## PABLO'S ARMCHAIR TREASURE HUNT 2021 - Beef Leamington answer submission

## THE POSTER

The 12 pictures at the top, with the dates of the events they happened, are:

| Composite photo of the moon from Galileo spacecraft | 8 Dec 1990 |
| :--- | ---: |
| Vinette Robinson playing Rosa Parks in Doctor Who (date she wouldn't move <br> on bus) | 1 Dec 1955 |
| Oliver Cromwell being sworn in | 16 Dec 1653 |
| Boston Tea Party | 16 Dec 1776 |
| William the Conqueror on the Bayeux Tapestry (date of coronation) | 25 Dec 1066 |
| Antarctica filmed from Galileo spacecraft | 8 Dec 1990 |
| First crossword puzzle by Arthur Wynne | 21 Dec 1913 |
| Roald Amundsen at the South Pole | 14 Dec 1911 |
| Colin Powell with Dick Cheney behind | 20 Dec 1989 |
| Coronation Street first airs | 9 Dec 1960 |
| Women voting for the first time | 14 Dec 1918 |
| Galileo spacecraft in front of Jupiter | 7 Dec 1995 |

All the dates are in December, as with an advent calendar. Taking the day in December and indexing into the alphabet yields HAPPY HUNTING.

The large picture below is a still from the 1983 film 'A Christmas Story'. A calendar in the background has the year 1935 on it (added). In the film, the boy Ralphie uses an Orphan Annie decoder ring, which is suggested by the words below the picture - 'Santa Claus, what's that, who's he?' is a line from 'It's the Hard Knock Life' from the film Annie, the 'key' is the decoder ring (which has two keys on it).

Using the 1935 version and rotating so $\mathrm{N}=1$, the numbers that Ralphie is saying spell DUE FOR MY NIGHTCAP (which incidentally has no repeated letters).

## THE ADVENT CALENDAR

1 December: the four pictures are (a USPS official giving) the book symbol in charades, (umpire Simon Taufel giving) the symbol for 'one word' in charades, (actor Laurence Fishburne giving) the symbol for 'sounds like' in charades and the spitting image puppet of Paul Gascoigne crying, ie a "Gazza tear". The answer to this charade is GAZETTEER.

2 December: this image is of Swampy 'the world's largest gator' at Jungle Adventures, Christmas, Florida, USA.

3 December: this image is of the Fox and Hounds pub, Christmas Common, Watlington, on the day of the 2017 general election.

4 December: the images are of Normandy and a Ford Flex upside down, suggesting Flexford, Normandy, Surrey. The image of a pin below represents the geographic position of the hamlet of Christmas Pie which is south of Flexford and Normandy.

5 December: the picture is of Steps' 2012 tour (Christmas With Steps) and a screenshot of 'Bristol solitaire', suggesting Christmas Steps, Bristol.

6 December: the reference to beagles and tortoises and "down on the farm" suggests Charles Darwin; he lived at Down House, Downe, Surrey, which is next to Christmas Tree Farm; the farm has some rheas.

7 December: the formula on the left is Newton's cooling formula; on the right is the word for 'cold' in Newton's invented universal language (itor) and the initials of 'happy birthday to me'. Sir Isaac Newton was born on 25 December 1642, suggesting Cold Christmas, Hertfordshire.

8 December: the two-letter codes are internet country domains; taken in pairs the countries and numbers are the scores in the group stage matches of the 2014 FIFA World Cup that were held at Arena das Dunas, Natal, Brazil. Natal is Portuguese for Christmas.

9 December: the lyrics hint at the carol The Twelve Days of Christmas, since the addition of a triangular number of gifts each day could form a new layer in a tetrahedron. Since the card is dated 25th December, the first day of Christmas, that suggests a partridge in a pear tree. There is a Partridge Green in West Sussex.

10 December: converting chemical element symbols to numbers and vice versa makes the road sign B2135 / B2116. Those two roads intersect at Partridge Green in West Sussex. The right-hand image suggests the memorial to Richard Parker (R.I.P. RP), the cabin boy eaten by his surviving crew-mates leading to the criminal case of $R$ v Dudley and Stephens. Richard Parker was also the name of the tiger in the book and film The Life of Pi, hence the pi at the top. The memorial is in Peartree Green, a suburb of Southampton. Again this relates to 'a partridge in a pear tree'.

## CHRISTMAS MESSAGE

24 December advent calendar door: the Passenger Name is U. Marsupial, setter of the 2021 hunt; the two locations are San Nicolas Island, California and Stocking Island, the Bahamas, suggesting Father Christmas's journey. The bar code leads to The Anti-Social Club, by Alan Pasqua. The ABC235 flight number suggests the prime number code used in the hunt on page 13. The 44 R seat number suggests taking numbers mod 26 to spell letters.

## NEW YEAR MESSAGE

All that is cold is not coldest, - reference to finding the coldest Christmas temperature Not all cards that are shown have a twin - not every Christmas card has a corresponding image; The primes, Ptolemy's was the oldest - Ptolemy first used a prime meridian, Answers can be found from within. - reference to prime meridian code on page 14

From the themes an idea shall be woken,
And words from the puzzles shall spring;
Renewed shall be spirits that were broken,
A letter may look like a ring - the O is in the centre of each Olympic ring on page 3.

## MAIN HUNT

The themes of the main hut are: The Twelve Days of Christmas, 36, Cold Christmas, Christmas singles, the prime meridian - and Humphreys.

The treasure is hidden in a tree south of the village of Cold Christmas (on the prime meridian), Hertfordshire, at grid reference TL 3800 1671. It was found by Beef Leamington at 15.15 on 30 December 2021, the second retrieval.


