1998-9 Armchair Treasure Hunt Answers

Introduction

First of all, thanks to all of you who took part in this year's hunt. We hope you got as much enjoyment out of it as we did in setting it and marking your entries. We were particularly entertained by the number of unintentional links and clues that you found in the puzzle, and in a certain sadistic way by the number of you who visited the decoy site at the Hog's Back near Guildford - the treasure was actually buried some 30 miles away from here in Hogback Wood in Beaconsfield.

In the weeks leading up to Christmas, after we had set the puzzle, we suffered repeatedly from the quizsetters paranoia - finding the answers to our supposedly difficult questions cropping up with alarming regularity in the public view: Ted Hughes inconveniently died, the BBC chose just the wrong moment to bring Delia Smith back to prominence with her *How to Cook* series, Dillon's bookshop did a feature on Frank Sinatra's involvement in the Rat Pack, etc etc. We were convinced some fiendish treasure hunter had been bugging our question setting sessions and feeding them to the media.

There were three themes this year -

- People associated with **Beaconsfield** identified the treasure town,
- Food (prepared by Delia Smith) identified the wood in which the treasure was buried
- Music (courtesy of Gilbert and Sullivan) gave the detailed instructions for finding the box.

In the remainder of this report you will find details of the scoring system, a full explanation of how to find the treasure, answers to all the questions and puzzles, and the roll of honour.

We're still deciding who will be setting the quiz for next Christmas - the decision will be made by the end of January - so if you'd like to volunteer please let me know. You can contact me (Brian Mills) by email -millsb@logica.com, phone - 0777 180 6195, or snail mail to CP/G.

We'd also like to know what other people thought of the hunt. As you'll see below, we had entries from 23 teams, of various sizes. There must have been many other Logibods out there who looked at the puzzle but decided not to enter for one reason or another. We would welcome any feedback you may be able to obtain from your colleagues on why they didn't enter and what would make them more likely to do so in the future.

The Famous Five. (Brian, Graham, Neville, Rog and Sarah)

Note that page numbers quoted below are those from DiaLogica (in which the hunt is on pages 7 to 18).

The Scoring System

The points awarded for each question or puzzle are given in brackets after each answer in the sections below. The traditional Logica treasure hunt scoring formula has been used. The formula is (n-c+1) where n is the number of entrants, and c is the number that had the correct answer. Thus for each question, this formula awards one point for every entrant that did not get the question right, so awarding more points for the more difficult questions. For example, 23 people entered the hunt, so a question answered correctly by just one entrant would score 23 points, one answered correctly by 2 entrants would score 21, and one answered correctly by everyone would score 1.

The route to the treasure counted as 3 questions - one for correctly identifying the treasure town as Beaconsfield, one for finding Hogback Wood and one for finding the treasure box itself. The treasure box scored (n-r+1) points, where r was the number on the ticket you took from the treasure box.

Where you have given an answer different to *our* answer we have checked your answer and awarded points if we believe it valid.

Finding the Treasure

Food Clip-art

To find the treasure the first thing you had to do was spot that the food items on each page all began with the same letter:

Page	Items	Letter
8	Peas, Pizza, Pork Pie, Prawn, Pig's Head	P
9	Ice Cream, Irish Coffee, Indonesian Chillies (sorry!)	I
10	Nuts, Nachos	N
11	Christmas Pudding, Coffee, Cheese	C
12	Ham, Hot Dog	Н
13	Oranges, Onions	0
14	Fruit, Figs, Fish (the fish was accidentally omitted from	F
	the DiaLogica copy of the hunt)	
15	Soup, Strawberry, Sandwich	S
16	Asparagus, Apples	A
17	Lemon, Leek, Lobster	L
18	Turkey, Toffee Apple, Tomato	T

