Learning activities

Activity 1 👥 [Challenge 2]

Objective
• Add and subtract mentally, whole numbers and decimals

Resources
3 × 0–9 dice (per pair)

What to do
• Both children should write 0 as their start number.
• They must then take it in turns to roll the dice.
• Using the digits on the dice, they should make a one-digit number to two decimal places.
• They should add the number rolled to the start number.
• The winner is the first player to pass 20.
• If at any time during the game a player's total is a whole number, then they are the winner.

Variations

[Challenge 2] • Children start from 20 and subtract the decimals.

[Challenge 3] • Children use four dice and make two-digit numbers to two decimal places.

Activity 2 👥 [Challenge 2]

Objectives
• Add whole numbers with five and six digits using the formal written method
• Use rounding to check answers

Resources
2 × 0–9 cards (per pair)

What to do
• Children should shuffle the cards and put them face down in a pile.
• They must turn over the top five/six cards and use the digits to make a five/six-digit number and write it down.
• They must put these cards at the bottom of the pile.
• They should repeat this to make a second five/six-digit number.
• They must then both add the numbers together using the formal written method and check their answers together.

Variations

[Challenge 2] • Children should subtract the lowest number from the highest number.

[Challenge 1] • Children should make four-digit numbers.

Activity 3 👥 [Challenge 2]

Objectives
• Subtract whole numbers with five and six digits using the formal written method
• Use rounding to check answers

What to do
• Both children should make up a six-digit subtract five-digit calculation and work it out using the formal written method.
• They must then copy the calculation but leave out four of the digits – the digits can be from the calculation or the answer.
• They should give this version to their partner.
• They must both work out their partner's missing numbers then swap back to check answers.

Variation
[Challenge 3] • Four of the columns have a lower number as the number being subtracted from.

Activity 4 👥 [Challenge 2]

Objective
• Solve multi-step problems involving number and money, including some multiplication and division, deciding which operations and methods to use and why

Resources
Resource 46: Problem writing (per child)

What to do
• Ask each child to write down the name of some characters, a setting, and an action.
• They should then swap with their partner.
• Using the information, they should write a two-step word problem.
• They must then swap back and work out the answer to the problem.

Variation
[Challenge 1] • Children write one-step problems.

Also refer to the games and activities from:
• *Fluency in Number Facts: Y5/Y6* – Addition and subtraction