digits in a different colour. Say: **Round these numbers to the nearest ten.**

- Draw a number line from 500 to 600 and mark the tens intervals. Label 539 in the appropriate place. Say: **Now we are going to round to the nearest hundred. The rules are the same, but this time we need to focus on the tens digit.**
- Ask: **What two multiples of a hundred is 539 between and which one is it nearer to?** Show the number line on the board. Establish that it is nearer to 500.
- Say: **So 539 rounded to the nearest hundred is 500. Tell me another number that would be rounded down to 500.** Establish that all numbers under 549 would be rounded down and that for rounding to the nearest hundred, we need to focus on the tens digit.
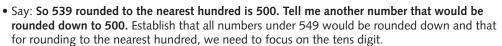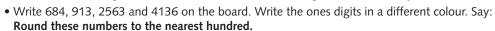- Say: **The mathematical rule when rounding to the nearest hundred is: 50 and all numbers above it are rounded up. Tell me a number that would be rounded up to 600.**
- Ask: **Which tens digits are rounded down? Which tens digits are rounded up?**
- Write 684, 913, 2563 and 4136 on the board. Write the ones digits in a different colour. Say: **Round these numbers to the nearest hundred.**

Individualised Learning

Refer to Activity 3 from the Learning Activities on page 205.

> **Pupil Book 4B:** – Page 6: Rounding to the nearest 10 or 100
>
> **Progress Guide 4:** – Support, Year 4, Unit 5, Week 1, Lesson 3: Rounding

Plenary

- Ask: **When might we need to round numbers in maths?** Discuss children's ideas. Establish that we often round numbers when we need to estimate an answer. Also, there are some mental methods that use rounding and adjusting.
- Ask: **When might we round numbers in real life?** Discuss children's ideas and have some of your own to share.
- Say: **I am going to say a number and I want you to round the number to the nearest ten and reply.** Expect a whole-class response.
- Repeat with rounding numbers to the nearest hundred.

> 🏠 **Homework Guide 4**
>
> Year 4, Unit 5, Week 1, Lesson 3: Round up or round down

Overcoming Barriers

- Children will find rounding challenging if they are not very secure with three- and four-digit numbers. They need to be able to readily identify the multiples of ten and hundred on either side of a given number. If they are unable to do this, go back to two-digit numbers and use a number line to support the rounding. Make the link between the pattern of numbers clear, for example, 56 rounds up to 60, 356 rounds up to 360.