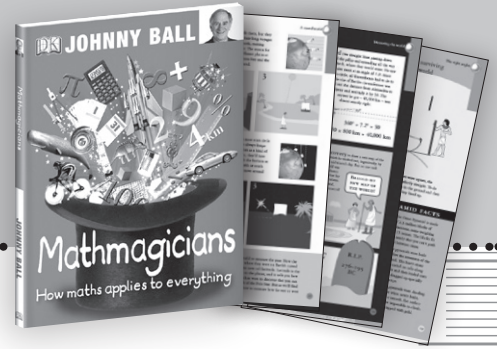
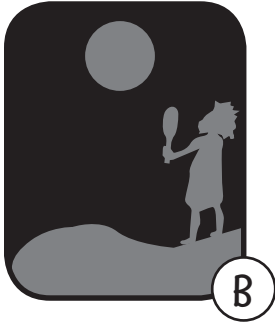


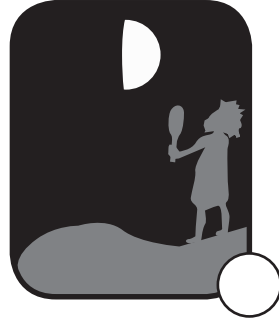
Become a Mathmagician!



Maths and the Moon



B



Did you know that maths has a place on the moon? In the box under each shape, write down the letter of the description that matches the shape. The first one has been done for you.

(A) HALF MOON

(B) NEW MOON

(C) FULL MOON

(D) CRESCENT MOON

FACT

Our ancient stone-age ancestors measured time by watching the progression of the moon.

Yuk! These strawberries are nowhere near ripe, let's come back the moon after next.



? DID YOU KNOW?

In Ancient times the Sun and stars, being vital for calculating the date, were worshipped as Gods and huge temples were built in their honour.

Maths Search

Can you find these maths words hidden in the grid:

ALGEBRA

PYRAMID

ANGLE

PYTHAGORAS

DEGREE

TIME

HEIGHT

TRIANGLE

MEASURE

TRIGONOMETRY

PI

YARD

PROTRACTOR

FACT

Light travels from London to New York in two hundredths of a second

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | M | E | A | S | U | R | E | D | Y | F | L |
| P | R | L | Y | U | A | L | G | E | B | R | A |
| R | O | T | I | N | T | K | N | G | I | P | S |
| O | P | R | C | A | B | I | T | R | O | Y | M |
| T | R | I | G | O | N | O | M | E | T | R | Y |
| R | O | A | Y | P | C | G | I | E | R | A | W |
| A | K | N | U | A | R | I | L | O | C | M | E |
| C | E | G | O | L | R | M | Y | E | S | I | T |
| T | V | L | P | F | J | D | W | I | R | D | S |
| O | M | E | U | B | H | E | I | G | H | T | Y |
| R | P | Y | T | H | A | G | O | R | A | S | T |

Maths Scramble

Use the clues to unscramble these five jumbled up words, write your answers in the spaces provided:

EANITNC PNGIESYTA _____

Famous race who built the pyramids

SPCMOSA _____

Instrument used to find a direction particularly at sea

HIGRT LNAGE _____

Name given to a triangle with an angle of exactly 90°

LCKCO _____

A device we use to measure time

GHITEH _____

Name given to describe how tall you are

? DID YOU KNOW?

The Roman roads are the straightest roads in history thanks to a nifty rod they used called a 'groma'.

The Big Maths Quiz

Take our Big Maths Quiz and find out how much of a Mathmagician you are.

1

Before compasses sailors used to use crows as a navigational tool

true / false

2

The Universe is always expanding

true / false

3

Latitude is a line that runs vertically from the north pole to the south pole

true / false

5

Nothing travels faster than light

true / false

4

A year is exactly 365 days long

true / false

Now check your answers!