This spells "PINCH OF SALT" (5). This is the keyword for the Vigenere code on page 13. Vigenere codes are deciphered by writing the keyword repeatedly under the encrypted text, then subtracting the numeric value of the keyword letter from the corresponding encrypted letter (using the rule A=0, B=1, C=2 etc):

```
IW FVHFY XIYW DCG YOOY DIYDH BUG ACZJ PI NCHOF SALT PIN CHOF SALTP INC HOFS -- ---- ---- ---- ---- TO START FIND OUT WHAT LINKS THE TOUR
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The fully deciphered code reads:

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To start find out what links the tour You'll see it is no picnic Next spot the seasoned words of lore Then turn and face the music (17).
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This suggests that the UK tour will give you a starting point for finding the treasure, and that the music gives the final detailed route.

The UK Tour

The tour took you to: **Rayleigh**, **Diss**, **Hampstead** (you may need to deny it later), **Berkhamsted**, **Chesterton**, **Blyton**, **Gilberdyke** (pull your finger out...), **Birnam** and **Keith** - a detailed explanation of the route is given later.

"You may need to deny it later" hints that you should remove Ham(p)ste(a)d from Berkhamsted and "pull your finger out" means remove "dyke" from Gilberdyke. Most people got the latter but there were many suggestions of dubious assignations on Hampstead Heath; we thought that was Clapham Common, but anyway, it's irrelevant. The place names can then be grouped as follows:

Diss + Rayleigh	(Benjamin) Disraeli
Berkhamsted - Hampstead	(Edmund) Burke
Gilberdyke - dyke + Keith + Chesterton	Gilbert Keith Chesterton
Blyton	(Enid) Blyton
Birnam	(Lord) Burnham

All these people have a connection with **Beaconsfield (19)** - Disraeli was Earl of Beaconsfield, and all the others lived there.

Numeric Code Tour

The numeric codes (27 26 6 33 81 68 etc) were based on chemical elements (see section 5.1); they gave the names of 6 further places: **Corfe Castle, Babbacombe, Southport, Blackpool, Godshill I.O.W.** and **Bourton on the Water**. These places have some of the more well-known **Model Villages** (20) in the UK. Omitted from this list is arguably the most famous of the lot, Bekonscot, which is in Beaconsfield.

Prime Number Code

The code on page 12 is an expression in prime numbers. P(n) is the n'th prime number, so if you evaluate this expression you get P(73434), the 73434th prime number, which is 929483, giving \$U 929483. SU 929483 is the grid reference of a picnic area on the Hog's Back (A31) near Guildford - a convenient location for the treasure as one of us lives only two miles away, but this is nowhere near Beaconsfield and in any case the Vigenere code says "You'll see it is no picnic" - hinting that the picnic area is the wrong place. The \$ (a crossed out S) is a hint that the S of Hog's Back should be removed, giving HOGBACK. (22).

As evil puzzle compilers we were delighted that several entrants swallowed the bait and visited the Hog's Back - two being confident that it was the correct place because of a nearby village named Christmaspie.

Delia's Christmas Message

The front cover of the treasure hunt mimics the cover of Delia Smith's best selling Christmas cookery book. In case this wasn't a big enough hint, the titles of the food quotation books spell out "Delia's Christmas Fayre". Part of the introduction to the recipe book is reproduced on page 9, but someone has cunningly changed some of the words. If you compare it with the original (*spot the seasoned words of lore*), the words that have been changed are:

Hunting

Obscure

Games

Bewilderment

Achievement

Codes

Knowledge

Spelling HOGBACK (21) again.

A look at a map of the Beaconsfield area reveals that there is a small wood named Hogback Wood to the west of the town.

Face The Music

The six pieces of music are a code based on musical notation. They all use the same coding principles, but the earlier pieces are simpler so you could work up from a one finger exercise to the full blown piece on page 18.

The detailed coding principles are given below. The individual pieces decipher as follows:

Page	Text
10	START FROM THE ROAD WHOSE NAME IS (13)
12	EPONYMOUS (19)
14	TAKE PATH CROSS TWO STILES INTO WOOD (19)
15	FORK RIGHT DOWN HILL STRAIGHT ON AT FALLEN TREE (19)
16	AT CLEARING FORK L , THRU BIRCHES FORK R BY ANOTHER FALLEN TREE , AT
	CLEARING FORK L , AND L INTO CRATER (23)
18	NEAR GALLOWS UNDER L O G I C A L (20)

Each code is based on associating each note with a numerical value between 1 and 26, then mapping this value to the corresponding letter of the alphabet. The first code uses a simple relationship:

Note	Value
A#	1 (A)
В	2 (B)
С	3 (C)
(256 Hz)	
C#	4 (D)
D	5 (E)
D#	6 (F)
Е	7 (G)
F	8 (H)

Note	Letter
F#	9 (I)
G	10 (J)
G#	11 (K)
A'	12 (L)
A'#	13 (M)
B'	14 (N)
C'	15 (O)
C'#	16 (P)
D'	17 (Q)

Note	Letter
D'#	18 (R)
E'	19 (S)
F'	20 (T)
F'#	21 (U)
G'	22 (V)
G'#	23 (W)
Α"	24 (X)
A"#	25 (Y)
В"	26 (Z)

For the second code the same rules apply but the bass line has to be subtracted from the treble line (a la Vigenere) - or as the *Pirates* explained it: Take the difference in semitones between the treble and the bass. Subtract 9 and translate to letters as before.

For the third code the duration of the notes becomes significant - the numerical values are multiplied by the note durations (crotchet = 1) before translating to letters - so for example middle C# as a crotchet has value 4, so is letter D; as a minim (duration 2) has value 8 so is letter H; and as a quaver (duration 0.5) has value 2 so is letter B.

The fourth code combines the principles of the second and third - where there is more than one note add the note values together then multiply by the duration and translate to letters.

The fifth code is only slightly more complex - add together the notes in the treble clef as before and subtract the one in the bass clef before adjusting for duration. The first four bars of the code are repeated - this is taken literally in the deciphering, giving a repeat of the directions "At clearing fork L" - only the *Pirates* noticed this. The bass line is the tune of "Tower Warders" from *The Yeomen of the Guard* by Gilbert and Sullivan (23) - only the culturally aware team of Rosalind Barden spotted this, but even they did not spot that the second code's bass line (only nine notes long) is the tune of "Try we lifelong" from *The Gondoliers* (24!), which recurs to the relevant words "Set aside the dull enigma". A bit obscure, we know, but obviously not far beyond the reach of our hunters.

The final code adds an extra twist, because the encoded notes have been hidden as extra notes in a piece of real music. If you have a well trained ear and a good understanding of musical structure you may have been able to work this one out directly. Failing that, attempting to play it, it is instantly recognisable as a piece from Gilbert and Sullivan's *Pirates of Penzance*. Armed with a score of this you can easily identify the extra notes which can then be decoded in the same way as the previous codes. We particularly enjoyed the comment from the team who said that this was the only piece of music they recognised.

The instructions tell you to "start at the road whose name is eponymous". This is Hogback Wood Road in Beaconsfield, just to the east of the wood of the same name. Following the instructions leads you to a cratered area in which there is a tree with a large branch from which several pieces of rope are hanging, gallows-like. The treasure box was hidden in a hollow between the roots of this tree. As is traditional, the box contained numbered tickets, each finder taking the lowest numbered ticket from the box as

evidence of their finding it. One team misread "gallows" as "willows" and thus had a long search, compounded by the fact that the treasure was beneath a beech tree.

Answers to the Questions

Numeric Questions

A. My house lies on a main road between two bus stops. One is 90m away to the left and the other 270m away to the right. My fare to work is 70p from the stop to the left, or 60p from the stop to the right. The buses travel from left to right, appearing over a hill 90m from the left bus stop, and disappearing round a corner after the second bus stop. The buses travel at 15m/s and wait 3 seconds at each stop. I walk at 2m/s and run at 6m/s when I see a bus. If I see a bus, but miss it, I must go by taxi, costing £2. When I come out of my house one morning there are no buses in sight, and I reckon that it does not matter which bus stop I go to. How frequent are the buses?

