

RIGHT TIMES

In each of these boxes, we've circled three numbers – two of which can be multiplied to make the other, for example $4 \times 9 = 36$ in the top box. Can you spot another group of three in each box?

27 8 56 5
 70 63 9 12
 4 36 40

5 48 12 32 94
 9 66 27 7
 84 3 122

SUM UP

For some great mental maths practice, try to work out one top number without writing anything down.

If the number in each circle is the sum of the two below it, see how quickly you can fill all the circles and figure out the top number. You may have to work up and down to fill all the circles.



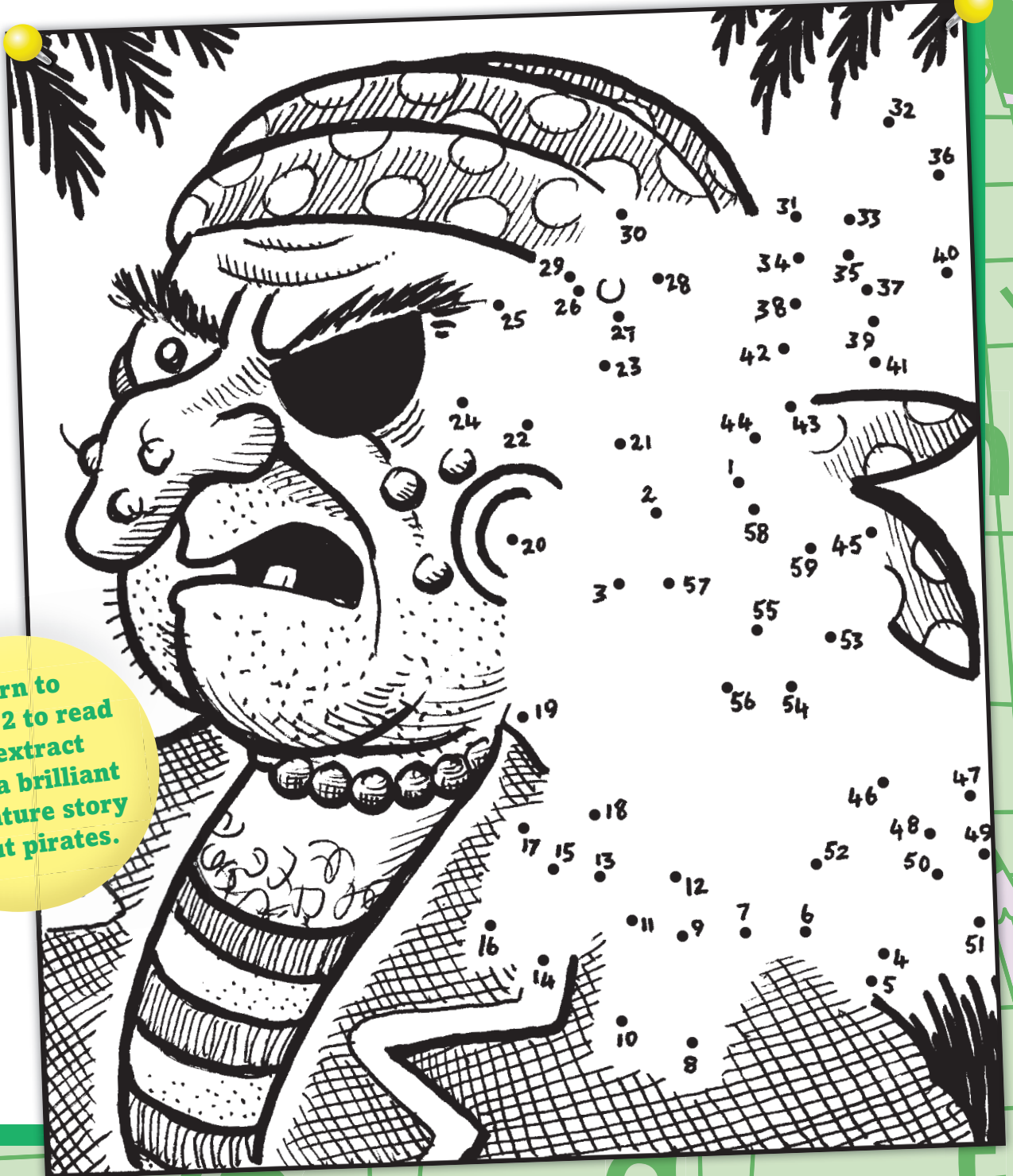
DOT-TO-DOT

Join the dots from 1 to 59 to complete the picture. Now see if you can rearrange the jumbled letters to spell six things you might associate with the characters in the scene?

AMP
HIPS

RAPTOR
RAT PIE

LADS IN
TRUE EARS



Turn to
page 12 to read
an extract
from a brilliant
adventure story
about pirates.

RIDDLE RHYME

Using this rhyme, can you work out the five letters of a word to do with electricity?

My first is in TOASTER and also in KETTLE
 My second's in VOLT and CONDUCTOR, not METAL
 My third is in HEATER and also in FIRE
 My fourth is in CABLE and SOCKET, not WIRE
 My fifth's not in CIRCUIT, but in SWITCH and BRIGHT
 My whole uses battery and bulb to make light



My whole is

--	--	--	--	--

SHOCKING!

Italian scientist Alessandro Volta is said to have invented the battery in 1800, but... Complete this puzzle to discover something amazing about the history of electricity. Solve the clues, using the 27 listed letters once each to make your answers. Write your answers in the boxes beside the clues. Then transfer the letters to boxes below that have the same number to reveal a sentence about electricity. We've put three letters in the boxes to get you started.

A A A B ~~D~~ E E G H I I M N N O O Q R R S S T U V ~~X~~ ~~Y~~ W

- A** Tall cupboard for hanging clothes
- B** _____ C, healthy substance in lemons and limes
- C** Gas in air
- D** Fruit drink, or a game played with a racket

