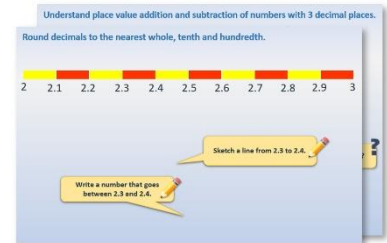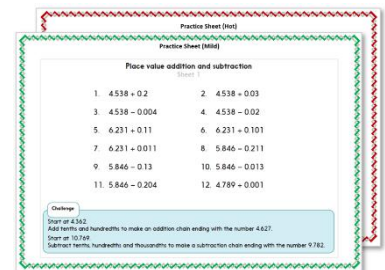# Week 11, Day 3
Solve single and multi-step problems, deciding which calculations are necessary.
Each day covers one maths topic. It should take you about 1 hour or just a little more.
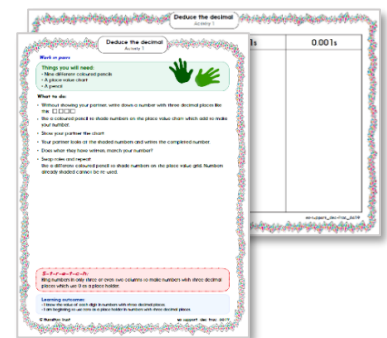
1.   Start by carefully reading through the **Learning Reminders**.

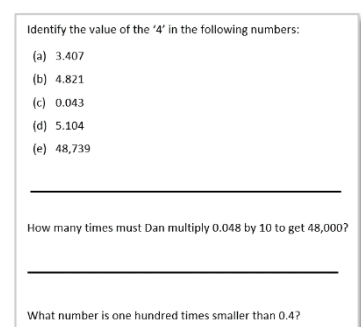2.   Tackle the questions on the **Practice Sheet**.
There might be a choice of either Mild (easier) or Hot (harder)!
Check the answers.

3.   Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**

4.   Have I mastered the topic? A few questions to **Check your understanding**.
Fold the page to hide the answers!

Learning Reminders

Solve single and multi-step problems, working out which calculations are necessary.

Remember to use our RUCSAC to help solve word problems!

Read the problem.
  Understand what you need to do.
    Calculation: Which operation do you need?
    Solve the calculation.
     Answer the problem.
      Check - does the answer seem reasonable?

Learning Reminders

Solve single and multi-step problems, working out which calculations are necessary.

> 3 children collect stickers.
> Each has a sticker album holding 200 stickers.
> How many stickers do they have if, between them,
> they need 25 stickers to complete their collections?

1. Read this problem.

2. Understand the problem and decide what calculations to do.

This is a 2-step problem!
We have to first find how many stickers the 3 albums hold, then subtract the number needed to complete them.

3. Solve the calculation...

(3 x 200) - 25 = 575

4. Answer the question and check if the answer is sensible.

The children have 575 stickers.

Practice Sheet Mild
Stickers word problems

Solve these questions. Don't forget your RUCSAC!

1. Four children collect stickers. Each has a sticker album holding 100 stickers. How many stickers do they have if, between them, they need 30 more stickers to complete their collections?

2. A small packet of stickers costs £1.20. How much would 6 packets cost? How much change from £10?

3. Three children each have 223 stickers. How many is that altogether?

4. Josh buys 4 small packets of stickers costing £1.20 each and 3 large packets costing £2.50 each. How much does he spend altogether?

5. Janine has 237 stickers. Her friend Ellie gives her 62 stickers and then she gives 45 to Josh. How many stickers does she now have?

6. Yvonne has 248 stickers. She gives one quarter of them to Ellie. How many stickers does she now have?

Challenge

Now make up your own stickers word problems for someone else to solve. You must be able to work out the answer yourself!

Solve these questions. Don't forget your RUCSAC!