3 minutes (17), using the assumption that the average cost of travel via either bus stop is the same: It is easy to determine that if you turn left and the bus appears in less than 18 seconds you will miss it (cost 200p), otherwise you will catch it (cost 70p).

Similarly if you turn right and the bus appears in less than 27 seconds you will miss it (cost 200p), otherwise you will catch it (cost 60p).

Suppose there is a bus every *N* seconds. It takes 36 seconds for a bus to traverse the visible stretch of road, and there is no bus in sight, so the next bus must appear within *N*-36 seconds.

So the expected cost if you turn left is
$$\frac{18}{N-36} \times 200 + \left(1 - \frac{18}{N-36}\right) \times 70$$

And the expected cost if you turn right is
$$\frac{27}{N-36} \times 200 + \left(1 - \frac{27}{N-36}\right) \times 60$$

If these two expected costs are the same, then these two values must be equal, giving:

$$18 \times 200 + (N - 54) \times 70 = 27 \times 200 + (N - 63) \times 60$$

But $54 \times 70 = 63 \times 60$ so this simplifies to:

$$10N = 9 \times 200$$

So N = 180 seconds, or 3 minutes.

There were several answers of 144 seconds, which overlooked the fact that it must have been at least 36 seconds since the last bus appeared over the hill.

D. What is next in the sequence 53, 68, 85, ...?

98 (**24**) - These are years in which a new portrait of the Queen was introduced on English coins - 1953 (Coronation), 1968 (introduction of the first decimal coins), 1985 and 1998. No one got this right - most entrants gave an answer of 104 (add 15, add 17, add 19) but this was not accepted. There was some support for the notion that these were the numbers of Logica offices, but no one had a valid answer for this.

E. Which Sonnet gave the titles to novels by HE Bates & John Mortimer?

No. 18 (3), which contains the lines:

Rough winds do shake the **darling buds of May** [Bates]

And **summer's lease** [Mortimer] hath all too short a date.

F. What is next in the sequence 18, 46, 94, 63, 52, ...? **61** (**16**) - the digits of 9², 8², 7², 6², 5² and 4², reversed.

L. I am shipwrecked in calm tideless sea and swim towards the shore. After I have been going for an hour, I pass a buoy 1 mile from the shore, and I am swimming at 1 mile per hour. However, at this point I begin to tire and my speed becomes inversely proportional to the time I have been swimming. How long in total does it take me to reach the shore?

My speed decreases exponentially, so it takes me **2.71828** (13), or e hours. Extra honour, but no extra points, for those who made a link between the *Patience* quote and the fact that e is a transcendental number. Neither honour nor points for those who can't integrate, and offered the answers e+1, or infinity.

The full working is as follows:

Let t be the time I have been swimming (in hours), let x be the distance from the shore (in miles) and v be my current swimming speed (in mph). Elementary calculus tells us that the integral of v with respect to t between two times gives the distance travelled in that time.

After 1 hour (t=1) I am one mile from the shore (x=1) and swimming at 1 mph (v=1). Assume that the total time I take to reach the shore (including the first hour) is T (hours). Thus:

$$\int_{1}^{T} v dt = 1 \text{ mile}$$

The question tells us that (for the time from t=1 to t=T) my speed is inversely proportional to time so v=A/t. for some A. As we know that v=1 when t=1, A=1 and v=1/t.

So:
$$\int_{1}^{T} \frac{1}{t} dt = 1$$

constant.

Calculus tells us that $\int \frac{1}{t} dt = \ln t + c$, where $\ln t$ means natural logarithm (base e) and c is some

Thus:
$$(\ln T + c) - (\ln 1 + c) = 1$$

Note that the c's cancel and that $\ln 1 = 0$. So $\ln T = 1$, ie T = e.

Remember that we defined T to be the time **including** the first hour (which is why we integrated from 1 not 0) so the answer is that the total time taken is *e* hours.

- **O.** What comes next: 30, 42, 54, 66, 78, 90, 144, 259, ...?
- **45** (22) Each number is the sum of the divisors of its predecessors.
- **S.** I thought we'd done well to bowl them out for less than 140, but then our specialist batsmen only scored in inverse proportion to their number in the order (although not ducks); our 4 bowlers scored in inverse proportion to the wickets they took, and had batting scores the same as their bowling averages. If only our Number 1 batsman had scored as much as our top-scoring bowler it would have been a tie. There were no run-outs or extras; how many did the wicket-keeper score?
- **0** (17). A lot of spurious logic was offered in answers to this question. Several teams had trouble with "inverse proportion", and the key to this question is that the 6 specialist batsmen don't have to bat first. Several teams commented on the similarity to England's test team. In fact, the score was even worse than many supposed: final card below.

	Score	Wickets	Average	Runs conceded
Batsman 1	24			
Batsman 2	12			
Batsman 3	8			
Batsman 4	6			
Batsman 6	4			
Batsman 8	3			
Bowler 1	11	3	11	33
Bowler 2	11	3	11	33
Bowler 3	11	3	11	33
Bowler 4	33	1	33	33
Wicket-keeper	0			
TOTAL	123	10		132

If Batsman 1 had scored as much as Bowler 4, we would have scored 9 more runs and tied.

T. What is the shortest distance by boat from Copenhagen to Piraeus?

About 4200 km (21). We came up with this rather pointless question whilst sailing in Greece - and subsequently regretted it as we spent an inordinate amount of time researching the correct answer. We believe the shortest route is via the Baltic Sea, Elbe-Lubeck Canal, Nord-Sud Canal, Mittelland Canal, Dortmund-Ems Canal, Rhein-Herne Canal, R Rhein, Rhein-Saone canal, down the Saone and Rhone to Marseilles, then across the Mediterranean, passing between Corsica and Sardinia, and between Sicily and the Italian mainland. Alternative routes via Paris (Seine and Rhone) and via the Europa Canal to the Danube seem to be viable. Scores were awarded to the three teams who offered an explanation of their

route, even though their yachts' logs seemed to differ somewhat from ours. Fortunately, all the apparent guesses were very wide of the mark. Whilst it is tempting to regard The Wild Boys as having lived up to their name in guessing, we more charitably suspect them of having a yacht of size akin to the *Queen Mary*, necessitating a trip *via* Gibraltar.

U. What comes next: 273, 325, 459, 918, 1157, ...?

521 (24). Logica share price on 1 January each year since 1994. No right answers to this one.

V. Which two numbers are next in sequence (1,2), (6,5), (8,3), (12,5), ...?

(13,5) (24). Positions on a backgammon board and the number of men occupying them at the start of a game. Again no right answers.

Y. What was the largest known prime number before the largest known prime number was discovered? 2²⁹⁷⁶²²¹-1 (11), A Mersenne prime discovered on 24 August 1997. The largest known prime is now 2³⁰²¹³⁷⁷-1 and has 909526 digits. According to the Barden team a newspaper reporting on the discovery explained that 1 had been subtracted to ensure 2 was not a factor....

General Ouestions

- **1.** Which is the odd one out: Corset, H. Berry, Mrs Stay, Mrs Sattin, Sent Gas, Tad Silk? **Tad Silk** (**18**), which is an anagram of St Kilda. All the others are anagrams of Scilly Isles Tresco, Bryher, St Mary, St Martin and St Agnes.
- 2. Which of Riemann's works did Einstein edit in 1919?

 Musik Lexicon (17), edited by Alfred Einstein. Bad luck if you thought this was a mathematical question...
- **3.** Who was shot within hours of being appointed to the top job in his profession? **Estermann, Alois (17).** The first Head of the Swiss Guards in the Vatican not to come from a noble family was killed by a disgruntled underling in May 1998, after less than a day in office. A spirited suggestion of Eric the Half a Bee from Monty Python was disallowed after extensive research failed to discover evidence of his even being interviewed for, let alone appointed to, the top job.
- **4.** If you take away the title of a Finn Brothers song, remove directions and ignore the companion of the Beast, you will find that which is sought after what?