A	1	2	3	4	5	6	7	8
B	9	10	11	12	13	14	15	
C	16	17	18	19	20	21		
D	22	23	24	25	26	27		

7	2	11	11	8	3	10	20	22
---	---	----	----	---	---	----	----	----

13	12	18
		Y

27	25	9	8
		V	

20	17	14	26	11	8	4		11	1	6		11	27	16	24	22	2	15	4	
						D														D

18	20	12	5	26
Y				

25	19	6

10	21

14	3	2	23

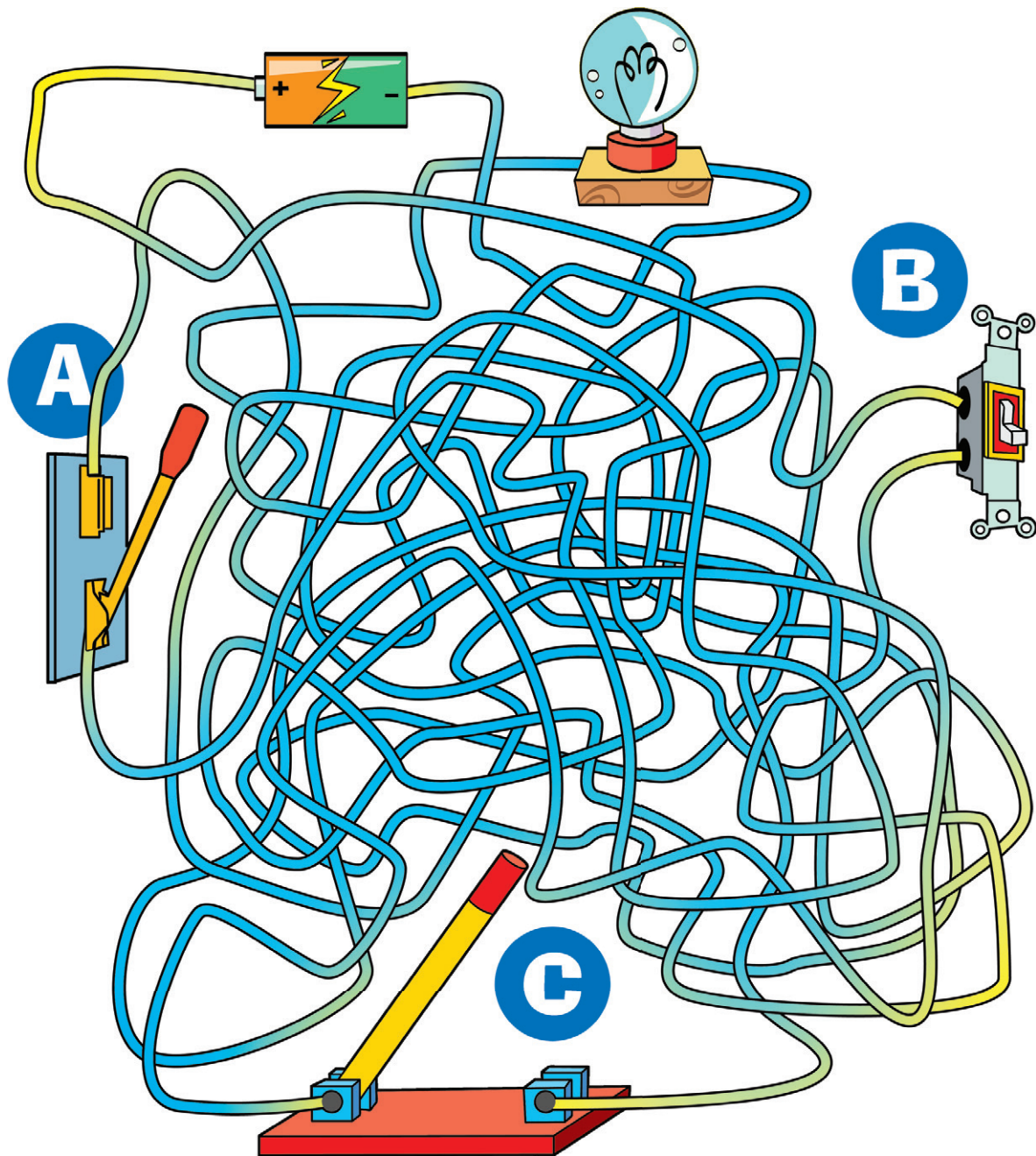
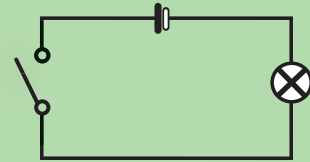


CIRCUIT TANGLE

Can you work out which one of the three switches needs to be flicked to complete the circuit and light the bulb?

