

The Case of the Missing Cookie

It was 3:23 pm when the delicious chocolate-chip cookie went missing. I know the exact time because the delivery man came to the door. The cookie was sitting on a plate on the kitchen bench when I walked out to answer the door. By the time I came back, it was gone! I remember that I signed for the package that was delivered at exactly 3:23 pm.

I was distraught! I decided to search the kitchen for clues to find out who stole my scrumptious cookie. As I was looking around, I found some short brown hairs by the bottom of the bench, just below where my cookie had been sitting. I continued to search further and found a tennis ball, just around the corner. It had chocolate-chip cookie crumbs on it! Who would have dropped short brown hairs on the floor and left crumbs on a tennis ball?

There was a trail of crumbs leading toward the back door, which was open. The crumbs led down the back stairs and onto the grass. As I followed the trail, I saw...



Name _____

Date _____

The Case of the Missing Cookie

1. Who do you think stole the cookie?

Explain why you think this. List three clues that you used.

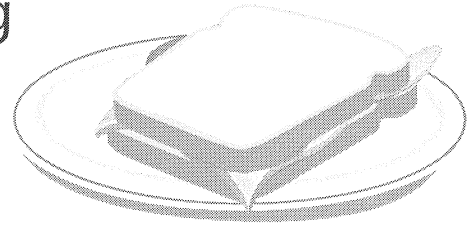
2. What words did the author use to show that they were looking forward to eating the cookie?

3. Where else could the author have looked for clues?

4. What could have happened after the thief was caught?



7. Alex needs 2.5 kg of ham to make sandwiches for his soccer team. The ham comes in 375 g packets. How many packets does he need to buy?



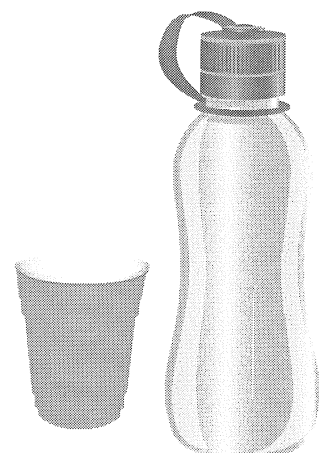
Teach Starter.com

8. You bought a 12 month gym membership for \$418. How much do you need to pay per month?



Teach Starter.com

9. It is recommended that you drink 2 L of water every day. If your cup holds 210 ml, how many cups of water would you need to drink to have 2 L?



Teach Starter.com

Addition mental strategies – split strategy version 1

When adding large numbers in our heads, it can be easier to split one of the numbers into parts and add each part separately.

$$112 + 46 \begin{cases} 40 \\ 6 \end{cases} \rightarrow 112 + 40 = 152 \rightarrow 152 + 6 = 158$$

- 1 Practise separating these numbers into tens and units. The first one has been done for you.

a $48 \begin{cases} 40 \\ 8 \end{cases}$

b $63 \begin{cases} \square \\ \square \end{cases}$

c $52 \begin{cases} \square \\ \square \end{cases}$

d $27 \begin{cases} \square \\ \square \end{cases}$

- 2 Practise adding the tens to these numbers:

+	20	50	30	70	60
123					
214					

- 3 Use the split strategy with these problems. The first one has been done for you.

a $48 + 53 \begin{cases} 50 \\ 3 \end{cases} \rightarrow 48 + 50 = 98 \rightarrow 98 + 3 = 101$

b $65 + 38 \begin{cases} \square \\ \square \end{cases} \rightarrow \square \rightarrow \square$

c $112 + 25 \begin{cases} \square \\ \square \end{cases} \rightarrow \square \rightarrow \square$

d $332 + 66 \begin{cases} \square \\ \square \end{cases} \rightarrow \square \rightarrow \square$

Addition mental strategies – split strategy version 2

Here is another way to use the split strategy.

$$\begin{aligned} 42 + 32 &= (4 \text{ tens} + 3 \text{ tens}) + (2 \text{ units} + 2 \text{ units}) \\ &= 7 \text{ tens} + 4 \text{ units} \\ &= 74 \end{aligned}$$

1 Use this way to add these:

$$\begin{aligned} \text{a } 63 + 37 &= \left(\begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \right) \\ &= \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \\ &= \square \end{aligned}$$

$$\begin{aligned} \text{b } 88 + 23 &= \left(\begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \right) \\ &= \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \\ &= \square \end{aligned}$$

$$\begin{aligned} \text{c } 56 + 15 &= \left(\begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \right) \\ &= \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \\ &= \square \end{aligned}$$

$$\begin{aligned} \text{d } 65 + 28 &= \left(\begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} \right) + \left(\begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \right) \\ &= \begin{array}{|c|} \hline \square \\ \hline \text{tens} \end{array} + \begin{array}{|c|} \hline \square \\ \hline \text{units} \end{array} \\ &= \square \end{aligned}$$

Ten units are 1 ten.
So if I have 3 tens + 10 units,
I really have 4 tens or 40.



REMEMBER

2 Use either version of the split strategy to complete this table:

+	23	78	63	55	36
45					
39					