

Spotlight 5: a learning check

Has inefficient counting strategies and/or insecure understanding of the number system

Opportunity for: explaining and discussing

How many digits?

Time 5–15 minutes

Resources

- Tens number cards (Resource sheet 24)
- Hundreds number cards (Resource sheet 25)
- Thousands number cards (Resource sheet 26)
- Tenths number cards (Resource sheet 27)
- Timer
- *Blank loop track* (Resource sheet 21)
- At least two children

Check: does the child use key vocabulary?

- | | |
|------------------------------|----------|
| count in tens/hundreds | boundary |
| start at | digit |
| next two numbers | column |
| one before/after | add |
| ten/hundred more | total |
| count forwards/
backwards | equals |

Teaching activity

‘This game, **How many digits?**, will help you with counting and with adding tens, hundreds and thousands.’

Choose which cards are suitable for the children (for example, just the tens and hundreds) and put these in a bag.

Children could cooperate in pairs.

How to play

1. The children each take a card from the bag and put them on the table. For example, 200 and 60.
2. They must estimate the answer, add the numbers in their head and say how many digits there will be in the answer.
3. If they get the total correct, they score one hundred points. If they get the number of digits in the answer correct, they win one hundred points.
4. They then put the cards back in the bag and take two more, and so on.
5. They can play until they score a total of one thousand points. If you set a timer, you could see how long it takes to score one thousand points, then play again so that children can try to beat their personal best time.

Variations

- Play with the rules above, but instead of scoring points, move the number of digits in the answer around the loop track on Resource sheet 21.

So if cards 40 and 80 are taken, the answer is a three-digit number so move three spaces. You might want to turn this game into a race, with one pair racing to get around the track faster than another pair. (But remember it is a game of luck!)

- ↑ ● Play by taking more than two cards. This is harder.
- ↑ ● For a really challenging game, play with the decimal number cards from *Tenths* (Resource sheet 27) as well.

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;
- count a large number of objects accurately using efficient counting strategies and check the count;
- count in tens, hundreds and thousands, including counting up and down through boundaries;
- add and subtract multiples of ten, a hundred and a thousand;
- read numbers up to nine thousand including those with zero place holders;
- understand the magnitude of the digits in a four-digit number;
- understand that the number system works in groups of ten.