Truth (22). This is all about quarks, which come in 6 flavours: Strangeness and Charm, Truth and Beauty, and more prosaically Up and Down. The Finn Brothers song covers the range but is entitled Strangeness and Charm; remove directions and Beauty and there you have it.

- **5.** If you have Cheerios and an Egg McMuffin for breakfast, what coffee would you drink? **Lavazza** (23) coffee, the connection being that Cheerios, McDonalds and Lavazza were all official sponsors of the World Cup this year. One team got the right answer from the initial letter no-one spotted the connection.
- **6.** Which group had a 1998 hit about the winner of a 1997 MTV award? Another question with no right answers. The correct answer is **Cornershop (24)** whose hit "Brimful of Asha" is about 65 year old Indian singer Asha Bhosle, who won the 1997 MTV video music award in the Indian Viewers' Choice category with *O mere sona re sona* perhaps not the best known award in this country... Puff Daddy's tribute to Notorious B.I.G. was a hit in 1997 not 1998, otherwise this could have been an alternative answer.
- **7.** What is the odd one out: beets carrots celery lettuce parsley spinach turnips watercress? **Turnips(20).** The only one which is not present in a vegetarian drink called V8, which is considerably less potent than its name suggests (the eighth ingredient is tomatoes). A lot of more prosaic solutions were offered, many with erudite botanical reasoning. However, we felt that these had missed the point, and The Old Boys vindicated us by spotting the right connection.
- **8.** What are Butch and Sundance better known as? **Tamworth Two (1).** The one question that everyone got right.

9. If Regent = 734 and Tudor = 883 then what is 467?

Imperial (13). These are the dialling codes and old names of London area telephone exchanges. When automatic dialling was introduced in London in 1927 exchanges were given names whose first 3 letters could be "dialled" according to the following rule: ABC=2, DEF=3, GHI=4, JKL=5, MN=6, PRS=7, TUV=8, WXYZ=9, OQ=0. Although many exchanges were named after the locality they served some had to be given made up names to avoid numeric clashes - REGent was in Soho, TUDor was in Muswell Hill, and IMPerial was in Chislehurst. We thought this question was really hard and sad, but there were a lot of correct answers...

10. Which company incorrectly brought flowers to Glastonbury in 1998?

NatWest Bank (22). The itinerant bank machine installed by NatWest at Glastonbury had been accidentally set up to print "Hampton Court Flower Festival" (its next destination) on its receipts.

11. Ponto is to Jim as Wallace is to?

Albert (13). In unrelated poems by Hilaire Belloc (*Jim who ran away from nurse and was eaten by a lion*) and Marriott Edgar (*The Lion and Albert* - famously read by Stanley Holloway), lions Ponto and Wallace ate boys called Jim and Albert respectively. No marks for Gromit, nor for Nick Parks who invented him.

12. Which book had 60 pages inserted by the author invita Minerva? **Erewhon (18)** by Samuel Butler. He did it to extend the copyright.

13. Which cockney lives in SW19?

Stepney (16). Being one of the new generation of Wombles introduced during 1998. They all still live on Wimbledon Common. The other newcomers were Alderney and Obidos. Not, as offered by one team who shall remain nameless lest the suggestion that the MD is a Womble should limit any careers, Martin Read!

14. Where did a 41-year-old Wiltshire businessman achieve a first on 13th May 1998?

By reaching the **North Pole(19)** David Hempelman-Adams achieved the "Grand Slam" of Adventuring - climbing the highest peak on each of the 7 continents, and reaching both geographic and magnetic poles on foot. We have to apologise for a slight error in the date of this feat; there were many different dates on the Web but consensus seems to be that it was 29th April. However, since The Old Boys got the question right without comment, we assume that 13th May came from a Reuters report. We allowed the answer "North Magnetic Pole", with which D H-A completed the feat of both magnetic poles and the South Pole in one year, in 1996. We did not allow "in his garage".

15. Who was felled by a pork pie that had passed its sell-by date?

Ernie (13), the fastest milkman in the west. In the words of Benny Hill's 1971 Christmas number 1, "The concrete-hardened crust of a stale pork pie hit him in the eye and Ernie bit the dust". Brings a tear to your eye doesn't it. Not "Safeways", accompanied by a long explanation which failed to convince us that this was not a guess.

16. What connects the Queen of Spain and a snakes head?

Fritillary (14). Snakes Head Fritillary is a bulbous perennial of the lily family. The Queen of Spain is a type of fritillary butterfly - both named for their checker-board patterns.

17. What form of transport did Bill, Jan, Peter, Peter, Daniel, Harry and Tom request? Tom Pearce's old grey **Mare** (2) so that they could all go to Widdicombe Fair.

18. Which famous household name firm was established by brothers Alfred & George in 1898? **Moss Bros (19)**.

19. *In which book does the heroine dress up as a joint of meat?*

To Kill a Mockingbird (17). The heroine in Harper Lee's only novel, Scout Finch, is a child acting in a school play; going home in the dark, she is attacked by a man with a knife and is saved by the fact that she is dressed in a metal-framed ham costume.

20. Who was swallowed by a red herring?

Armstrong, Dr (21). In Agatha Christie's *Ten Little Niggers* (now *Indians*), each character dies according to a reference in this grisly nursery rhyme. Dr Armstrong in fact swallows an enormous red herring when he fails to spot that the character who has, with his help, tricked all the others with a fake death is tricking him too. He duly perishes. You needed to read this book to answer the question - we did not accept mere references to the rhyme which inspired it.

21. What is the longest month of the year?

October (14), for the simple reason that it usually contains 30 24-hour days and one 25-hour day, due to the adjustment for daylight saving. "September" (on the grounds of letters) was not accepted, although we were tempted by "The Long March" offered by Ian Canning.

22. What would you have if you had plucked the moon from the bottom of the sea?

Limit Hand (16). This is a special hand in mah-jong in which, for the cognoscenti, a player goes mah-jong (i.e. wins the hand) with the last tile from the wall, which happens to be the One of Circles. We couldn't be bothered to calculate the probability of this, but it is very, very small. After advance work to ensure that the question was not ambiguous enough to allow the answer "Bright Honour" (from Hotspur's speech in Shakespeare's *Henry IV*), we did not allow this answer, which one team offered.

23. What comes next - green circle, brown diamond, purple square?

Red Triangle (16). These shapes are on £5, £10, £20 and £50 notes (Bank of England, not any of your Scottish stuff, as we found out during testing). We didn't accept answers related to Sega, nor the one from The Old Boys who worked out that it was a £50 note, but for whom "an attempt to borrow £50 from the barmaid in *The Pillars of Hercules* failed". Only the creditworthy should enter.

24. What is four fifths of the second element?

Nitrogen (11). A bit of a trick question, since the elements referred to are earth, air, fire and water, whereas the answer is an element of another sort. However, most of you saw straight through it.

25. When are 2, 57 and 111 proper in the morning?

Easter Day (16). These are the Proper Psalms according to the Book of Common Prayer for the Church of England. We did not allow the answer which gave the individual other days on which each psalm is proper.

- **26.** Who redeemed his failure in classics at Oxford by becoming Professor of Latin at Cambridge? **Housman, A.E.** (12). He also, of course, became, or rather was, a Shropshire Lad. One team told us off for using the word "classics", but this was a deliberate obfuscation on our part to avoid the easy net search on "failed in Greats".