WORDSEARCH:

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | M | E | A | S | U | R | E | D | Y | F | L |
| P | R | L | Y | U | A | L | G | E | B | R | A |
| R | O | T | I | N | T | K | N | G | I | P | S |
| O | P | R | C | A | B | I | T | R | O | Y | M |
| T | R | I | G | O | N | O | M | E | T | R | Y |
| R | O | A | Y | P | C | G | I | E | R | A | W |
| A | K | N | U | A | R | I | L | O | C | M | E |
| C | E | G | O | L | R | M | Y | E | S | I | T |
| T | V | L | P | F | J | D | W | I | R | D | S |
| O | M | E | U | B | H | E | I | G | H | T | Y |
| R | P | Y | T | H | A | G | O | R | A | S | T |

UNSCRAMBLE THE WORDS:

Ancient Egyptians, Compass, Right Angle, Clock, Height

ANSWERS TO TRUE/FALSE QUESTIONS:

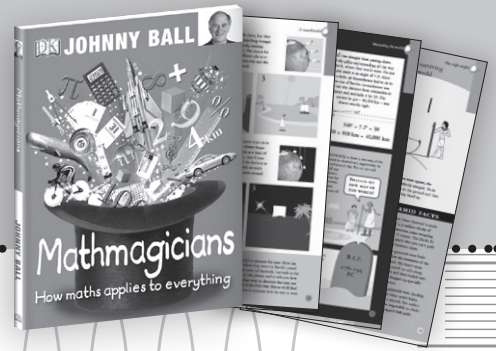
- 1) TRUE: These sea-hating birds head straight for the nearest land.
- 2) TRUE: Edwin Hubble discovered that the light being emitted from distant stars and galaxies was taking increasingly longer to get to earth, and therefore the universe was expanding.
- 3) FALSE: This is a longitude line; a latitude line runs horizontally parallel to the equator.
- 4) FALSE: A year is actually 365 and a quarter days long which is why we have a leap year every four years.
- 5) TRUE: With a speed of just under a billion km/h, light is pretty zippy!

Content taken from:
Mathmagicians | RRP £10.99



Available to buy now at all good bookshops and www.dk.com

Become a Mathmagician!



Can you hear me?

The world is full of sound. Sound is a form of pressure, caused by molecules bumping into each other and passing on their energy. These ripples of pressure travel in waves through the air. High sounds have waves that are close together whilst low sounds have waves that are far apart; loud sounds have tall peaks whilst quiet sounds have small peaks.



Match the following descriptions of sound waves with the correct drawing.

- HIGH AND LOUD**
 HIGH AND QUIET
 LOW AND LOUD
 LOW AND QUIET

On the crest of a wave

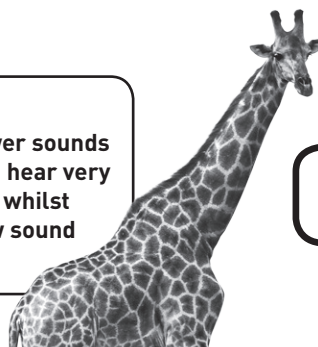
Fill in the word blanks using the following words:

soft sound high frequency shape tall loud pitch close waves

The _____ of the pressure wave tells you a lot about the _____ whether it's loud or _____, or _____ or low in pitch. The number of _____ that pass by each second is called the sound's _____. Waves with peaks that are very _____ together have a higher (sound) than long, spread out waves. Measuring the height of the wave tells us how _____ the sound is – _____ waves sound louder than flatter waves.