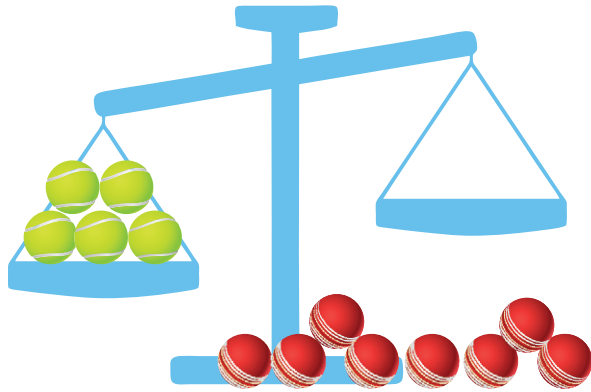
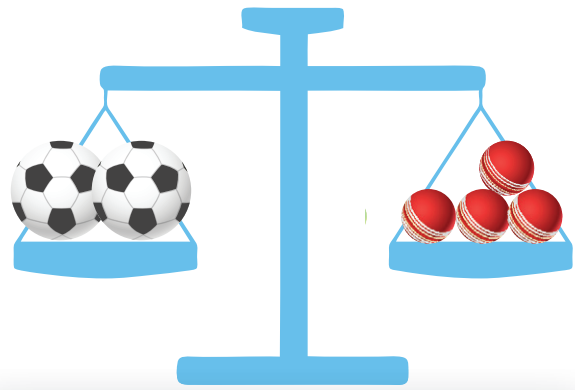
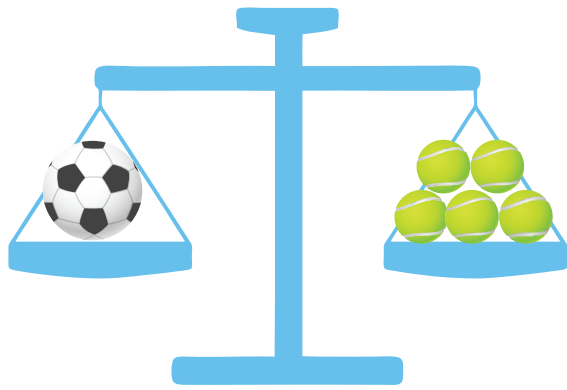
SCIENCE FACT

The bulb will only light up if the circuit is complete. If the circuit is broken then electricity cannot flow. If you connect the correct wires, the circuit diagram will look like this.



BALANCING ACT

The first two scales are perfectly balanced! How many **cricket balls** do you need to add to the third set of scales so it is balanced as well?



HINT

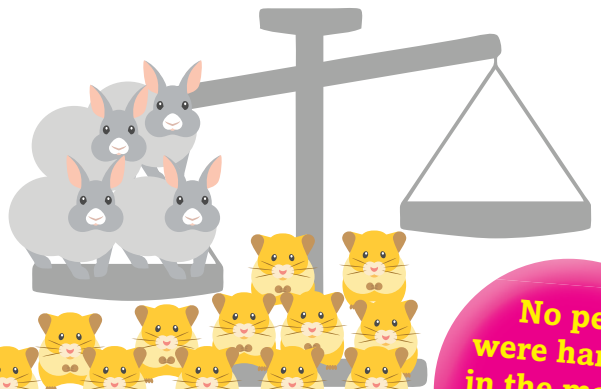
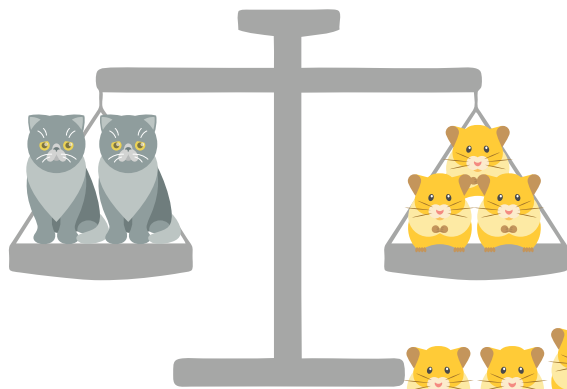
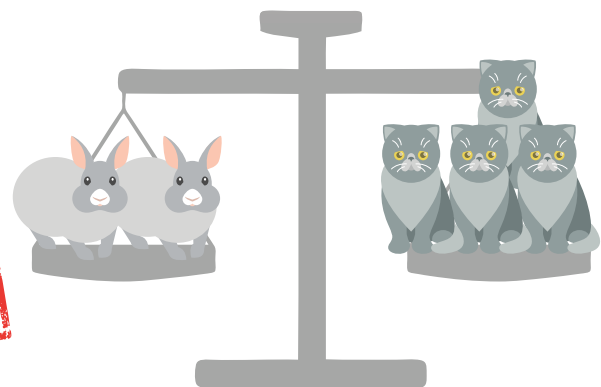
An equation is like a balance. You could write the first two scales using algebra. If f is football, t is tennis ball and c is cricket ball:

$$f = 5t$$

$$2f = 4c$$

Now try this one. How many **hamsters** do you need to add to the last set of scales to balance it?