- **27.** Which local party official carried out the order to destroy the last house of the Romanovs? **Yeltsin, Boris (16)**. In 1977 he was responsible for demolishing the Ipatiev House in Svedlovsk (formerly Ekaterinburg), where he was the local party boss. Answers of Yurovsky, who executed the last members of the family, were not accepted the question was worded to focus on the physical house, and anyway this answer was much more interesting.
- **28.** What diet did a so-called slob go on, subsequently winning a prize?

Nil By Mouth (22). The actress Kathy Burke, well known for her portrayal of Waynetta Slob on the Harry Enfield Show, played a battered and abused wife in Gary Oldman's unremittingly grim and violent film *Nil By Mouth*. Ms Burke duly won the Cannes Film Festival Best Actress award for her performance. Several people offered Nigel Lawson or the Cambridge Diet...nice tries.

29. Where did the demise of a politician result in scenes of drunken revelry?

Eriskay (24). The politician in question was the *S.S. Politician*, wrecked on Eriskay in the Outer Hebrides in 1942 with 20,000 cases of the finest Scotch whisky on board. The incident inspired Compton Mackenzie's book *Whisky Galore*, subsequently made into a now very dated film. Sad to say, nobody got this one, so we reluctantly conclude that we were too obscure. Many more or less straight answers were offered, notably ones related to Ceaucescu or to Michael Portillo, who allegedly is still alive.

30. When Dougal set out from the station on 21st March 1961, what was the highest point he reached? **Eiger (21).** Strictly speaking, the summit of the Eiger; anyway, the point was that he went straight up; Dougal Haston was in the first team to climb the notorious North Face of the Eiger by a direct route. The ascent was carried out in appalling weather and set new standards of difficulty for Alpine climbing; Haston's original team-mate was killed and those who survived were in poor shape by the end, an outcome incongruous with the picture of setting out from the alpine railway station at Kleine Scheidegg. Teams who got this claimed our date was wrong, but all offered different ones. We concluded from the answers that no-one had been led far astray.

31. When might you rush, split and take off?

When playing **Croquet** (16) - a rush shot is a roquet which moves the target ball to a specific position, the split is a croquet shot where the two balls move in different directions and the take-off is where the croqueted ball hardly moves. Cucumber sandwiches anyone?

32. Tony Elvers made a sharp exit from his accommodation in 1994; where had he been living? **The Needles Lighthouse (22)** on the Isle of Wight. This was one of the last manned lighthouses to become fully automated; the last one was due to be converted during 1998. Plenty of spurious offers for this one, including "his neighbour's flat".

33. Who had a pet guinea pig called Peanuts?

Sorry - this is the inevitable **Diana** question (15). Most answers given to this one were right, but we enjoyed the alternatives of Charles Schultz, Jimmy Carter, and Freddie Starr.

34. For what did a collector pay 1000 pounds of cheese, four oxen, 8 pigs in 1634? A single bulb of the Viceroy **Tulip (8)**.

35. What runs in the veins of the gods?

Ichor (7). Literally Greek for juice - we are indebted to Chris Harries for this information. Answers of ambrosia, or milk, were *not* accepted.

36. Who's missing: Big, Little, Eat, No?

Four-Eyed (18). Big Moe, Little Moe, Eat Moe, No Moe and Four-Eyed Moe are Five Guys Named (you've guessed it) Moe, characters in the musical devised by Clarke Peters based on the marvellous swinging music of Louis Jordan. Most interesting alternative (with spurious justification): Noggin the Nog.

37. What connects: Man in the Moon, Adam and Eve, St Peter Mancroft?

Norwich (11). The Adam and Eve is Norwich's claim to have the oldest pub in England, while St Peter Mancroft is one of its many glorious churches (two rooms of more different ceiling height would be hard to find). As for the Man in the Moon, it is well known that he

...came down too soon,

And asked his way to Norwich.

He went by the south and burnt his mouth

With supping cold pease porridge.

No-one spotted the Delia Smith connection (she is a director of Norwich City FC).

38. Who has his clothes changed royally three times a year?

The **Emerald Buddha** (22) at Wat Phra Kaeo, in the Royal Palace site in Bangkok, has his costume changed by the King of Thailand in accordance with the three seasons - summer, winter and rainy. The Mannequin Pis, the statue in Brussels with the self-explanatory name, was a popular wrong answer.

39. What comes before Bad Hare Day, Egg Monsters from Mars, the Beast from the East? **Night of the Living Dummy 3 (9)** - Goosebumps books in numerical order. A distressingly large number of correct answers.

40. Which piece of music will no longer be a screen perennial?

I wish I knew how it would feel to be free (19), by Billy Taylor - The theme tune of Barry Norman's Film review magazine which started in the early 70's with the imaginative title of Film 73 and has

undergone an increasingly predictable name change each year. After Film 98 the BBC decided to drop it because it isn't millennium compliant, so Norman has moved to Sky. Various alternatives were offered but not accepted - "perennial" was the clue to something which comes up again each year.

41. Which painting has a skeletal trompe d'oeil?

Holbein's **Ambassadors** (6). The picture contains a skull which is not immediately apparent, but can be seen when viewed from an odd angle. Strictly speaking, as many pedants told us, not a *trompe d'oeil*, but many people got it. We could find no evidence for an alternative offer of "The Merchants of Hamburg" so took it as a guess.

42. What follows Bunker Hill and Waterloo?

Emancipation (23). Bunker Hill Day is 17th June, Waterloo Day is 18th June, and 19th June is Emancipation Day. Lots of ingenious suggestions to do with battles were offered, but not accepted only one team got the point.

43. The Doctor lives with Chris, the Elephant Keeper. Robin lives with the oldest. Olive's son has a perfect age, and is not the youngest. The Architect and Lee have been married for 10 years. Andy's other half is the youngest. The Lawyer has taken 8 years to come to terms with the fact that his son is gay. The Inspector's ex-husband was older than her but he has now gone for an even younger woman in her thirties. Who is Olive's son?

Andy (16), who is the Doctor. He was the progeny of Lee the Lawyer's first marriage to Olive the Inspector. Lee is now married to Robin the Architect. Andy is getting fed up with Chris' rather unsavoury elephant impressions.

44. What connects Zemmery Fidd, St-Vaast & Loch Fyne?

They are all well known as sources of **Oysters** (11) - Zemmery Fidd is mentioned in The Walrus and the Carpenter (Lewis Carroll); St-Vaast in is Normandy and Loch Fyne in Scotland.

45. Who at the age of 50 was made Mayor of Blackpool?

Sooty (17). This political debut was for one day only (19 July 1998) but he's already acting as an image consultant to William Hague. No alternatives accepted.

46. Which Turkish dish describes a clerical lapse?

Imam Bayaldi (13), literally "The priest has fainted" - traditionally because of his astonishment at the amount of olive oil in this aubergine dish.

47. Who said "I once had a rose named after me and I was very flattered, but I was not pleased to read the description in the catalogue: not good in a bed, but fine up against a wall"?

Eleanor Roosevelt (23). A splendid selection of guesses for this one, including Clare Rayner and Alan Clark.

48. Which is the odd one out and why: Sum Imp Carapace Traveller Firth?

Traveller (23). OK, we admit it, one of us works for an oil company, but not Total, Elf, Shell or Gulf, those represented by these synonyms, and certainly not for Rover, which is the odd one out since it is a car company, or was.

49. Bonnie was born in 1998 - who was her mother?

Dolly (4), the cloned sheep. Bonnie was born on 13th April 1998 (Easter Monday).

50. Of whom did Alan Bennett say "could never have written as he did had he lived in a house - put him in a nice detached villa and he'd never have written a word"?

Franz **Kafka** (17). The Old Boys tell us that Kafka wrote as he did because he lived in an apartment, a world of muffled sounds, voices through walls etc.

51. Who can't make today's lunch appointment?

