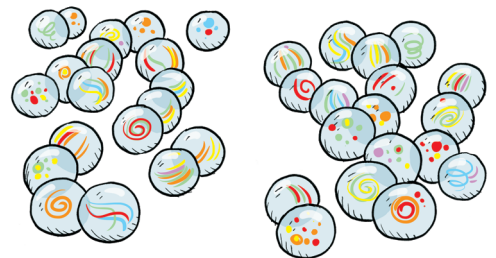# Addition and subtraction

Bridging and adjusting

Look for numbers that are close to a multiple of 10, so that you can round to a multiple of 10 and then add or subtract a small number (adjusting). For example:

$64 + 79 = 143$ Work this out as $64 + 80 − 1 = 143$

$138 − 47 = 91$ Work this out as $138 − 50 + 3 = 91$

1.   Complete these calculations. Show your working.

a. $62 + 56 =$ _____

b. $94 + 87 =$ _____

c. $83 + 78 =$ _____

d. $82 + 99 =$ _____

Here are other ways of thinking when adding and subtracting.

$137 + 39 = 137 + 40 − 1 = 176$ $137 + 41 = 137 + 40 + 1 = 178$

$187 − 21 = 187 − 20 − 1 = 166$ $187 − 19 = 187 − 20 + 1 = 168$

2.   Now do these problems in the same way, showing your working.

a.	157	+	19	=	$157 + 20 − 1$	=	176
b.	385	−	69	=		=	
c.	537	+	41	=		=	
d.	542	−	21	=		=	
e.	246	+	39	=		=	

3.   Solve this problem using one of the strategies suggested on this page.

A jar contained 454g of marmalade. Seventy-nine grams
of the marmalade were eaten.

What mass still remained in the jar? _____
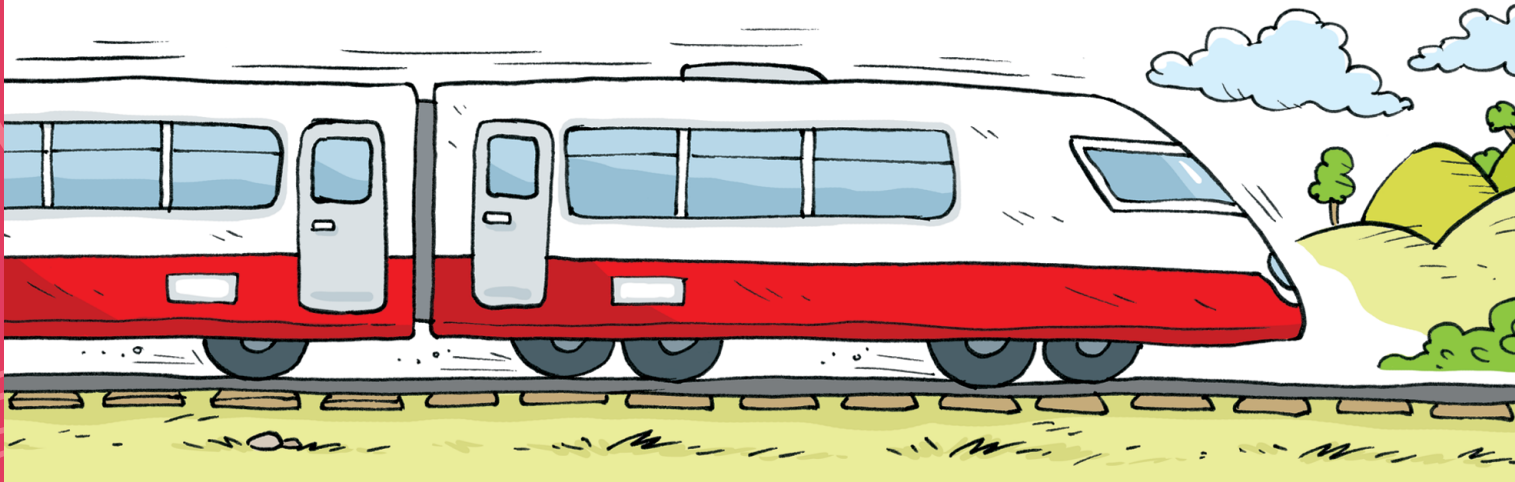
Mental addition and subtraction

Choose the best strategy for the numbers in the questions.

Counting up and bridging through tens or hundreds is useful for mental subtraction.

Partition the numbers to make them easier to add or subtract mentally.

Work out the answers to these problems. Think carefully about which strategy you are going to use.

1. £370.00 + £250.00 = _____

2. 920km take away 480km = _____

3. 3687 miles − 800 miles = _____

4. 900kg + 726kg = _____

5. 740g minus 360g = _____

6. 982 litres + 600 litres = _____

7. From 3000m take away four hundred and seven hundred metres.

   _____

8. A train travels 700km, 400km and 900km. How far is that?

   _____

Calculation problems

All at sea!

Remember, you can check your answer to a problem by using an inverse operation.

Captain Jack is loading up his ship with supplies for a long voyage. He needs to know how many items he is taking. However, he is not very good at maths! Help him by answering these questions.

1. Captain Jack wants to take 350 nails for each of his three masts.
    How many nails does he need to bring?

    _____

2. There are eight crew members. Each can bring 256 of their favourite biscuits.
    How many biscuits can be loaded on board?

    _____

3. Six barrels of apples, each containing 425 apples, are brought below deck.
    How many apples are there in total?

    _____

4. Each of the eight crew, plus Captain Jack, is allowed 512 rations of their favourite tipple –
    prune juice. How many rations of prune juice do they bring to drink?

    _____

5. There are seven cannonball racks, each holding 156 cannonballs.
    How many cannonballs are there in total?

    _____

6. The crew take five parrots and 673 packets of bird seed for each
    parrot. How many packets of bird seed are packed for the voyage?

    _____

Lots of division

Solve these problems mentally. If you can't do them in your head, use short division to find the answers.

1. Harry has received equal numbers of postcards from 8 different countries. He has received 176 postcards. How many come from each country?
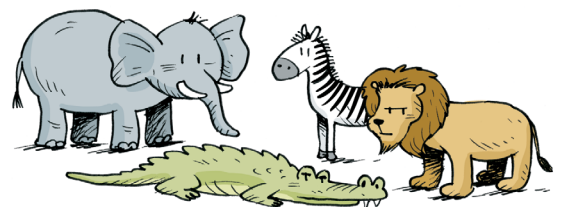
Answer: _____

2. a. At the zoo, Tariq saw a number of four-legged animals. They had 312 legs between them. He challenged his sister to work out how many animals he had seen that day.

Answer: _____

b. Tariq's sister returned the challenge by saying 'If there were 346 visitors and 24 keepers, how many pairs of shoes were there in the zoo that day?'

Answer: _____

3. A baker packs his cakes into boxes of 6 for the supermarket. He has 255 cakes. How many boxes does he make up? Are there any cakes left for his tea?

Answer: _____