

# I.M.C.A.

**I**nformation

What do I know?

What do I need to know?

**M**ethods

What methods will I be using?

**C**alculations

Working out / Calculations

**A**nswer

Answers, checking and presentation.

IMCA is a method used in Year 6 (and in high school) to break down reasoning problems to make them easier to solve. First, the information section identifies what we already know and what the question is asking. We then think about what methods we could use before calculating the answer. Finally we check our work.

Example:

Gabriel has £7.52 pocket money saved up, Amaad has £12.38 and Nikki has £9.36. Gabriel and Amaad decided to club together to buy a new computer game. It costs £19.85. Do they have enough money?

**Information.**

What do we know?

Gabriel has £7.52

Amaad has £12.38

Game costs £19.85

What do we need to know?

Do Gabriel and Amaad have enough money to buy the game?

**Method.**

addition

**Calculations.**

$$\begin{array}{r} 7.52 \\ + 12.38 \\ \hline 19.90 \end{array}$$

**Answer.**

Yes, they do have enough money.

The game only costs £19.85, but together they have £19.90.

**Check.**

Use the inverse (opposite) operation to check my answer...

$$\begin{array}{r} 19.90 \\ - 12.38 \\ \hline 7.52 \end{array}$$

Yes, my answer is correct.