Miss Otis (6) regrets she's unable to lunch today - because she's been arrested for the murder of her lover, according to the song by Cole Porter, and made famous by Ella Fitzgerald and more recently revived by Kirsty MacColl with the Pogues.

- **52.** Which is the longest freshwater loch in Scotland?
- Loch Awe (13), which beats Loch Ness by about half a mile, basically because it's not as straight.
- **53.** Who sucks up to Rupert, patronises Clive and bullies Penny?
- **Alex (12)**. The eponymous hero of a yuppie comic strip highly successful in the 1980's and now to be found in the Daily Telegraph. He does have a surname (Masterley) but it's not used much. Rupert is his boss, Clive his co-worker and friend, and Penny his wife. We enjoyed the alternative of John Junor!
- **54.** What was offered for sale (& sold) for \$250,000 in June 1954 in the Wall Street Journal? 4 of the **Dead Sea Scrolls (21)**. There was some support for both London Bridge and Tower Bridge. London Bridge was flogged off rather more recently (late 60's) and as far as I know Tower Bridge is still British.
- **55.** What comes next D, F, GB, H, ?
- **T** (**Thames**) (22). No, it's nothing at all to do with European countries it's a shipping forecast question: Dogger, Fisher, German Bight, Humber, Thames etc.
- **56.** Who won the Whitbread one year and the next cleared himself of implication in his wife's death? **Hughes, Ted (9).** Double trickery in this question; the Whitbread is the prize for poetry, not for yachting, and Ted Hughes "cleared himself" in 1998 not in court but in literary circles, by the publication of Birthday Letters. He had never spoken or written about his wife Sylvia Plath's suicide in 1963 and it was widely said that he had driven her to it, caring little, until this was dramatically refuted in his poetry.
- **57.** Who was persuaded by his sister to kill his mother who had killed his father who had gone off with his uncle to bring back his aunt?
- **Orestes (6).** There seems to be a lot of death in these answers, and this story, being Greek mythology, is particularly rich in it. Agamemnon was Menelaus's brother, and when Helen (Mrs Menelaus) absconded to Troy with Paris, it was Aggie who launched the 1000 ships to bring her back. On his return, he was done in by his wife Clytemnestra; their daughter Elektra got pretty upset about this, but was saved from going completely off her trolley by the timely return of her brother Orestes, whom she swiftly convinced that all would be set to rights if he would only kill Mummy in revenge.
- **58.** Who is missing: St Teresa, St Ignatius, St Settlement?
- **St Teresa** (17). These are the four eponymous saints in Virgil Thomson's opera *Four Saints in Three Acts*. Apparently Thomson was intrigued by the thought that nobody really had any idea of what a saint actually *did*, other than just saintly acts. In the opera, therefore, the four saints indeed do very little indeed other than wander around a bit. The point of the question was that there are two St Teresas. Sadly, there is a fifth saint who has a minor part in the opera, St Chavez, and we were forced to allow this answer.
- **59.** Which poem inspired Rodin's Thinker?

Dante's Inferno (11). We allowed "Divine Comedy", of which the Inferno is a part.

60. What was named after Snotinghas?

Nottingham (12). Obvious really. According to one source, named after the followers of Good King Snot.

61. In which establishment was Bell's Bunker?

In the basement of the **Longview Hotel, Knutsford (22).** Where Martin Bell was based for his successful election campaign - he became MP for Tatton.

- **62.** What is next in the sequence $10, V, D \dots$?
- **R** (Roi) (22). From the markings on french playing cards.
- **63.** For what purpose does IB have an M?

Science Fiction (23). The author Iain Banks writes two sorts of fiction, science fiction and the other sort, whatever that is. For the former he works under the cunning *nom de plume* of Iain M. Banks, so

that he won't be recognised or confused with himself. No connection with International Business Machines.

64. Who issued a code of laws that made nearly every offence punishable by death?

The Athenian lawyer **Draco** (7) - whence *draconian*. Not the Mikado, in whose regime only flirting was punishable by death, nor the Red Queen in *Alice*; there is no evidence of her having promulgated a law. And, as far as we know, not the Royal Navy!

Connections

a. Clint Eastwood, Chic Young, Penny Singleton

Blondie (14). Clint Eastwood played Blondie in *The Good, the Bad and the Ugly*; Chic Young created a comic-strip character called Blondie; Penny Singleton appeared in the film *Blondie Knows Best*.

B. Surrender, Dutch, Pawnbroker

Uncle (13). In the USA, "Uncle" is a contraction of Unconditional (surrender). The others are obvious.

Y. Bismarck, Finisterre, Weyland

They are all **New Guinea mountain ranges (18).** Various dubious suggestions based on Nelson, or otherwise, were rejected.

8. Penelope Keith, Toyah Wilcox, Eric Sykes

The all do voice-overs for the Teletubbies (14).

E. Pan, Chymistry, Scarf

Hermes (20). Hermes Pan was a successful Hollywood choreographer who worked notably with Fred Astaire, the Greek god Hermes is associated with alchemy, and Hermès (think about the pronunciation) is an accessories retailer that specialises in scarves.

ζ. Dumbarton, Taverner, Epsom

Oaks (11). Dumbarton Oaks is a private estate in Washington DC at which the basic plan for the charter of the United Nations was drawn up in 1944, and which gave its name to an orchestral concerto by Stravinsky; John Tavener was associated with *Strong on Oaks, Strong on the Causes of Oaks*, which was a popular classical piece in 1998. Actually, although Tavener shared the CD, it was Michael Nyman who wrote *Oaks* - sorry about this error, but we didn't delete the question, since several people got the answer anyway. The Oaks horse race is run at Epsom.

η. Ant, Kitten, Robin

They are all cars made by Reliant (11)

0. Jessye Norman, Betty Boothroyd, Germaine Greer

Newnham College, Cambridge (21) - they are all honorary fellows.

1. Aristotle, Rosicrucians, International Date Line

They are themes of books by Umberto **Eco** (21) - respectively The Name of the Rose, Foucault's Pendulum and The Island of the Day Before. A spurious answer of "Ephemerides" from the Pirates of Penzance came with a splendid explanation which was going so well until they finished lamely with "Aristotle was also interested".

K. Matthew Calbraith Perry, Emma Goldman, Georges Seurat

Stephen **Sondheim** (22) musicals. Perry, the American commodore who "discovered" Japan, features in *Pacific Overtures*, Goldman appears in *Assassins*, and Seurat is the subject of *Sunday in the Park with George*. The answer "musicals", even backed up by evidence of Emma Goldman's appearance in another musical, was rejected since there is a more specific connection.

λ. Swing, Rubber, Roll

Bridge (11)

u. Frank Sinatra, Winston Smith, Simon Crowe

Rats (14). Frank Sinatra was a member of the "Rat Pack", Smith's downfall in 1984 was his fear of rats, and Crowe was a member of the Boomtown Rats.

v. Mouth of the River, Hollow of the Mill, Little Height

They are the English translations of the names of **Islay Whiskies** (24), ie Bunahabhainn, Lagavulin, and Ardbeg. There was some discussion in our team in advance as to whether this question was too obscure - sadly our fears were well-founded, although a number of people were on the right lines with Irish or Welsh towns.

ξ. Michelle de Bruin, Tour de France, Messiah

Dublin (13) - Swimmer de Bruin was born in Dublin (as Michelle Smith), the 1998 Tour de France started there, and Handel's Messiah was premiered there. Nothing to do with drugs.

o or π. Richard II, Canute, Edward the Confessor

Queen **Emma** (20) of England. She was the daughter of Richard II of Normandy, consort to Canute and mother of Edward the Confessor. A number of more general answers such as "King" were rejected. More ingeniously, one team came up with "Harry" - allegedly the successors of three kings of these names - but this too was rejected.

The UK Tour

