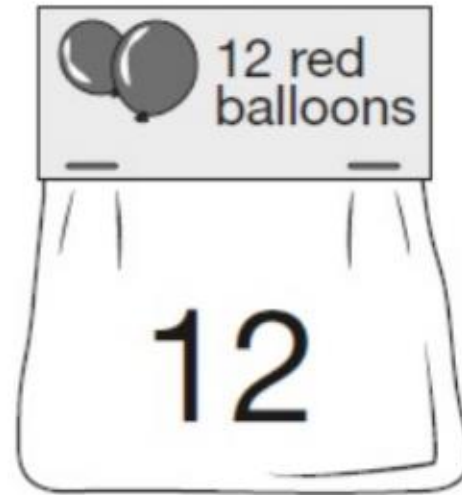
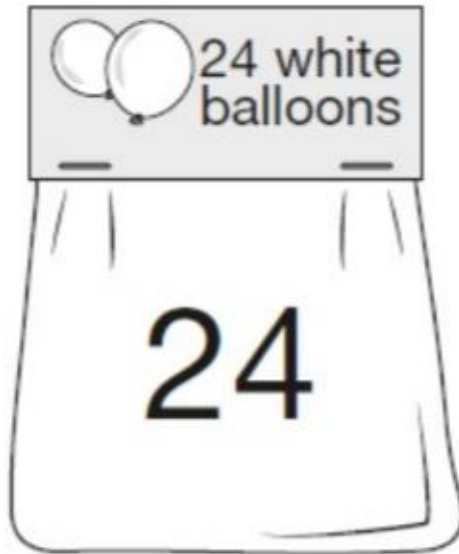


RECALL

1



Adam buys **6** bags of white balloons.

Chen buys **3** bags of red balloons.

Adam says,

'I have four times as many balloons as Chen.'

Explain why Adam is correct.

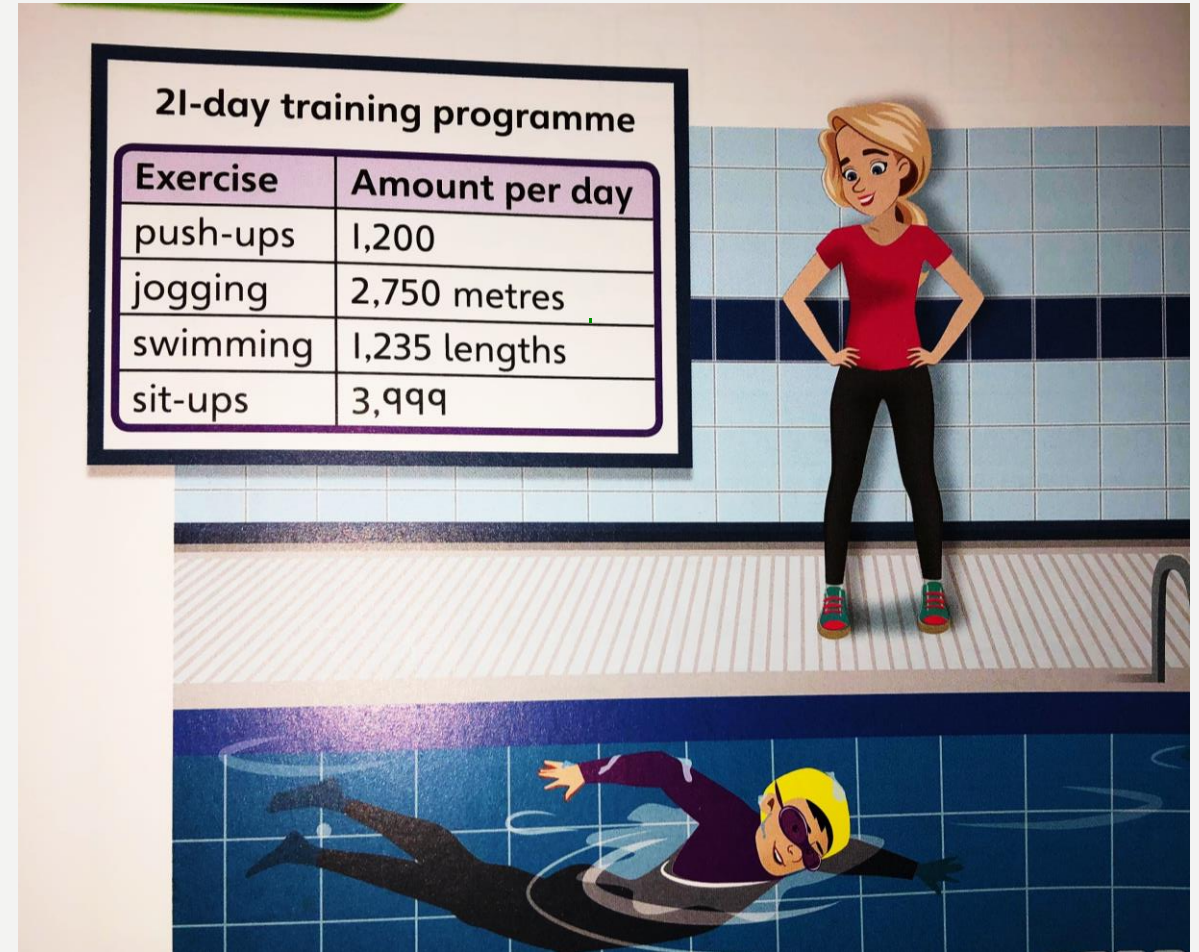
L.O. MULTIPLY MULTI-DIGIT NUMBER UP TO 4 DIGITS BY A 2-DIGIT NUMBER USING THE FORMAL WRITTEN METHOD OF LONG MULTIPLICATION.

