

My goal is to learn  
how to balance  
numbers.



- A Warm-up. Listen to your teacher.**  
 $11 + 9 = 20$  is a number sentence.  
 Fill the missing number in each box.



- B Fill in the blanks in the number sentences.**

- |                                      |                                   |                                    |
|--------------------------------------|-----------------------------------|------------------------------------|
| 1. (a) $5 + \underline{\quad} = 12$  | (b) $9 + \underline{\quad} = 10$  | (c) $2 + \underline{\quad} = 11$   |
| (d) $4 + \underline{\quad} = 8$      | (e) $8 + \underline{\quad} = 8$   | (f) $0 + \underline{\quad} = 5$    |
| 2. (a) $10 + \underline{\quad} = 18$ | (b) $20 + \underline{\quad} = 21$ | (c) $30 + \underline{\quad} = 37$  |
| (d) $40 + \underline{\quad} = 52$    | (e) $50 + \underline{\quad} = 70$ | (f) $60 + \underline{\quad} = 75$  |
| 3. (a) $15 + \underline{\quad} = 20$ | (b) $21 + \underline{\quad} = 21$ | (c) $38 + \underline{\quad} = 40$  |
| (d) $42 + \underline{\quad} = 50$    | (e) $56 + \underline{\quad} = 64$ | (f) $72 + \underline{\quad} = 100$ |

- C Answer the questions.**

- The mayor wishes to visit **50** houses. He has already visited **35** houses. How many more has he to visit? Write a number sentence to show this.
- Gilda has read **65** pages of a book which has **40** leaves. (One leaf is the same as **2** pages.) How many more pages has she left to read? Write a number sentence to show this.
- Make a word problem for this number sentence:  $62 + \underline{\quad} = 100$



- D Taking away.**

- (a)  $5 - \square = 2$
- (a)  $10 - \square = 8$
- (a)  $15 - \square = 10$
- There were **20** boats in the harbour. Some of them left this morning and now there are **8** left. Write a number sentence that shows how many boats left this morning.
- 80** people turned up to watch a concert but some of them left early. **63** watched all of the concert. Write a number sentence that shows how many left early.
- Make a word problem for this number sentence:  $100 - \underline{\quad} = 48$



**A** Multiplying

- Use cubes or counters to make 'pictures' for the following.
  - 3 sets of  $\underline{\quad} = 15$
  - 3 sets of  $\underline{\quad} = 21$
  - $3 \times \underline{\quad} = 27$
  - $3 \times \underline{\quad} = 33$
- 6 sets of  $\underline{\quad} = 54$
  - 7 sets of  $\underline{\quad} = 77$
  - 8 sets of  $\underline{\quad} = 40$
  - 9 sets of  $\underline{\quad} = 36$
- $10 \times \underline{\quad} = 70$
  - $11 \times \underline{\quad} = 44$
  - $12 \times \underline{\quad} = 36$
  - $2 \times \underline{\quad} = 40$
- Peter has to carry **40** books to the spare room. How many books does he take at a time if he needs to make **5** trips? Write a number sentence using  $\times$ .
- A fletcher made **48** arrows. How many arrows are in a set if he has made **8** sets? Write a number sentence using  $\times$ .
- Make a word problem for this number sentence:  $5 \times \underline{\quad} = 45$

**B** Dividing

- Some frogs shared **20** flies for lunch. How many frogs were there if each frog ate **4** flies?
- $8 \div \underline{\quad} = 4$
  - $28 \div \underline{\quad} = 4$
  - $36 \div \underline{\quad} = 4$
  - $44 \div \underline{\quad} = 4$
- $42 \div \underline{\quad} = 6$
  - $63 \div \underline{\quad} = 7$
  - $19 \div \underline{\quad} = 2 \text{ R}1$
  - $29 \div \underline{\quad} = 8 \text{ R}5$
- A lift carried **72** people to the top floor of a building. How many people did the lift carry each time if it made **12** trips? Write a number sentence using  $\div$ .
- It took Lisa one week to read a book which had **56** pages. How many pages did she read each day? Write a number sentence using  $\div$ .
- Make a word problem for this number sentence:  $32 \div \underline{\quad} = 8$

**C** Multiplying and dividing.

- Mum had **20** bags of rubbish for recycling, but she could only carry **3** at a time. **How many trips did she have to make to the recycling bin?**
- Eight** passengers can fit in a people carrier. **How many passengers were carried on Sunday if it made 7 journeys altogether?** 5 trips were full and 2 trips were half full.
- Parking costs **65c** an hour. Dad only had **20c** coins and he wanted to park for **2** hours. **How many 20c coins did he need to insert in the parking machine?**



**A** Let's investigate: maximum.

Maximum weight 500kg



- The digger can safely carry up to 500kg. The maximum weight is 500kg. The elephant weighs at least \_\_\_ kg.
- When the digger carries 400kg, what is the greatest amount of extra weight that it can safely carry?  $400\text{kg} + \underline{\hspace{1cm}} < 501\text{kg}$ .