Mary Queen of Scots was beheaded at **Fotheringhay** castle. The nearest city is **Peterborough**, from which you catch a train to **March**, and then on to Hereward the Wake's stronghold at **Ely**. Continuing south on the railway through Cambridge you get to **Bishop's Stortford**. The road east from here (A120) is **Stane Street** which takes you to **Great Dunmow**. South on the A130 through Chelmsford takes you to **Rayleigh** (5).

Rayleigh is near **Southend Airport**. 70 nautical miles on bearing 018 takes you to **Norwich Airport**, and to the south west is **Thetford**. The A1066 goes east from Thetford to **Diss** (6). Several entrants thought the A1066 ended at Scole, which was accepted - our map shows it stopping at the A143 in Diss, but it's possible the roads have been renumbered recently.

East from Diss takes you to the A144 which leads to the A12. This road crosses the River Alde and goes to **Colchester**. A train from here goes to **London Liverpool Street**. One stop on the Circle Line takes you to **Moorgate** where you catch a Northern Line train to the deepest station on the underground, at **Hampstead (3)**.

The Northern Line goes to **Edgware**, where you pick up the A41 (**Edgware Way**). Parallel to the A41 is the **Grand Union Canal** which passes the castle at **Berkhamsted** (3).

North of Berkhamsted is **Pitstone Common** (site of the 1996 ATH treasure) and the zoo is **Whipsnade** (a dead give-away if you were lost before this point). Lorraine Chase came from **Luton** (Airport) - according to the martini ad, and north-east from here on the A515 is **Hitchin**. The A515 goes to **Duxford** (home of one of the prototype *concordes*), which is near **Whittlesford**. Going up the M11, the last junction takes you onto the A14, and turning off the A14 before the River Cam takes you to into the suburbs of Cambridge, at **Chesterton(5)**. Answers of Cambridge were allowed from those who had not managed to spot the connection between the tour destinations.

Oliver Cromwell's first constituency was **Huntingdon**. Turning right here takes you onto the A1, past **Stilton**. Further north the A1 crosses the River Trent at **Cromwell**. Downstream from here is **Gainsborough** (*Lord and Lady Howe* is one of Gainsborough's better known paintings). North-east from here there was an airfield at **Blyton** Grange (15). Lots of teams had difficulty identifying this one.

Going west from Gainsborough the road goes through **Everton**, and crosses the River Idle into Bawtry. Two right turns takes you onto the A614 which leads eventually to the Humber at Newbridge. Turning right here you will reach **Gilberdyke(7)**.

The nearest motorway is the **M62**. At junction 10 it intersects with the **M6**. It's slightly further to **Carlisle** from here than to Rugby. The **A7** from Carlisle leads to **Edinburgh**, where crossing the **Forth Bridge** (opened on 4th September 1964) takes you to **Bridge of Earn** just south of Perth. Going up the Earn you reach **Glen Turret**, north takes you across the **River Almond** and the road leads first north then east to **Birnam(7)**.

The train north from Birnam takes you to Aviemore and then on the Speyside railway to **Boat of Garten**. Down the River Spey you pass **Knockando** (a refusal), then right leads you to **Dufftown**, home of Glenfiddich whisky (bottled in distinctive green triangular bottles). East from here takes you through the village of **Bridgend**, then north to **Aberchirder** (an anagram of *birch reader*). Left and left again leads you through **Gordonstoun** to **Keith (8)**. Answers of Glenbarry, just beyond Gordonstoun, were accepted - though only in remotest Scotland could you consider a road junction with a pub and two houses a town!

Codes and Puzzles

Numerical codes

To solve the numerical codes you needed to interpret the numbers as the atomic numbers of the elements and replace each number by the corresponding atomic symbol - thus 1 is H (Hydrogen), 2 is He (Helium) etc. This gave:

Co Fe C As TI Er	Corfe Castle
Ba B Ba C Mo Be	Babbacombe
Sr O U Th O Pt	Southport
B La CIK Po O	Blackpool
Gd Os Ho Li Li W	Godshill I.O.W.
B O U Rn Te O No Th W At Er	Bourton on the Water
Se As O N S W I S He S Y O U In Ge N I O U S	Seasons wishes you ingenious tip-
Ti Pt O Pt Tr As U Tr H U N Te Ra Nd S U C Ce	top treasure hunter and
SSFULaNSW Er Er OFC Od Es	successful answerer of codes

No points for this unless you recognised that the places all have model villages (see above).

Island, Castle, Valley, ...

The pictures in the top left corner of pages 11 onwards are references to Enid Blyton's *Adventure* series of books:

The **Island** of Adventure

The Castle of Adventure

The Valley of Adventure

The **Sea** of Adventure

The Mountain of Adventure

The **Ship** of Adventure

The Circus of Adventure

The **River** of Adventure

There were some valiant attempts to make these pictures spell out a word, or to marry them with the food pictures, but this is just a hint to the relevance of **Enid Blyton (23)**.

Quotations

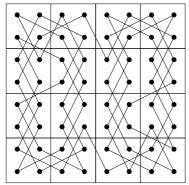
The food quotations were as follows:

What is required for chutnification?	MIDNIGHT'S CHILDREN	Salman Rushdie (16)	DEL
1		` /	
"Joe! Joe!"	THE PICKWICK PAPERS	Charles Dickens (7)	IAS
You should've seen the steaks.	THE CATCHER IN THE RYE	JD Salinger (16)	CH
My dears, you'll never guess	THE PURSUIT OF LOVE	Nancy Mitford (17)	RI
You know, the way love can change	THE INIMITABLE JEEVES	PG Wodehouse (18)	ST
a fellow			
After distributing the eight ice	THE DARLING BUDS OF	HE Bates (17)	MASF
creams	MAY		
Ravenous, and now very faint,	JANE EYRE	Charlotte Bronte (11)	AYRE

Using the numbers to pick letters from each title spells Delia's Christmas Fayre (16).

Dot Puzzle

The dot-and-line fragments on each page can be assembled into an 8 x 8 grid thus:



This is recognisable as a Knight's Tour of the chess board - see below.

Linking Phrases/Sentences

The answers to numerical questions: sorting the questions letters into ascending numerical order of their answers spells: SLAVEOFDUTY (20)

The first letters of the answers to the main questions, when put into an 8 x 8 grid by following the knight's tour as follows:

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	111 5	tour	ub 1	OHO	** 5.		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	T ₁	H ₅₆	E ₃	M ₁₈	E ₂₉	A 20	N ₃₉	146
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	N ₁₀	G 17	D ₆₄	O ₅₇	E 38	S ₄₅	N ₂₈	O 21
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	T ₅₅	M ₂	A 11	T 4	T ₁₉	E ₃₀	R ₄₇	lao
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	F ₁₆	l ₉	T 58	S 63	Q 44	N ₃₇	L_22	Y ₂₇
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	159	D 54	L ₅	E ₁₂	G ₃₁	H ₂₆	A ₄₁	T ₄₈
	T _s	E ₁₅	R ₆₂	O 51	F ₃₆	A ₄₃	T ₃₄	R ₂₃
N ₁₄ T ₇ A ₅₂ L ₆₁ K ₅₀ I ₃₅ N ₂₄ D ₃₃	A ₅₃	N ₆₀	S 13	C.	E ₂₅	N ₃₂	D ₄₉	E ₄₂
	N ₁₄	T7	A ₅₂	L ₆₁	K ₅₀	I 35	N ₂₄	D ₃₃

... spelling "the meaning does not matter if it's only idle chatter of a transcendental kind" (21) - a quotation from Gilbert & Sullivan's *Patience*.

The answers to connections (in Greek letter order) spell: BUNTHORNES BRIDE (21).

The link between these linking phrases/sentences is **Gilbert and Sullivan (20)** - The Slave of Duty is the alternative title for the Pirates of Penzance, and Bunthorne's Bride is the alternative title for Patience, from which the "meaning does not matter" quotation comes.

There is a further (fake) reference to Gilbert and Sullivan. "Fairies and Journalists are [the] Slaves of Duty" is a quotation attributable to **GK Chesterton** in *Orthodoxy*, but not one that is associated with Pirates of Penzance (or Iolanthe for that matter).

Red Herrings

Page 10 "Peach Sooner Beaver ...".

These are the nicknames of various US states, spelling "Good Luck":

Peach	Georgia
Sooner	Oklahoma
Beaver	Oregon
First	Delaware
Pelican	Louisiana
Beehive	Utah
Golden	California
Blue Grass	Kentucky

Page 10 "Butter Ground Ginger Candle Castle Monkey Sleeve Mocker".

This is a code using the initial letters of font names. The fonts used are:

Arial, Courier New, Desdemona, Excalibur, Facet, High Noon, Impact, Milestones, Nadianne, Old English, Poster Bodoni, Reindeer, Signet Roundhand, Times New Roman, Urkle, Vangard, Wingdings and Young Zaphod, spelling:

"AMERRY CHRIST MASAND AHAPPY NEWYEA RFROMT HEFAMO USFIVE".

The words themselves are all types of nut (edible except for sleeve-nut and castle-nut which are mechanical). This ties in with the food theme on page 10 (items beginning with N) but has no other significance.