- **SOME WILL EVEN:** Use various ways to solve and check sums.
- **SOME WILL:** Use long multiplication.
- **MOST WILL:** Use grid method.
- **ALL WILL:** Use partitioning to make the sum easier.

MY TURN

- a) Can you work out how many lengths would be swam in total over the training programme?
- b) Coach says 'I can work it out more quickly if I first work out how many lengths the athletes swim in a week.'

Use the coach's method . Does it give the same answer?



help



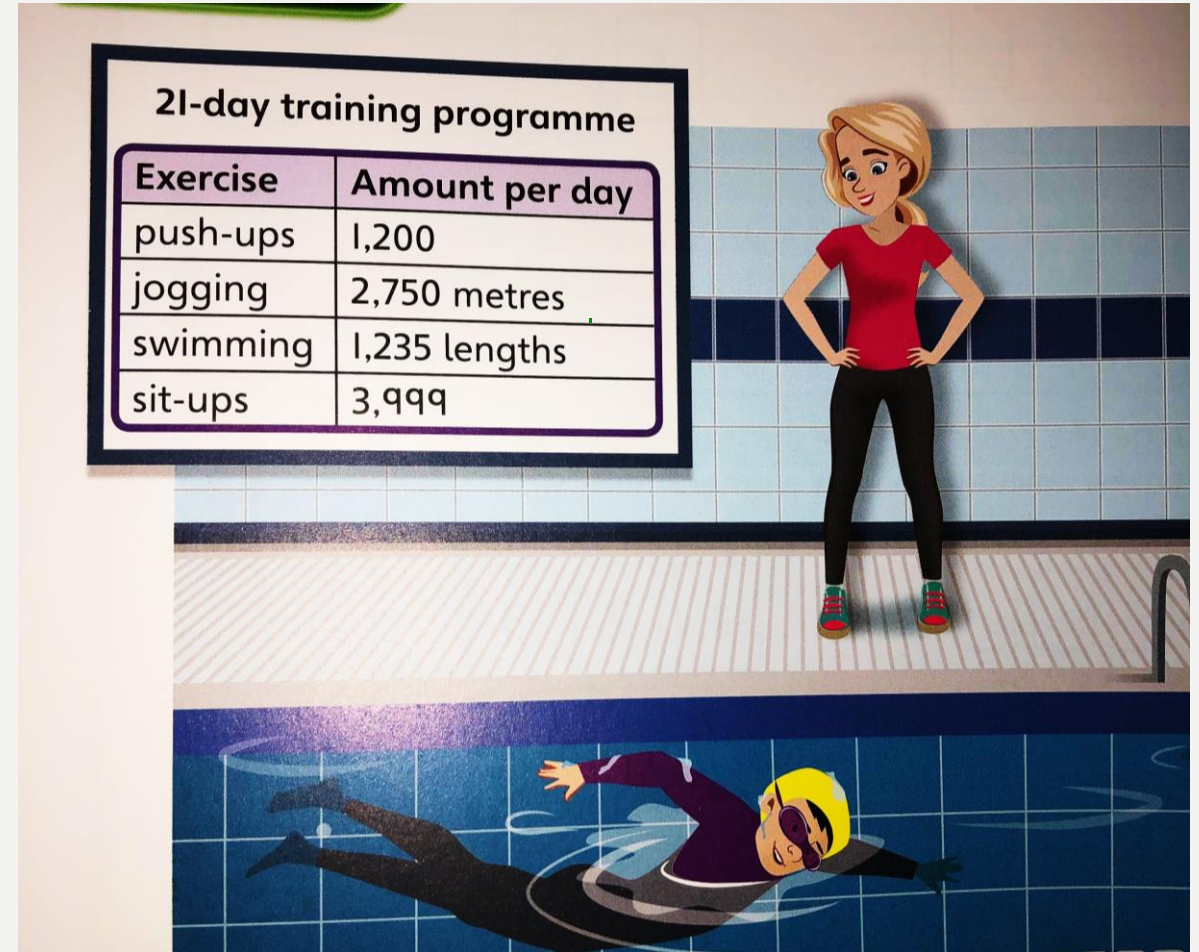
Use grid method and use times table grid for key facts.

