

Spotlight 5: a learning check

Rounding inaccurately, particularly when decimals are involved, and having little sense of the size of the numbers involved

Opportunity for: explaining and discussing

Remembering rounding

Time 5–15 minutes

Resources

- Tens cards (Resource sheet 24)
- Number cards 0–10 (Resource sheet 1)
- Tenths cards (Resource sheet 27) (optional)
- Hundreds cards (Resource sheet 25) (optional)
- Bag
- At least two children
- Timer

Check: does the child use key vocabulary?

round up	whole one
round down	multiple of ten/hundred
almost	decimal
nearest ten	tenth
hundred	between
unit	estimate

Teaching activity

‘This game, **Remembering rounding**, will help you with rounding, and if you can round well, that will make your calculating much better.’

Put the tens cards face down on the table. These must always be kept in the same place because players must learn where each one is.

Put the digit cards in the bag.

Players can cooperate in pairs or they can play against each other.

How to play

1. Each player takes turns to take two digit cards out of the bag, for example 1 and 7. They make a two-digit number.
2. They then choose two cards from the tens cards that are face down, for example 20 and 60.
3. If one of their two-digit numbers, 17 and 71 in this case, rounds to one of the tens cards, they score one hundred points.
4. If neither of their two-digit numbers rounds to one of the tens cards drawn, they score nothing.

With 1 and 7 I can make
 $\begin{array}{l} \nearrow 17 \\ \text{and} \\ \searrow 71 \end{array}$

 Can I round to 20 or 60?

Yes, 17 rounds up to 20.

5. The digit cards are put back in the bag. The tens cards are put back exactly where they were on the table.
6. To get more points, they must try to remember where the tens cards are so that they pick the one they want. That way they can always make one of their two-digit numbers round to a multiple of ten.
7. See how long it takes to score one thousand points.

If there is time, they can play again and see if they can beat their personal best time.

Variations

- Play with digit cards and *Tenth cards* (Resource sheet 27) and round them to whole numbers.
- Play by taking three digit cards and round to multiples of a hundred (Resource sheet 25).

Learning outcomes

By the end of this set of activities, children should be able to:

- tackle related learning tasks with increased motivation and confidence;
- use and understand connected mathematical vocabulary;
- round to the nearest ten and hundred;
- round decimals to the nearest whole number;
- begin to see how rounding can be used for estimating and calculating;
- begin to see how rounding can be used to solve real-life problems.