TRICKY!

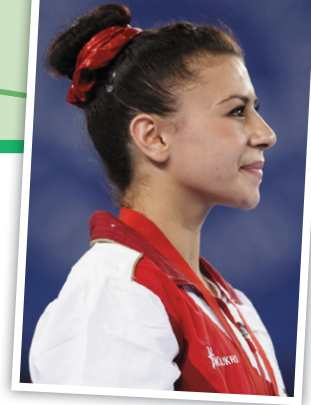


No pets were harmed in the making of this puzzle!



DROP QUOTE

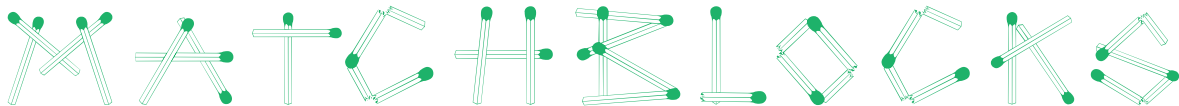
Here's a comment by British gymnast Claudia Fragapane from the Guardian newspaper in August 2014, shortly after her amazing win of four Commonwealth Games gold medals. Some words from the quotation have dropped out of position into the columns below. Can you put them back to reveal what she said?



REX FEATURES

I've		been		little	
thing		around.			driving
	mum		crazy,		around
the		I		picking	
my		sister			her
	My			me	
			more		

~~thing~~ ~~mum~~ ~~sister~~ ~~more~~ ~~little~~ ~~her~~
~~my~~ My around. crazy, me around
~~the~~ running I remember ~~picking~~ driving
~~I've~~ little ~~been~~ this chucking to
use my mum wanted bouncing up
around. house. energy I positively. tiny
my always absolutely and was



Can you put each block from group A in front of a different block from group B to make eight four-letter words? For instance, GO and LD can be put together to form GOLD. Now, see if you can match up the rest. Watch out though – although some group A blocks can match up with more than one block from group B, there is only one way of using up all the blocks.

Group A

~~GO~~ FO GI ON TU WI CR YO

A B

GO LD

A B

A B

Group B

FT IB LY ~~LD~~ RL AM UR FE



FIT AND HEALTHY

Sporting champions, like Claudia on the opposite page, need to stay fit and healthy in order to keep training, competing and winning. Exercise, eating well and getting enough sleep are all important for this. We've fitted all but two of the listed words in the grid. Which are the two listed words that don't belong in a puzzle about staying healthy, and so are missing from the grid?



- | | |
|----------------------|-------------------|
| air | health |
| artery | heart |
| balanced diet | lungs |
| beat | muscle |
| blood | nicotine |
| body | nutrition |
| brain | organ |
| breathe | oxygen |
| chamber | pulse |
| cigarette | pump |
| circulation | sleep |
| exercise | strong |
| fitness | valve |
| flow | vegetables |
| fruit | vein |



EXERCISE FACT

Don't skip exercise – exercise by skipping! There's a good reason why everyone from athletes to pop stars include skipping in their exercise. You don't need a gym or loads of equipment, skipping improves flexibility, co-ordination and balance, it exercises muscles in your upper and lower body, not to mention your heart, and it's fun!



Treasure Trail

Read this extract from the wonderful adventure story, *Treasure Island*, by Robert Louis Stevenson, then have a go at solving the crossword on the page opposite.

In this extract, the book's narrator, Jim Hawkins, is about to set off as cabin boy on a treasure-hunting sea voyage. He has been sent to Bristol to find John Silver, an inn-keeper who will be the cook on the voyage.

When I had done breakfasting the squire gave me a note addressed to John Silver, at the sign of the Spy-glass, and told me I should easily find the place by following the line of the docks and keeping a bright lookout for a little tavern with a large brass telescope for sign. I set off, overjoyed at this opportunity to see some more of the ships and seamen, and picked my way among a great crowd of people and carts and bales, for the dock was now at its busiest, until I found the tavern in question.