**B** Fill the blanks with the greatest possible whole number.

- |   |  |  |
|---|--|--|
| 1. (a) $200 + \underline{\hspace{1cm}} < 501$ | (b) $300 + \underline{\hspace{1cm}} < 501$ | (c) $50 + \underline{\hspace{1cm}} < 501$  |
| (d) $498 + \underline{\hspace{1cm}} < 501$    | (e) $500 + \underline{\hspace{1cm}} < 501$ | (f) $250 + \underline{\hspace{1cm}} < 501$ |
| 2. (a) $50 + \underline{\hspace{1cm}} < 101$  | (b) $70 + \underline{\hspace{1cm}} < 101$  | (c) $98 + \underline{\hspace{1cm}} < 101$  |
| (d) $1 + \underline{\hspace{1cm}} < 101$      | (e) $5 + \underline{\hspace{1cm}} < 101$   | (f) $42 + \underline{\hspace{1cm}} < 101$  |
| 3. (a) $23 + \underline{\hspace{1cm}} < 25$   | (b) $42 + \underline{\hspace{1cm}} < 50$   | (c) $9 + \underline{\hspace{1cm}} < 20$    |
| (d) $17 + \underline{\hspace{1cm}} < 40$      | (e) $76 + \underline{\hspace{1cm}} < 90$   | (f) $40 + \underline{\hspace{1cm}} < 41$   |
| (g) $35 + \underline{\hspace{1cm}} < 65$      | (h) $67 + \underline{\hspace{1cm}} < 99$   | (i) $50 + \underline{\hspace{1cm}} < 100$  |

**C** Write a number sentence – whole numbers only!

- A washing machine can wash up to **7kg** of clothes. Dad put **3kg** of clothes into the machine. How much more can he add without breaking the machine? Write a number sentence using the  $<$  sign.
- A lift can safely hold **12** adults. There are **3** adults in the lift. Write a number sentence using the  $<$  sign to show how many more adults can safely enter the lift.
- A flask can hold up to **300ml** of liquid. Write a number sentence using  $<$  to show how much more hot water can be added to the flask if it now contains **120ml**.





**A** Let's investigate: minimum.

The path takes time to dry. Someone came along after 40 minutes. What is the least amount of time he should have waited?

$40 + \underline{\quad} > 59$  minutes

60 minutes or more ✓



Less than 60 minutes. X

After 40 minutes!

**B** Fill the blanks with the lowest possible whole number.

- |                                      |                                    |                                    |
|--------------------------------------|------------------------------------|------------------------------------|
| 1. (a) $20 + \underline{\quad} > 59$ | (b) $30 + \underline{\quad} > 59$  | (c) $10 + \underline{\quad} > 59$  |
| (d) $50 + \underline{\quad} > 59$    | (e) $55 + \underline{\quad} > 59$  | (f) $43 + \underline{\quad} > 59$  |
| 2. (a) $80 + \underline{\quad} > 99$ | (b) $75 + \underline{\quad} > 99$  | (c) $99 + \underline{\quad} > 99$  |
| (d) $90 + \underline{\quad} > 99$    | (e) $1 + \underline{\quad} > 99$   | (f) $12 + \underline{\quad} > 99$  |
| (g) $36 + \underline{\quad} > 99$    | (h) $58 + \underline{\quad} > 99$  | (i) $27 + \underline{\quad} > 99$  |
| 3. (a) $12 + \underline{\quad} > 20$ | (b) $15 + \underline{\quad} > 25$  | (c) $38 + \underline{\quad} > 52$  |
| (d) $9 + \underline{\quad} > 18$     | (e) $14 + \underline{\quad} > 15$  | (f) $27 + \underline{\quad} > 60$  |
| (g) $19 + \underline{\quad} > 40$    | (h) $83 + \underline{\quad} > 150$ | (i) $66 + \underline{\quad} > 100$ |

**C** Write a number sentence for each of the following.



- A car needs **20** litres of fuel for a journey. There are **6** litres in the tank. **What is the least amount of fuel I should buy?** Write a number sentence using the  $>$  sign.
- Ella needs **100** points or more in a game to get to the next level. She has **65** points. **What is the least amount of points she needs?** Write a number sentence using the  $>$  sign.
- Teacher gives a prize to anyone who scores **90** or higher in a test. Kim scored **75**. **How many more points did she need to get a prize?** Write a number sentence using the  $>$  sign.

Challenge



Tick the correct answer.

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| $\begin{array}{r} 1 \underline{\quad} 5 \\ + 234 \\ \hline 379 \end{array}$ | $\begin{array}{r} 268 \\ + 3 \underline{\quad} 5 \\ \hline 593 \end{array}$ | $\begin{array}{r} 3 \underline{\quad} 7 \\ + 153 \\ \hline 510 \end{array}$ | $\begin{array}{r} 258 \\ + 4 \underline{\quad} 2 \\ \hline 700 \end{array}$ | $\begin{array}{r} 358 \\ + 3 \underline{\quad} 0 \\ \hline 708 \end{array}$ | $\begin{array}{r} 3 \underline{\quad} 2 \\ + 539 \\ \hline 921 \end{array}$ |
| <input type="checkbox"/> 4  | <input type="checkbox"/> 1  | <input type="checkbox"/> 6  | <input type="checkbox"/> 5  | <input type="checkbox"/> 5  | <input type="checkbox"/> 9  |
| <input type="checkbox"/> 5  | <input type="checkbox"/> 2  | <input type="checkbox"/> 4  | <input type="checkbox"/> 3  | <input type="checkbox"/> 4  | <input type="checkbox"/> 7  |
| <input type="checkbox"/> 3  | <input type="checkbox"/> 3  | <input type="checkbox"/> 3  | <input type="checkbox"/> 4  | <input type="checkbox"/> 3  | <input type="checkbox"/> 8  |
| <input type="checkbox"/> 2  | <input type="checkbox"/> 4  | <input type="checkbox"/> 5  | <input type="checkbox"/> 2  | <input type="checkbox"/> 6  | <input type="checkbox"/> 6  |

