

Spotlight 5: a learning check

Writes a remainder that is larger than the divisor, for example $36 \div 7 = 4$ remainder 8

Opportunity for: discussing and explaining

Silly number sentences

Time 15–20 minutes

Resources

- Cubes
- Bag
- Empty number lines
- At least two children
- Prepared series of number sentences

Check: does the child use the key vocabulary?

how many times? take away
group divided by
remainder

$$15 \div 5 = 4$$

$$17 \div 4 = 5$$

$$13 \div 3 = 4$$

$$15 \div 5 = 3$$

$$17 \div 4 = 4 \text{ r } 1$$

$$13 \div 3 = 3 \text{ r } 4$$

$$15 \div 5 = 2 \text{ r } 5$$

$$17 \div 4 = 3 \text{ r } 5$$

$$13 \div 3 = 4 \text{ r } 1$$

Teaching activity

‘Today we are going to play a game, **Silly number sentences**, and you are going to decide which ones are silly and which ones are sensible.’

? Tell me what you have remembered about the size of a remainder when we have been dividing.

Prepare several number sentences – some right, some wrong – as in the resource list.

The children could work cooperatively in pairs or teams, or they could compete against each other.

You might want to play the game where the players can shout.

Put all the number sentences in the bag so that you can pull them out one at a time, and so that each player can see the sentence at exactly the same moment.

How to play

1. Take a number sentence out of the bag and show it to everyone.
2. If it is a silly sentence, for example $18 \div 5 = 2 \text{ r } 8$, everyone shouts ‘silly!’.
3. If it is a sensible sentence, for example $11 \div 2 = 5 \text{ r } 1$, everyone shouts ‘sensible!’.
4. The players score ten points every time they get one right.

If a child needs more help, use cubes or number lines to work out the sentences and put them in two groups, silly and sensible, so that you can help the child to reflect on what is the same about the silly sentences.

? What makes a silly sentence silly?

Variations

- The children could compete and win a card if they shout first.
- The children could make up sets of three number sentences themselves to give to a friend to play the game.



? What do you notice about this: $50 \div 7 = 6 \text{ r } 8$?

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;
- decide whether a remainder is within the range appropriate for a particular division calculation;
- make decisions about how to treat a remainder based on the context within which it occurs;
- explain how they know that a particular remainder is a reasonable one.