It was a bright enough little place of entertainment. The sign was newly painted; the windows had neat red curtains; the floor was cleanly sanded. There was a street on each side and an open door on both, which made the large, low room pretty clear to see in, in spite of clouds of tobacco smoke. The customers were mostly seafaring men, and they talked so loudly that I hung at the door, almost afraid to enter.

As I was waiting, a man came out of a side room, and at a glance I was sure he must be Long John. His left leg was cut off close by the hip, and under the left shoulder he carried a crutch, which he managed with wonderful dexterity, hopping about upon it like a bird. He was very tall and strong, with a face as big as a ham—plain and pale, but intelligent and smiling. Indeed, he seemed in the most cheerful spirits, whistling as he moved about among the tables, with a merry word or a slap on the shoulder for the more favoured of his guests.



Now have a go at this crossword. Every answer to be entered in the grid can be found on the opposite page.



**WORLD'S
BEST
PIRATE
JOKE**

**Why are
pirates hard to
understand?
They just
arrrrrrrrrgh!**



ACROSS

- 2 Delighted (9)
- 8 With the name and location of (like the note for John Silver) (9)
- 11 Tobacco fumes (5)
- 13 Certain (4)
- 14 Fairly, quite (6)
- 15 Lower limb – Long John's left is cut off (3)
- 18 Brainy, clever (11)
- 19 Hanging around (afraid to enter) (7)
- 20 Old telescope (8)
- 22 Metal, an alloy of copper and zinc (5)
- 23 Flying creature (4)
- 27 Fun, amusement (13)
- 28 Road (6)
- 29 Tavern customers (6)

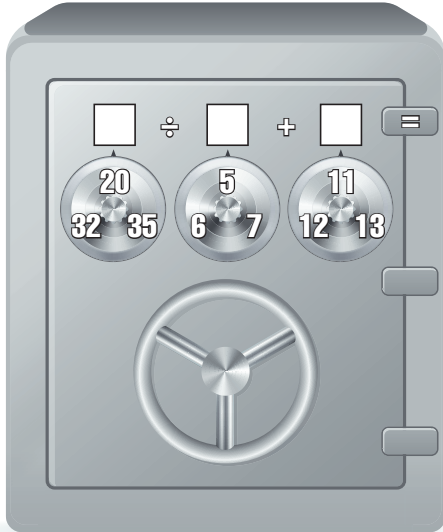
DOWN

- 1 Trolleys, wagons (5)
- 3 Chance to do something (11)
- 4 Without difficulty (6)
- 5 Bright, jolly (8)
- 6 Joint of pork (3)
- 7 Mainly, almost all (6)
- 9 View, look at (3)
- 10 Entrance to a room (4)
- 12 Having the first meal of the day (12)
- 14 Light in colour (4)
- 16 Beaming (7)
- 17 Recently, freshly (5)
- 20 Muscular, powerful (6)
- 21 Mood – Silver's were 5 Down (7)
- 24 Areas for unloading shipping (5)
- 25 Tidy, orderly (4)
- 26 Silver's was big and plain (4)



SAFE CRACKER

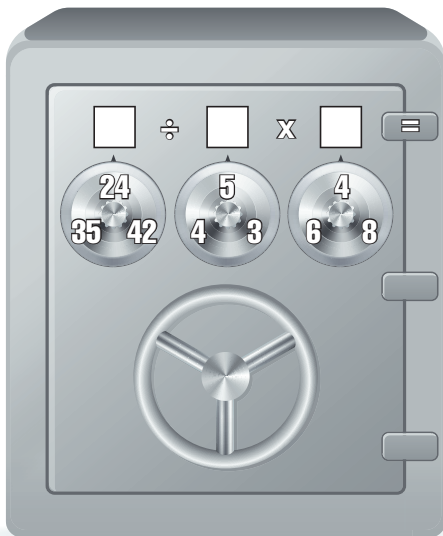
Can you crack the combination and unlock each safe? Choose the correct number of the three on each dial to make the sum work.



