



Maths

Multiplication and Division

Parrots Can't Read



Aim

- I can divide mentally by partitioning, calculating and recombining.

Success Criteria

- I can partition whole numbers up to four digits.
- I can partition numbers containing decimals.
- I can divide numbers mentally.
- I can recombine numbers to complete my calculation.

Perfect Partitioning



How many different ways can you find to partition these numbers?

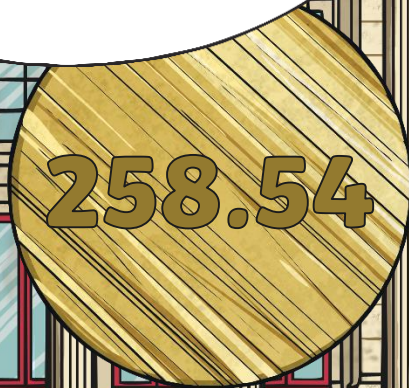
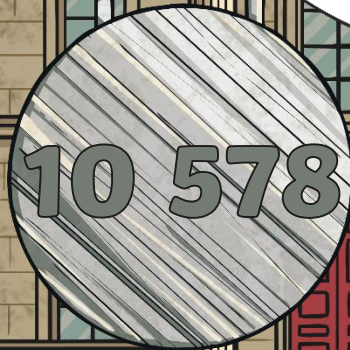
E.g. 1524 could be partitioned as:

$$1000 + 500 + 20 + 4$$

$$1500 + 20 + 4$$

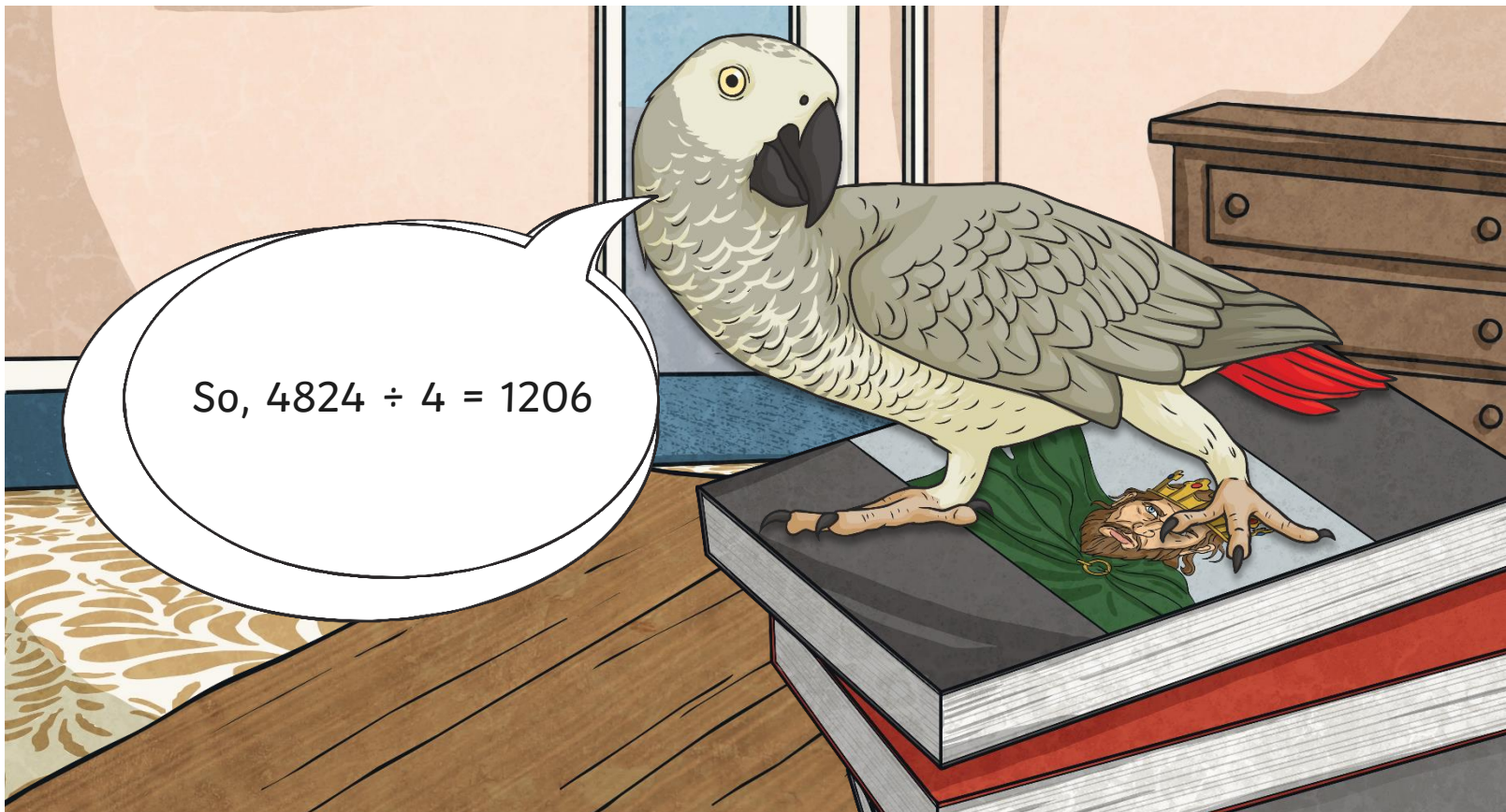
$$1500 + 24$$

$$500 + 500 + 500 + 20 + 4$$



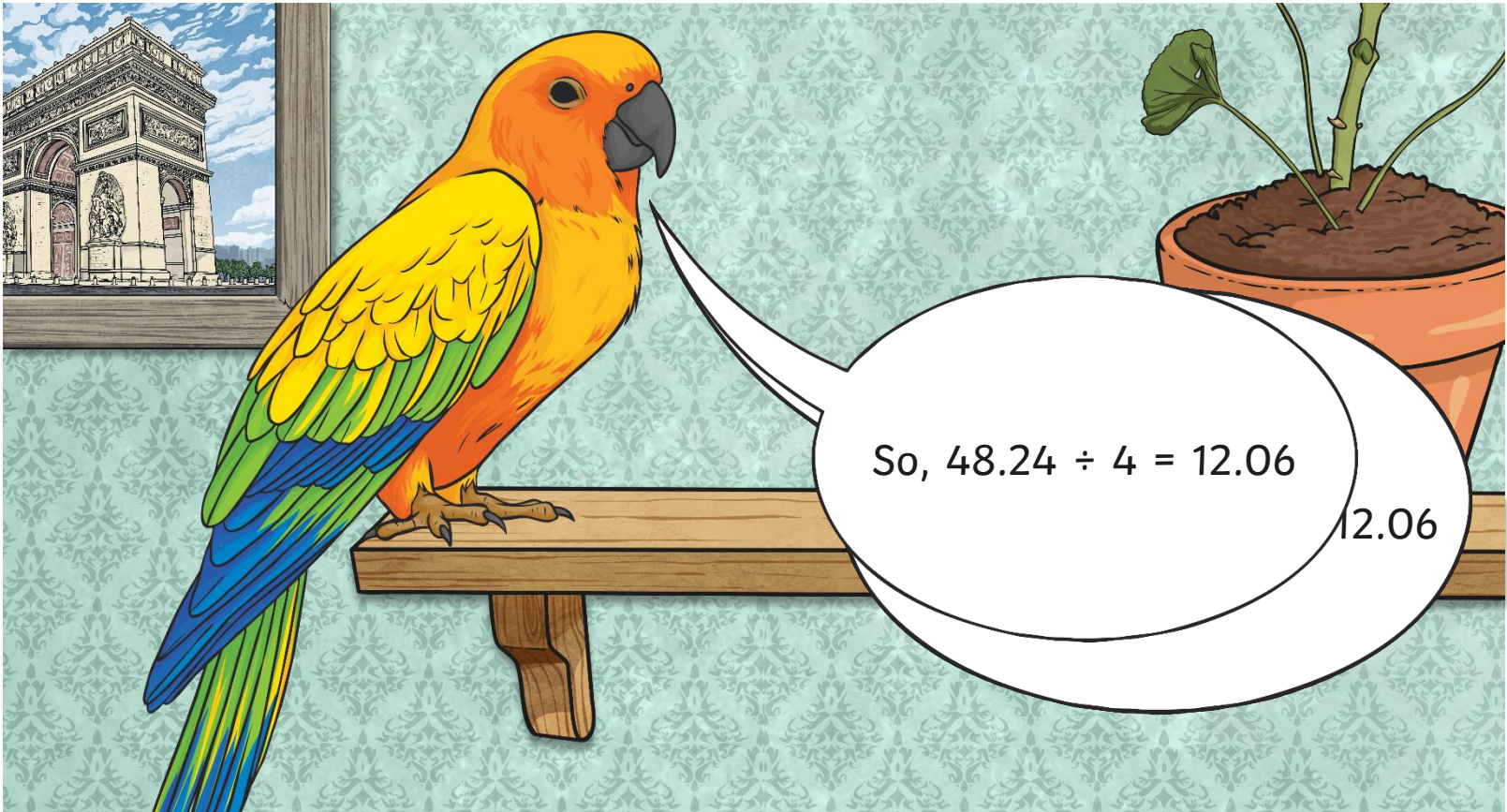
Parrots Can't Read

Parrots Can't Read is a mnemonic - a way of remembering the letters PCR.



Decimals

Parrots Can't Read can also be used for numbers with tenths and hundredths.



