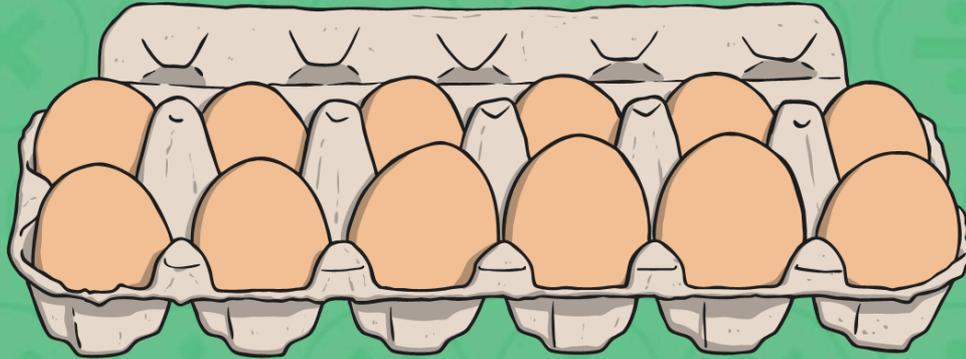




Maths

Multiplication and Division

The Twelves



Aim

- I can multiply and divide by 12.

Success Criteria

- I can count in twelves.
- I can recognise multiples of 12 up to 12×12 .
- I can use my knowledge of the times table to find the related division facts.
- I can solve word problems using the 12 times table.

Let's Count in Twelves



Click a segment of the counting stick to reveal the number.



If $10 \times 12 = 120$, how could you work out 5×12 ?

How could you work out 2×12 ?

What would 9×12 be? Can you use subtraction to work this out?

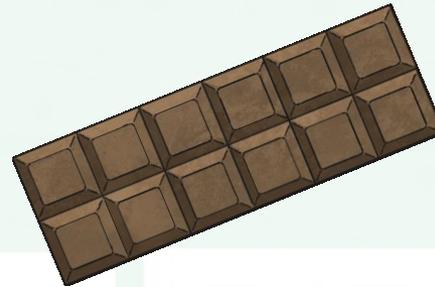
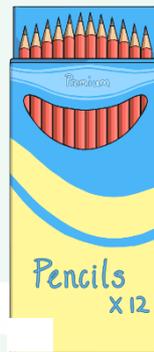
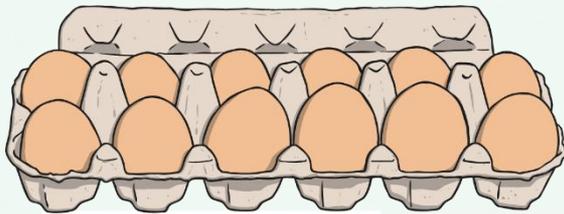
How could you work out 11×12 , 12×12 and 20×12 ?
Can you work out 15×12 ? How?

Twelve

Why is 12 a special number?

It can be known as a 'dozen'. The word comes from the Old French 'dozaine'. This word originated from the Latin word 'duodecim' which means twelve ('duo' meaning two plus 'decim' meaning ten).

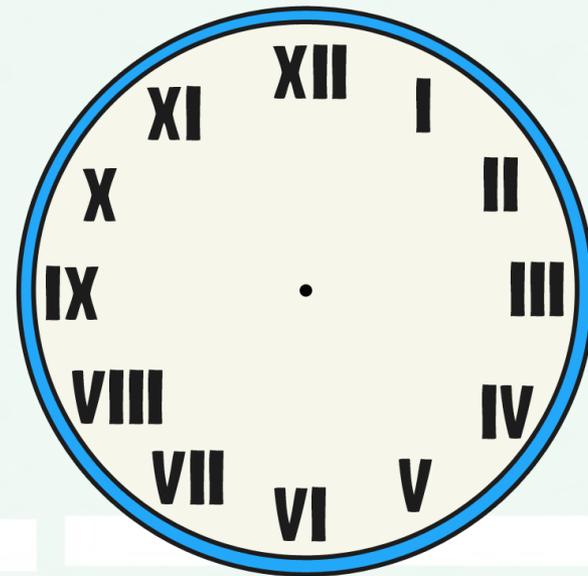
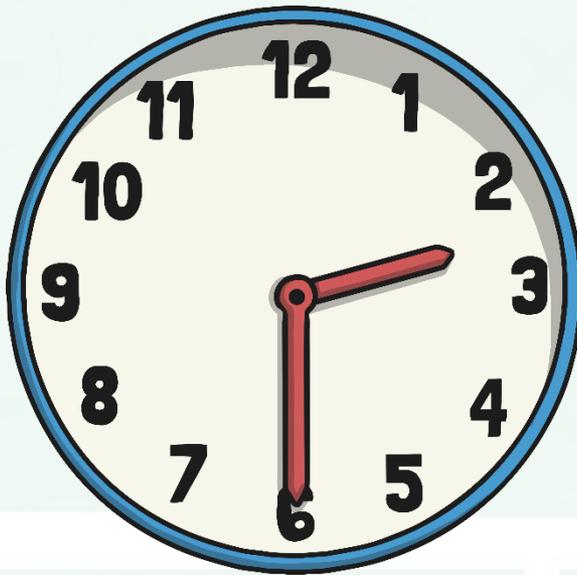
Can you think of anything that is still sold in a 'dozen'?