15



92



32



100

MATHS FACT

Remember **BIDMAS** to tell you the correct order of operations:

Brackets

Indices (like squares and cubes)

Division

Multiplication

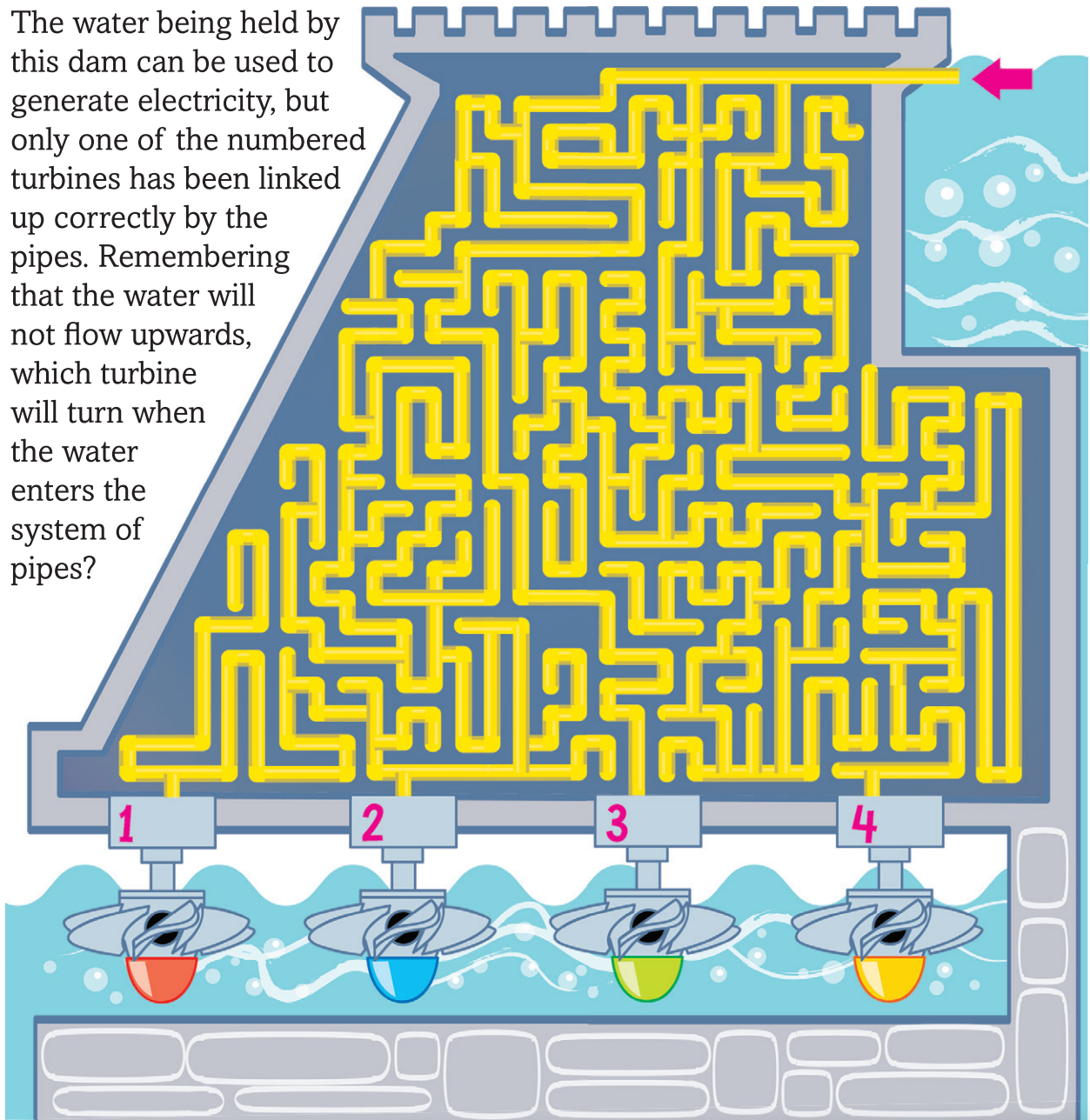
Addition

Subtraction



GO WITH THE FLOW

The water being held by this dam can be used to generate electricity, but only one of the numbered turbines has been linked up correctly by the pipes. Remembering that the water will not flow upwards, which turbine will turn when the water enters the system of pipes?