1. Four children collect stickers. Each has a sticker album holding 120 stickers. How many stickers do they have if, between them, they need 37 stickers to complete their collections?	4. Josh buys 5 small packets of stickers costing £1.20 each and 7 large packets costing £2.50 each. How much does he spend altogether?
2. A small packet of stickers costs £1.20. How much would 11 packets cost? How much change from £20?	5. Janine has 328 stickers. Her friend Ellie gives her 82 stickers and then she gives 45 to Josh. How many stickers does she now have?
3. Five children each have 223 stickers. How many is that altogether?	6. Yvonne has 328 stickers. She gives 25% of them to Ellie. How many stickers does she now have?

Challenge

Now make up your own stickers word problems for someone else to solve. You must be able to work out the answer yourself!

Practice Sheets Answers

Stickers word problems (mild)

1.   370

2.   £7.20, change = £2.80

3.   669

4.   £12.30

5.   254

6.   186

Stickers word problems (hot)

1.   443

2.   £13.20, change = £6.80

3.   1115

4.   £23.50

5.   365

6.   246

A Bit Stuck?
Pet word problems

1. A puppy eats 80g of dried food each day. How much will it eat in a week?

2. An adult Labrador needs 375g of dried dog food each day. How much would two Labradors eat in a day?

3. Mrs Walker spends £24 per month on cat food. This works out at £6 for each cat. How many cats does she have?

4. Mr Chidgey needs 3 cans of dog food each day to feed his dogs. How many days will 36 cans last?

5. A cat needs two worming tablets four times a year. How many tablets would the cat sanctuary need each year for its 123 cats?

6. Jack is checking rabbits' paws. If Jack checks 44 paws, how many rabbits are there?

7. A dog needs three walks a day. How many walks does it need in a month of 31 days?

Challenge

Make up your own pet number story for a friend to try to answer.
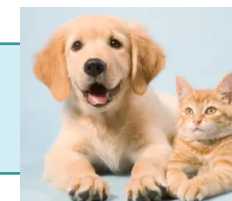
A Bit Stuck?
Answers

Pet word problems

1. $80 \times 7 = 560$ The puppy will eat 560g of dried food in a week.
2. $375 \times 2 = 750$ Two Labradors would eat 750g of dried dog food in a day.
3. $24 \div 6 = 4$ Mrs Walker has 4 cats.
4. $36 \div 3 = 12$ 36 cans will last for 12 days.
5. $123 \times 8 = 984$ The cat sanctuary needs 984 tablets each year.
6. $44 \div 4 = 11$ There are 11 rabbits.
7. $31 \times 3 = 93$ The dog needs 93 walks in a month of 31 days.

Check your understanding
Questions

Write the correct symbol (<, = or >) in each box to make the statements correct:

15 x 10 ☐ 7 x 20

120 ÷ 6 ☐ 180 ÷ 9

70 x 30 ☐ 4 x 500

440 ÷ 4 ☐ 720 ÷ 60

A box contains trays of oranges.
There are 12 oranges in a tray.
There are 5 trays in a box.
A grocer sells 30 boxes of oranges.
How many oranges does the grocer sell?

Write the missing number in each calculation:

252 ÷ 6 = [___]

[___] ÷ 6 = 10 remainder 3

102 ÷ [___] = 12$^3/_4$

See next page for answers

Check your understanding
Answers

Write the correct symbol (<, = or >) in each box to make the statements correct:

15 x 10 > 7 x 20   since 150 > 140

120 ÷ 6 = 180 ÷ 9   since each equal 20

70 x 30 > 4 x 500   since 2100 > 2000

440 ÷ 4 > 720 ÷ 60   since 110 > 12

A box contains trays of oranges.
There are 12 oranges in a tray.
There are 5 trays in a box.
A grocer sells 30 boxes of oranges.
How many oranges does the grocer sell?

He sells 1800 oranges (12 x 5 x 30). This is a 2-step problem requiring all three numbers to be multiplied together; they can be multiplied in any order.

Write the missing number in each calculation:

252 ÷ 6 = 42

63 ÷ 6 = 10 remainder 3

102 ÷ 8 = $12^3/_4$