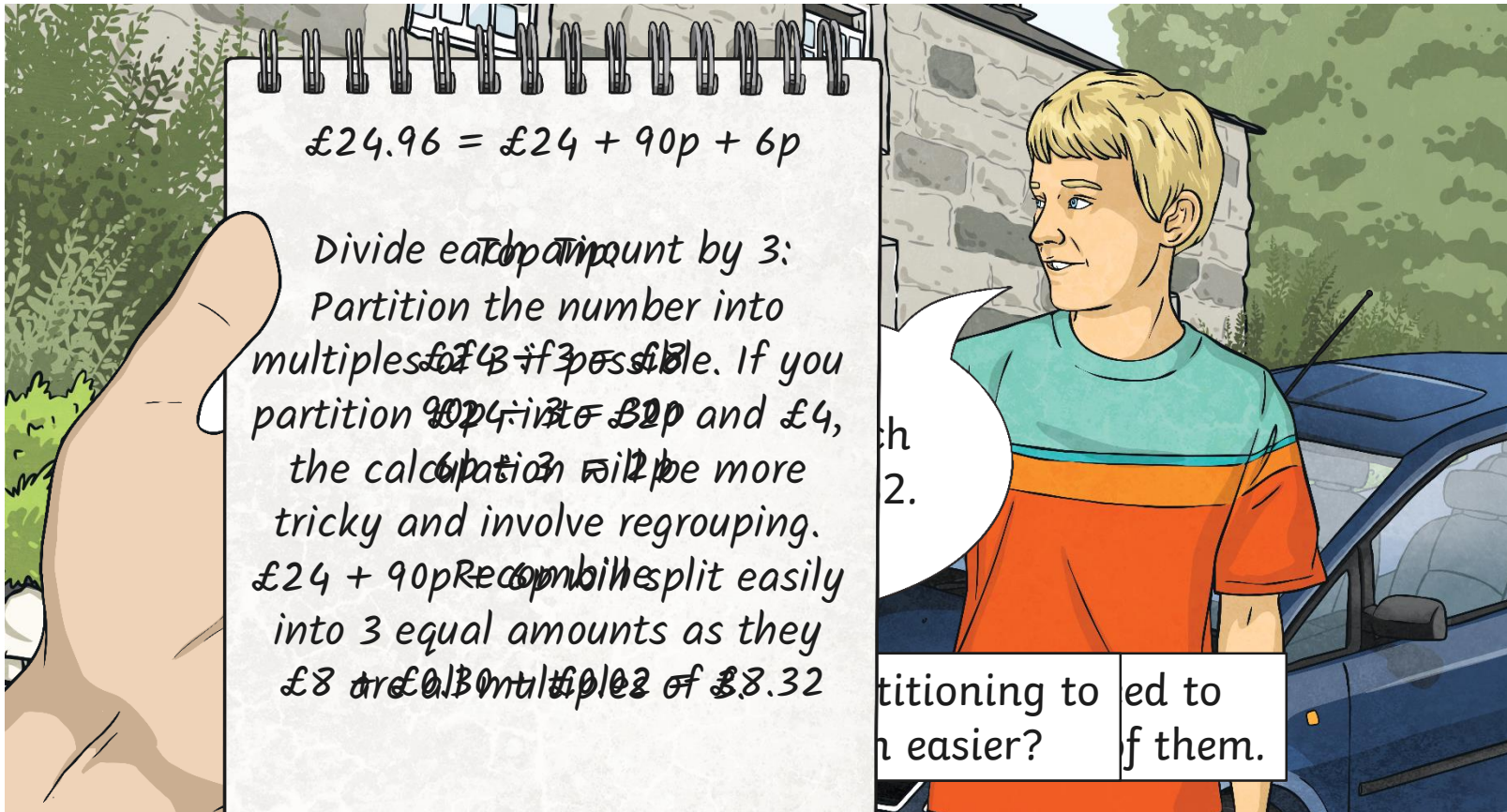
$$\text{So, } 48.24 \div 4 = 12.06$$

12.06

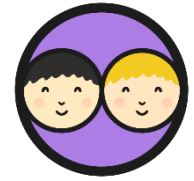
Pocket Money



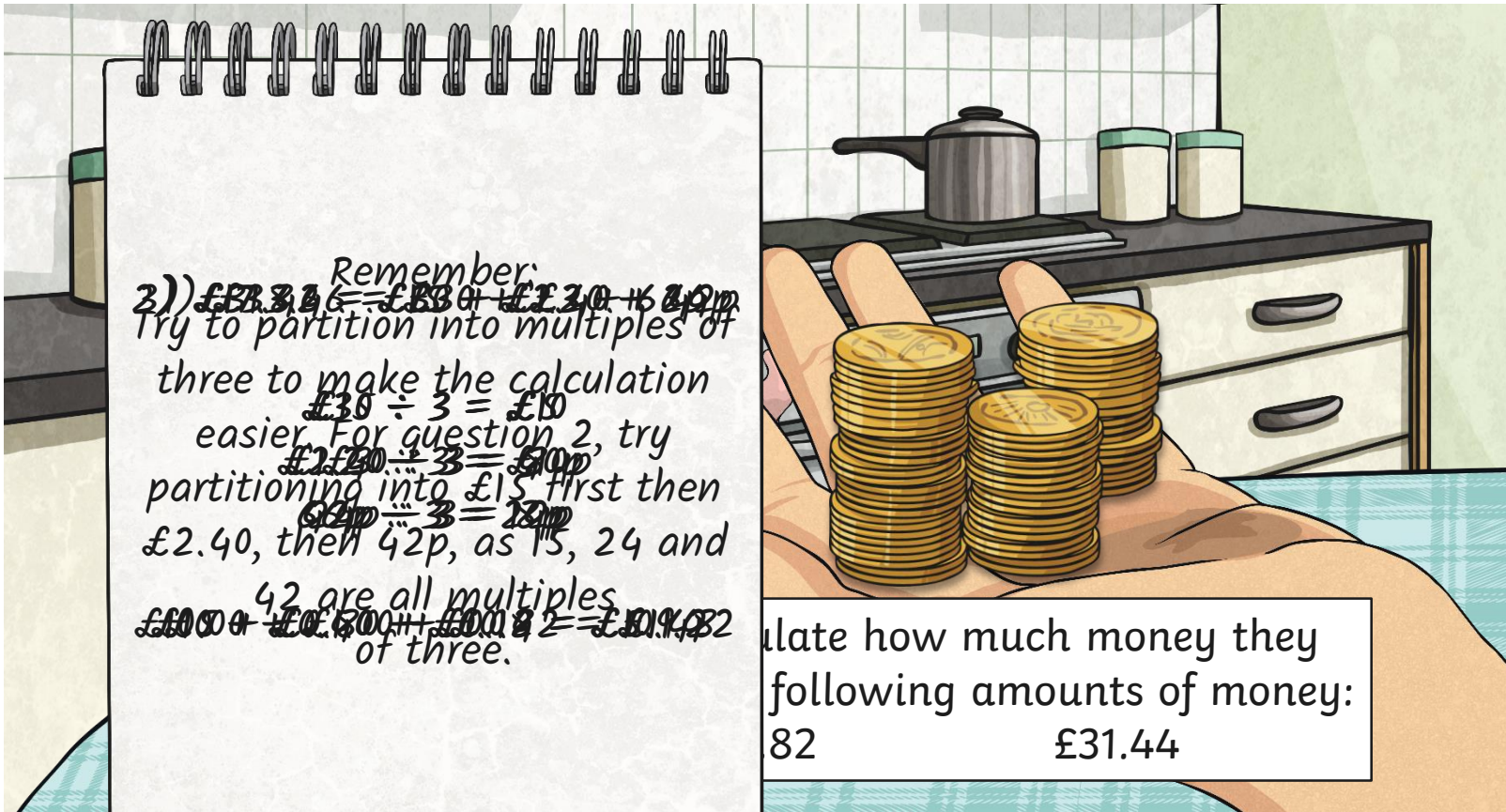
Harry, Harvey and Harriet have been washing cars to earn a bit of extra pocket money.