Hydroelectricity uses the energy of falling water to produce electrical power. Dams are huge walls built across valleys to store water in lakes called reservoirs. When the water is released from the dam, it flows down through pipes to turbines. The flow of water turns the turbines, which are linked to generators that produce electricity. Although this is a renewable source of energy, the dams are very expensive to build.

ANSWERS

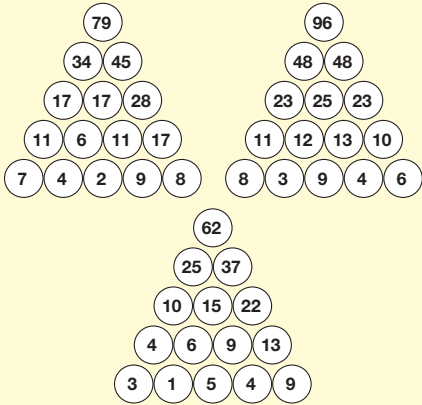
PAGE 4

Right Times

$5 \times 8 = 40$

$3 \times 9 = 27$

Sum Up



PAGE 5

Dot-to-Dot

It's a pirate and his parrot.
The letters spell: map, ship,
parrot, pirate, island, treasure.

PAGE 6

Riddle Rhyme

My whole is TORCH.

Shocking!

A Wardrobe

B Vitamin

C Oxygen

D Squash

Batteries may have existed two thousand years ago in Iraq.

Italian scientist Alessandro Volta is said to have invented the battery in 1800, but in 1938, a two-thousand-year-old pottery jar was found, containing a copper cylinder around an iron rod. This may have been an ancient battery.

PAGE 7

Circuit Tangle

Switch **B** completes the circuit.

PAGE 8

Balancing Act

You need 2 cricket balls.

2 footballs = 4 cricket balls, so

1 football = 2 cricket balls.

1 football = 5 tennis balls, so

5 tennis balls = 2 cricket balls.

You need 12 hamsters.

2 rabbits = 4 kittens, so

1 rabbit = 2 kittens.

2 kittens = 3 hamsters =

1 rabbit, so 4 rabbits =

12 hamsters.

PAGE 9

Competition

PAGE 10

Drop Quote

"I've always been this little tiny thing running around.

I was driving my mum absolutely crazy, bouncing around the house. I remember picking up my little sister and chucking her around. My mum wanted me to use my energy more positively."

Matchblocks

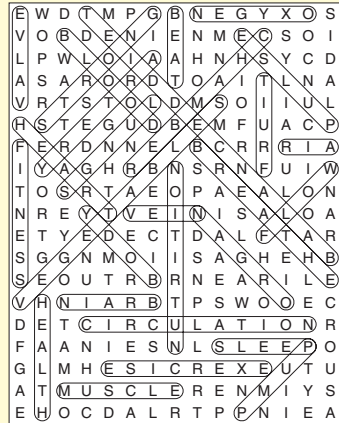
gold, foam, girl, only, tuft, wife, crib, your

PAGE 15

Go with the Flow

PAGE 11

Fit and Healthy



The missing words are CIGARETTE and NICOTINE.

PAGE 13

Treasure Trail



PAGE 14

Safe Cracker

$20 \div 5 + 11 = 15$

$12 \times 6 + 20 = 92$

$24 \div 3 \times 4 = 32$

$15 \times 12 - 80 = 100$

