

Checking strategies

Discover



- 1 a) How can the astronaut check her calculation?
- b) Show two ways to do the calculation.

128

Share

- a) A subtraction can be checked by using the inverse operation, which is addition.

I will use the fact family to check by adding the parts.



I could also check by estimating.



1,225
799
574

Th	H	T	O
7	9	9	
+	5	7	4
1	3	7	3
1	1		

The parts do not match the whole. The calculation should be done again.

Th	H	T	O
<del>X</del>	<del>12</del>	<del>12</del>	<del>15</del>
-	7	9	9
	4	2	6

Th	H	T	O
<del>X</del>	<del>12</del>	<del>2</del>	<del>6</del>
-	8	0	0
	4	2	6

I found an easier way.



There are 426 l of fuel left.

129

Think together

- 1 The mass of the food has to be calculated accurately. Check the calculation using the inverse operation.

6,995 g of food at start of voyage.  
3,288 g eaten so far.  
 $6,995 - 3,288 = 3,707$



+  =

The parts **do** / **do not** match the whole.  
The calculation is / is **not** correct.

- 2 Write a calculation to check each of these.

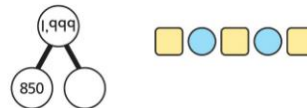
a)  $199 + 3,401 = 5,391$

b)  $9,009 - 440 = 8,569$

Complete any corrections that are needed.

130

- 3 Complete the part-whole model, and then write the four facts in the fact family.



- 4 Use a part-whole model or a bar model to show these missing number calculations.

$1,090 + \square = 3,000$        $4,000 - \square = 1,250$

$2,550 = \square + 1,850$        $\square - 750 = 2,000$

Now choose a calculation to find each of the missing numbers.



I wonder if a part-whole model or a bar model shows the numbers best.

I think it helps to draw a diagram with parts and wholes to show the missing information.



131