Twelve

Why is twelve a special number?

There are 12 numbers on an analogue clock.



Twelve

Why is twelve a special number?

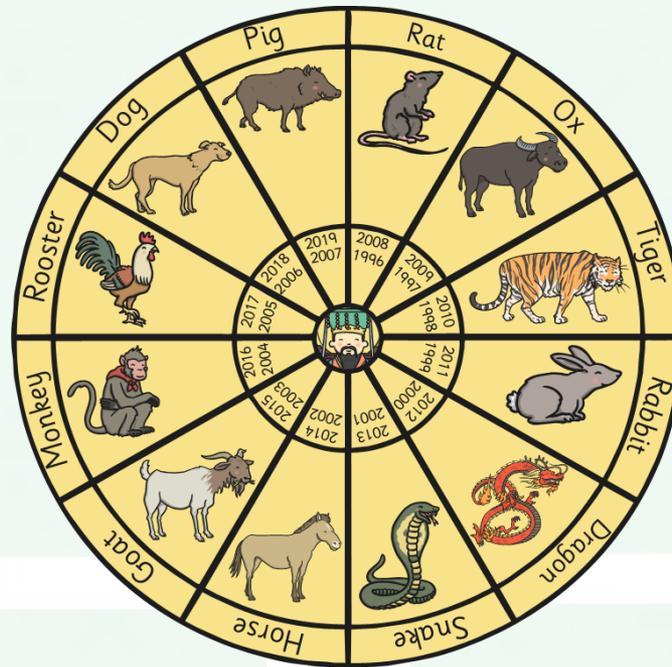
There are 12 months in a year.



Twelve

Why is twelve a special number?

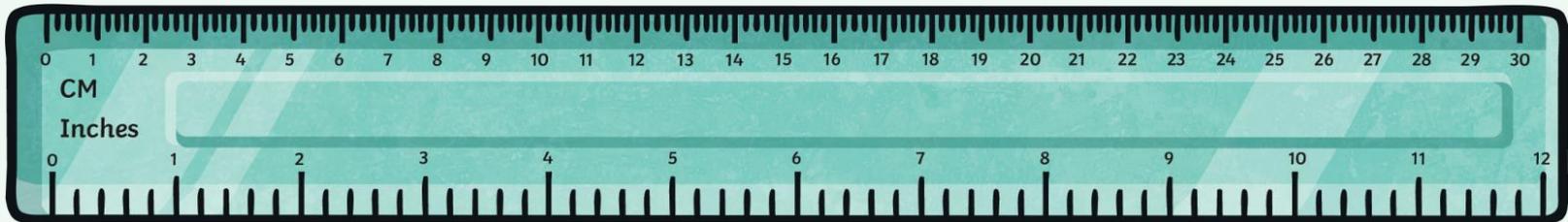
There are 12 zodiac signs.



Twelve

Why is twelve a special number?

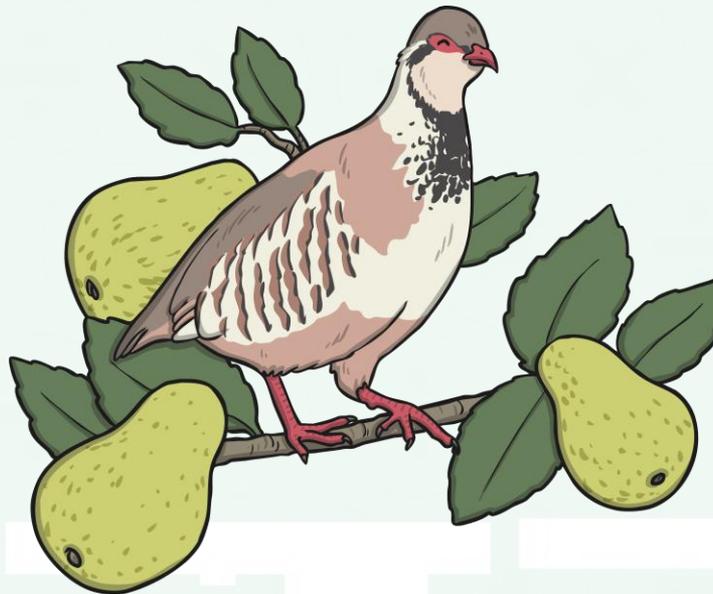
There are 12 inches in a foot.