Page 11 "Sew+s!jy)hyyaw"

This simply spells Merry Christmas upside down (at least after a few pints, as one team pointed out). This was solved by David, 6-year-old member of the Pirates team, so shame on the 15 teams that didn't get it.

Page 13 "Again Brave deeds..."

This is just a cryptic clue to the phrase "Red Herring" (Re d-H-erring).

Road Signs

There was a road sign at the head of each "tour" paragraph. Several teams tried to make some sense out of these by spelling words out of them, but they were purely decorative. Sorry!

There were no points for any of these red herrings.

Warm-up Puzzles

Before the treasure hunt was launched officially, we published a "flyer" on Logica sports and social club noticeboards, which contained three questions:

Who was the only competitor at the Montreal Olympics who did not have a sex test? (**Princess**) **Anne** Which opera was set 100 years before its first performance? **Tosca**

What connects Valley, Swan, Deer? Hunter (Australian wine region, shipbuilders, de Niro film)

The initial letters of these answers spell (P)ATH - without the P this is the traditional acronym of the Armchair Treasure Hunt. We put these answers on page 17 of the main puzzle. There was no intended deeper significance to this, although extraordinarily some teams interpreted the inverted L shape that the answers formed as a hint for solving the knight's tour.

The "flyer" referred to the Armchair Treasure Hunt web site (http://public.logica.com/~ath), which contained some "useful" web links and some further puzzles. The first of these was a maze. If you found the correct (shortest) route through the maze you would have found a series of objects:

Torch

Ring

Eagle's Foot

Apple

Scalpel

Ukelele

Rotting Corpse

Enchilada

Hamburger

Umbrella

Nectarine

Trifle

- spelling TREASURE HUNT.

If you found your way out of the maze, you would have reached a page which was password protected. Username and password were "armchair" and "treasurehunt" respectively. This led to three further pages containing puzzles.

The first was a *knight's move* puzzle using the same principle as that in the main treasure hunt. This contained the quotation "Solve the complicated plot. Quiet calm deliberation, untangles ev'ry knot" - which is from Gilbert and Sullivan's *The Gondoliers*.

The second and third puzzles were anagrams and grid references of places where the treasure has been buried in previous years, as follows:

1985-6	Christmas Common	SU 720 936
1986-7	Northaw	TL 268 033
1988-9	Ayot St Peter	TL 221 151
1989-0	Copped Hall	TL 430 015
1990-1	Addington Hills	TQ 354 644
1991-2	Cookham	SU 868 859
1992-3	Fetcham	TQ 151 541
1993-4	Little Chalfont	TQ 005 973
1994-5	Cranford Park	TQ 097 782
1995-6	Wallington	TL 289 341
1996-7	Ashridge Park	SP 972 135
1997-8	Fotheringhay	TL 065 928

We awarded no points for any of the warm-up puzzles.

The Results

First to the treasure was *The Malory Towers Old Boys*, a 10-strong team headed by Dave Browning and including several illustrious names from previous treasure hunts - Sambo Cloup, Gavin Hadder and Joanna Bricks are names that may be familiar to seasoned campaigners. The *Old Boys*' entry was almost good enough to save us having to compile these answers at all - pity we didn't predict that before Christmas.

Best overall entry (the *Old Boys* excluded) was from Rosalind Barden's team, who made two abortive trips from Cambridge to Guildford before homing in on the correct treasure location. They receive the long distance treasure hunting award.

Second to the treasure was Dave Kee, who took nocturnal hunting to extremes by trying to dig up the box at 2am. Second best overall entry was from the Meats team (Five Find-outers), whose entry was extensively embellished with maps, photographs of their exploits in the woods and G&S midi files.

We awarded *Famous Five Favourite Entry* to Alison Ruxton's *No Management Potential* team. This team allegedly consisted of most of the 4th floor at GMS, and got tantalisingly close to finding the treasure location - they spotted the changed words in the *Delia* introduction but just couldn't get HOGBACK out of it.

If you have won a prize, then it is either included with these answers (if they came by post) or will be on its way to you shortly.

War Stories from the Entrants

The Malory Towers Old Boys

The eponymously named road is Hogback Wood Road, though we should maybe mention that when we found the box (Tuesday 22nd December) we did not yet know this, only the literary links to Beaconsfield. With the help of a Beaconsfield map from the local Post Office, we first located Chesterton Green, but there was no apparent path, and we spent a good ten minutes studying the map before an old lady tapped on the window with her stick and asked "Are you lost?"

An obvious path on the *Chiltern Hills South* map turned out to be a fruitless 15 minute slog through wet clay to the golf course. We then tried Blyton Close and Disraeli Road. Finally, remembering the 'fork right down hill' direction, we parked near Hogback Wood which had a path appearing to fit this description. The stiles, the trees, the birches, everything worked, and led to the crater, which disappointingly was around 100 feet wide and contained dozens of trees. Disappointingly, because at that point we hadn't decoded the last piece of music, so only knew the box was in the crater. However treasure hunters' instinct led us almost straight away to a tree on the far side, which yielded the box. Having now decoded the G&S, I recall a large hummock with a tree on top, which may have been the 'gallows.'

The instructions in the box were written in the style of a Famous Five story, ending with 'Two sinister figures were approaching through the gloom'. Rather too realistic given the remote location, and enough to cause several glances over shoulders while taking ticket number 1 (labelled "Angels on Horseback") and re-burying the box. I don't think we were spotted by anyone, except several hundred passengers on a passing train.

Rosalind Barden and the pirates of Penzance

We did the music, the prime number and the Delia Smith codes. So on Christmas day (well it was more fun than peeling the sprouts or watching the Queen's speech), we headed down to the Hog's Back. It was raining. We found only one stile, a crater, and vast numbers of gallows-like wooden contraptions, presumably related to Hops cultivation, just South of the car park.

This could be a coincidence, a cunning red herring or an act of wishful thinking.

On New Year's Eve (during daylight), we returned to the Hog's Back, as Christmaspie tied the Delia Smith thread in nicely. We also checked a brick silo next to the gallows. There were unmistakable signs of previous diggings at the gallows end.

A few days later we saw the Beaconsfield link and the Hogback Wood. So we went down there after work. It was raining. It was muddy. And especially, it was dark. We couldn't see the fallen trees and we even missed the hollow.

We then had the idea to go to the right place in the day time, so we waited until the weekend. The sun shone, the directions were easy to follow in day time and we found the fourth ticket.

Tom Lehrer described Gilbert and Sullivan as *full of words and music and signifying nothing*. Seems to sum up the ATH admirably!

Roll of Honour

Team (Captain)	Score	Treasure Ticket	Prize
The Malory Towers Old Boys (Dave Browning)	1666	1	First to treasure £200
Rosalind Barden and The Pirates of Penzance	1468	4	Best overall solution £150
Five Find-outers (Richard Meats)	1147	3	Second best overall solution £50
David Kee	1067	2	Second to treasure £50
No Management Potential (Alison Ruxton)	780		Famous Five Favourite Entry £25
Ros Skelcher's team	637		
Ian Canning & Supporters	629		£10 from the hat
The Wild Boys (Dick Sykes)	570		£10 from the hat
Mark Amey	543		
Jon Wallis & Friends	509		£10 from the hat
Andrew Healey	414		£10 from the hat
Chris Harries	358		£10 from the hat
Ho Ho Hos (Tracey Surtees)	339		Best entry by an ATH Virgin £25
Richard Porter, John Glover and Neil Darby	314		£10 from the hat
Nick and Wendy Petty	279		
Mike Wood	252		£10 from the hat
Martin Milnes & team	250		£10 from the hat
Eutelsat & friends (Neil Burdett)	226		£10 from the hat
PDG Smith et al	179		£10 from the hat
Ian Wiseman	145		
Tony Ashton	139		
Charlotte Smith	138		
Alison Walton	72		