Share the Profit



Harry, Harvey and Harriet decide to start up a little business washing cars on Saturday mornings.

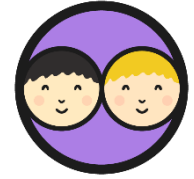


Remember:
~~3) £33.46 = £33 + £30 + 40p~~
Try to partition into multiples of three to make the calculation easier. For question 2, try partitioning into £15 first then £2.40, then 42p, as 15, 24 and 42 are all multiples of three.

~~£30 ÷ 3 = £10~~
~~£2.40 ÷ 3 = 80p~~
~~42p ÷ 3 = 14p~~

Calculate how much money they have following amounts of money:
82 £31.44

Parrots Can't Read



Use your marvellous maths skills to complete these activities:

Parrots Can't Read
I can divide mentally by partitioning, calculating and recombining.

1. Divide these numbers using PCR (Partition, Calculate, Recombine).
The first one is completed as an example.

a) $£62.19 \div 3 = £20.73$
P: $£62.19 = £60 + £2.10 + 9p$
C: $£60 \div 3 = £20$
 $£2.10 \div 3 = 70p$, $9p \div 3 = 3p$
R: $£20.00 + £0.70 + £0.03 = £20.73$

b) $£82.44 \div 4 =$

c) $£154.55 \div 5 =$

d) $£497.70 \div 7 =$

e) $£459.09 \div 9 =$

f) $£864.24 \div 8 =$

g) $£420.36 \div 6 =$

h) $£155.45 \div 5 =$

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1. Divide these numbers using PCR (Partition, Calculate, Recombine).
The first one is completed as an example.

a) $48.4 \div 4 = 12.1$
P: $48.4 = 48.4 = 40 + 8 + 0.4$
C: $40 \div 4 = 10$, $8 \div 4 = 2$,
 $0.4 \div 4 = 0.1$
R: $10 + 2 + 0.1 = 12.1$

b) $69.3 \div 3 =$

c) $28.6 \div 2 =$

d) $84.8 \div 4 =$

e) $5.5 \div 5 =$

f) $770.7 \div 7 =$

g) $906.3 \div 3 =$

h) $884.8 \div 4 =$

Parrots Can't Read
I can divide mentally by partitioning, calculating and recombining.

1. Divide these numbers using PCR (Partition, Calculate, Recombine).
The first one is completed as an example.

a) $484 \div 4 = 121$
P: $484 = 400 + 80 + 4$
C: $400 \div 4 = 100$, $80 \div 4 = 20$,
 $4 \div 4 = 1$
R: $100 + 20 + 1 = 121$

b) $6936 \div 3 =$

c) $2846 \div 2 =$

d) $8428 \div 4 =$

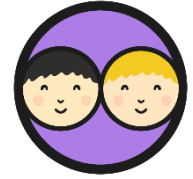
e) $5600 \div 5 =$

f) $7070 \div 7 =$

g) $9660 \div 3 =$

h) $8084 \div 4 =$

PCR



Parrots **C**an't **R**ead is one way of remembering PCR.



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