Can you check you answer using the inverse? Explain how.

YOUR TURN

- a) Can you work out how many metres will be run in total over the training programme?
- b) Coach says 'I can work it out more quickly if I first work out how many metres the athletes run in a week.'

Use the coach's method . Does it give the same answer?



help

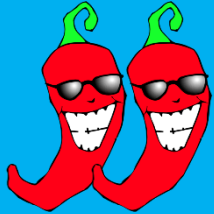


Use grid method and use times table grid for key facts.

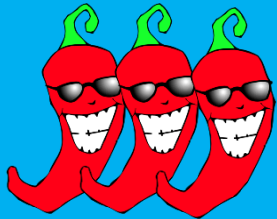
Can you check you answer using the inverse? Explain how.



If the athletes get five meals a day for the duration of the training programme, how many meals in total?



Calculate the number of push-ups completed over the whole programme.



Calculate the number of sit-ups completed over the whole programme.

21-day training programme

Exercise	Amount per day
push-ups	1,200
jogging	2,750 metres
swimming	1,235 lengths
sit-ups	3,999



The programme is extended to 28 days. Is there a quick way of updating your calculations?

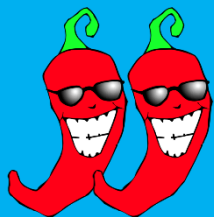


APE



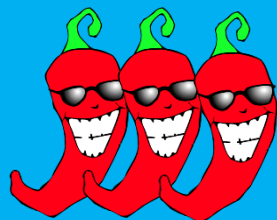
$$5 \times 21 = 105$$

$$5 \times 20 = 100 + 5 = 105$$



$$1,200 \times 21 = 25,200$$

$$1200 \times 20 = 24,000 + 1,200$$



$$3,999 \times 21 = 83,979$$

You could just add on 7x your number on to each of your answers.

$$\text{e.g. sit-ups} = 83,979$$

$$7 \times 3999 = 27,993$$

$$83,979 + 27,993 = 28 \times 3999 = 111,972$$

21-day training programme

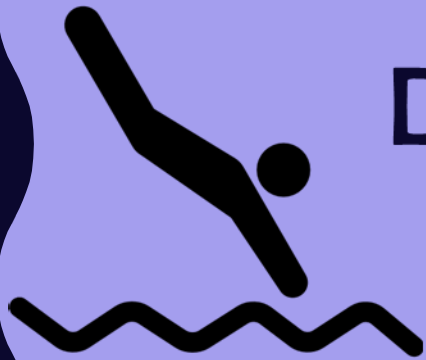
Exercise	Amount per day
push-ups	1,200
jogging	2,750 metres
swimming	1,235 lengths
sit-ups	3,999



The programme is extended to 28 days. Is there a quick way of updating your calculations?



APE



DIVE DEEPER 1

1) Copy and complete the table

24-day training programme		
EXERCISE	AMOUNT PER DAY	TOTAL IN PROGRAMME
Push-ups	1,200	
Jogging	2,750 metres	
Swimming	1,235 lengths	
Sit-ups	3,999	

2 a)

A pool holds 8,400 litres of water.

A builder fills up the pool with a 17 litre bucket. He pours in 379 buckets full of water. Is this enough to fill the pool?



b) The builder chooses to purchase a more effective bucket to make his life easier. What size bucket would be more effective? APE



APE



DIVE DEEPER 1

1) Copy and complete the table

24-day training programme		
EXERCISE	AMOUNT PER DAY	TOTAL IN PROGRAMME
Push-ups	1,200	28,800
Jogging	2,750 metres	66,000
Swimming	1,235 lengths	29,640
Sit-ups	3,999	95,976

2 a) $379 \times 17 = 6,443$

$8,400 - 6,443 = 1,957$ short $1,957$ divided by $17 = 115.117$ meaning a part bucket would be needed 😞

b) 10×840 12×700 15×560
 24×350 35×240 42×200

Any of the above measures would be more effective as it would mean using whole buckets rather than part.



APE