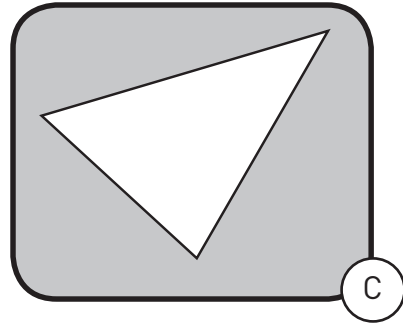
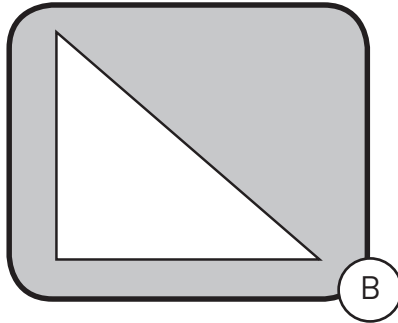
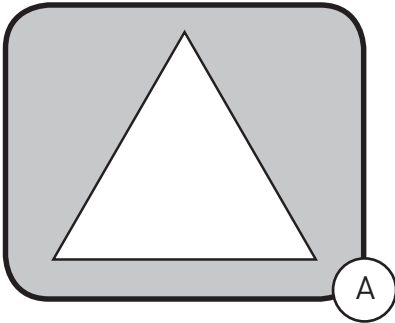
Some animals can hear much higher or lower sounds than we can. Bats, whales and dolphins can hear very high frequencies which we call ultrasound, whilst giraffes, elephants and hippos can hear low sound waves called infrasound.



I communicate through infrasound

The Right Angle

A right-angled triangle is a triangle with an angle measuring exactly 90° . Can you identify which of these three triangles is a right angle? Tick the box below with your chosen answer.



FACT

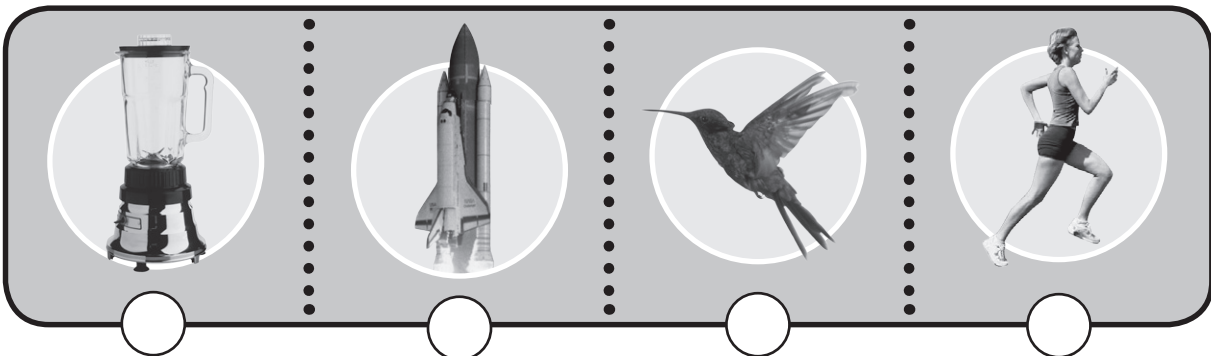
The Ancient Egyptians used right angles to help them build the pyramids

? DID YOU KNOW?

The Great Pyramid of Giza in Egypt consists of 2.3 million limestone blocks

Power Me Up

Energy is what makes everything around us happen. Power is the rate at which energy is produced or used, and is measured in Watts. The bigger and more powerful something is the more Watts it will need to function.



Under each image match the number of Watts required to power it.

- (A) 1 W (B) 300 W (C) 745 W (D) 11 BILLION W

? DID YOU KNOW?

An apple containing 55 kcal (which is equal to 230,000J) could power a 100W light bulb for about half an hour.

Answers

MATCH SOUND WAVE DESCRIPTIONS:
C, B, D, A

WORD BLANK REVEAL:

Shape, sound, soft, high, waves, frequency, close, loud, tall

FIND THE RIGHT-ANGLED TRIANGLE: B

MATCH THE PICTURES TO THE WATTS:

Food blender: B

Shuttle take-off: D

Hummingbird flying: A

Person running: C

Content taken from:
Mathmagicians | RRP £10.99

Available to buy now at all good bookshops and www.dk.com