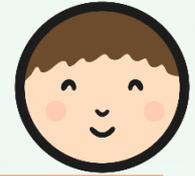
Twelve

Why is twelve a special number?

There are 12 days of Christmas.



The Twelves Activities



The Twelves

I know my 12 times table facts and can use them to solve problems.

Write out your 12 times table below. Check it with a partner.

$0 \times 12 =$	$7 \times 12 =$
$1 \times 12 =$	$8 \times 12 =$
$2 \times 12 =$	$9 \times 12 =$
$3 \times 12 =$	$10 \times 12 =$
$4 \times 12 =$	$11 \times 12 =$
$5 \times 12 =$	$12 \times 12 =$
$6 \times 12 =$	

Use your 12 times table facts to solve these problems:

- $6 \times 12 =$ _____
- $7 = 84 \div$ _____
- $60 = 12 \times$ _____
- Three times twelve is _____
- Five multiplied by twelve is _____
- Circle the number that is NOT a multiple of 12: 144, 96, 24, 35, 48
- $96 \div 12 =$ _____
- I put 144 children in teams of twelve, how many teams were there? _____
- $0 \times 12 =$ _____
- Continue this sequence: 120, 108, 96, 84, _____
- $4 \times 12 =$ _____
- The product of twelve and six is _____
- $10 \times 12 =$ _____
- $24 =$ _____ $\times 12$
- $108 \div 12 =$ _____
- On the back of this sheet, make a poster to show the multiplication and division facts for the 12 times table. Circle the ones you find tricky and try to learn these.

The Twelves

I know my 12 times table facts and can use them to solve problems.

Learn the Facts

Work in pairs. Ask your partner a question from the 12 times table. They must answer as possible, then ask you a question back. You can ask multiplication or division questions going until you have both answered. 10 questions correctly. You could use a Square to check your partners answers.

Now you know your facts, answer these questions:

- 6 dozen = _____
- $7 = 84 \div$ _____
- $60 = 12 \times$ _____
- Three times twelve is _____
- Five multiplied by twelve is _____
- Circle the number that is NOT a multiple of 12: 144, 96, 24, 35, 48
- $96 \div 12 =$ _____
- I put 144 children in teams of twelve, how many teams were there? _____
- $0 \times 12 =$ _____
- Continue this sequence: 120, 108, 96, 84, _____, _____, _____
- 4 dozen = _____
- The product of twelve and six is _____
- $10 \times 12 =$ _____
- $24 =$ _____ $\times 12$
- $108 \div 12 =$ _____
- On the back of this sheet, make a poster to show the multiplication and division facts for the 12 times table. Circle the ones you find tricky and try to learn these.

The Twelves

I know my 12 times table facts and can use them to solve problems.

Learn the Facts

Work in pairs. Ask your partner a question from the 12 times table (up to 20×12). They must answer as quickly as possible, then ask you a question back. You can ask multiplication or division questions. Keep going until you have both answered 10 questions correctly. You could use a calculator to check your partner's answers.

Answer these questions:

- 16 dozen = _____
- $7 = 84 \div$ _____
- $60 = 12 \times$ _____
- Thirteen times twelve is _____
- Five multiplied by twelve is _____
- Circle the number that is NOT a multiple of 12: 144, 96, 24, 35, 48
- $96 \div 12 =$ _____
- I put 144 children in teams of twelve, how many teams were there? _____
- 20 dozen = _____
- Continue this sequence: 120, 108, 96, 84, _____, _____, _____
- $14 \times 12 =$ _____
- The product of twelve and six is _____
- $12^2 =$ _____
- $24 =$ _____ $\times 12$
- $108 \div 12 =$ _____
- On the back of this sheet, make a poster to show the multiplication and division facts for the 12 times table. Circle the ones you find tricky and try to learn these.

Twelve Times Table Test



$5 \times 12 =$

60

$12 \times 8 =$

96

$108 \div 12 =$

9

$24 \div 12 =$

2

$12 \times 1 =$

12

$3 \times 12 =$

36

$48 \div 12 =$

4

$84 \div 12 =$

7

$12 \times 12 =$

144

$12 \times 6 =$

72

$120 \div 12 =$

10

$132 \div 12 =$

11

Aim



- I can multiply and divide by 12.

Success Criteria

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