## PAGE 1 - A PARTRIDGE IN A PEAR TREE

The 12 pictures at the top each relate to one of the twelve days of Christmas, i.e. 25 December to 5 January: John III Sobieski (Jan 3 in Polish); Nancy Pelosi becomes speaker (Jan 4); construction of the Golden Gate Bridge (Jan 5); Humphrey Bogart's birthday (Dec 25) (note: Humphrey); Good King Wenceslas (Dec 26); Apollo 8 recovery (Dec 27); Surrender of Granada (Jan 2); UK entry into the EEC (Jan 1); Dumbleyung Bluebird World Speed Record (Dec 31); Roy G Biv They Might be Giants track - Richard of York Gained Battle In Vain at the Battle of Wakefield (Dec 30); Thomas a Becket murdered (Dec 29); El Enfarinats festival (Dec 28).

The wordsearch has an (Alan) Partridge theme (-> Twelve Days of Christmas). Things that can be extracted:

Direct Partridge sketches: Knowing Me, Knowing You; Partridge Amongst the Pigeons; Inner City Sumo; Arm Wrestling with Chas and Dave; Swallow; Alan Attack; 15 occurrences of 'Dan'.

15 Monkeys: Capuchin, Douc, Gelada, Grivet, Guenon, Howler, Langur, Lesula, Mandrill, Mangabey, Surili, Talapoin, Tamarin, Uakari, Vervet, plus ‘Game Marmoset and Match', suggesting Monkey Tennis, a Partridge sketch.

Cu29Zn30 = Brass (Brass Monkeys $=$ cold - thematic link between monkeys and Cold Christmas).

Loch Othian, Pen-y-path, Thlaidburn and Black Thail suggest Youth Hostelling with Chris Eubank, another Partridge sketch, because Chris Eubank lisps and these (Loch Ossian, Pen-y-Pass, Slaidburn and Black Sail) are all youth hostels.

Christmas: angel, bauble, candle, ice skating, jumper, Lapland, Merry Xmas, stocking, tinsel, Wizzard (sang I Wish It Could Be Christmas Every Day - Christmas hit).

There is an adapted quote from Treasure Quest on BBC Radio Norfolk from 27 May 2012, 'This year's quest takes Becky Betts from Frettenham to Fakenham' (was originally 'week's'). This and the other winding message (marmoset) cover the red letters in the grid. The remaining letters after the search items have been eliminated spell:

KNOWING ME, KNOWING YOU, AHA, YOU HAVE FOUND A CLUE; BUT ALAS, YOUR HOPES ARE DASHED, IT WON'T HELP YOU FIND THE CACHE. YOU'VE BEEN SO CLEVER SO WE WANT TO GIVE YOU A BONUS POINT AFTER YOU HAVE FOUND THE TREASURE; ON THE WAY BACK AT YOUR LEISURE, MAKE A NOTE OF WHAT YOU'VE SEEN OUTSIDE NUMBER SIXTEEN.

Outside 16 Cold Christmas Lane, Thundridge, Hertfordshire is a monkey puzzle tree. 'Chilly pine' can be found in the grid, which could suggest a Christmas tree or a monkey puzzle tree (aka Chile pine).

The bottom right-hand corner is cordoned off with three prisons: Ford, Sing Sing and Slade (Slade also sang Merry Christmas Everybody - Christmas hit). Within the rectangle they enclose can be found molecular gastronomy, nouvelle cuisine, cordon bleu and vegan. Combined, this suggests 'Cooking in Prison', another Alan Partridge sketch.

Left over from the cooking types are letters spelling WHERE WAS CLUE TWO? Clue two in the Treasure Quest episode referred to above was at the Pear Tree in the Bishop's Garden in Norwich, suggesting a partridge in a pear tree.

## PAGE 2-36 THEME

The thirty-six images in a $6 \times 6$ grid are all 36 -based clues for an alphabet and the digits $0-9$ for use in cipher solving. They are as follows:

| Z (Z 36 German destroyer) | P (Patriots won <br> Superbowl XXXVI, Tom Brady, pictured, starred) | 3 (satisfies triangular factor) | 0 (Rachel Walters Etsy store is Undecillion, a 1 followed by 36 zeroes) | V (one of 36 <br> Views of <br> Mount Fuji) | 9 (satisfies square factor) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Y (three feet is 36 inches is a yard) | L (Huyton parish church in L36 postcode area) | G (Emperor Guangwu unified China in AD36) | $\mathbf{N}$ (Nevada is the 36th state to join the Union) | T (Two sixes or one in Thirty six chance or Twelve) | I (36th Infantry division) |
| 6 (satisfies square root of 36 ) | 7 (is a factor of 35 ) | A (Adelaide 36ers mascot) | 2 (satisfies factor of 36) | F (Boris Karloff lived at 36 Forest Hill Road) | 5 (is a factor of 35) |
| $\begin{aligned} & \text { E ('factor-e' = } \\ & \text { factory?) } \end{aligned}$ | U (36th Ulster Division) | 8 (satisfies triangular root) | W (for Wu Tan Clan, with album 36 Chambers) | $\mathbf{K}$ (krypton is the 36th element) | H (Hungarian phone box, code for Hungary is +36) |
| J (Johnson was the 36th president) with Hubert Humphrey note Humphrey | S (Gary Sobers, born in 1936 and scored a 36 over) | C (36th Chamber of Shaolin movie) | Q (36 Questions that lead to love) | D (36D is Beautiful South track) | 1 (satisfies triangular factor) |
| X (X36 plane) | R (0-36 on a Roulette wheel) | 4 (satisfies square factor) | M (Three 6 Mafia) | B (Barrel of 36 gallons) | O (Alexandra Ogilvy born in 1936 on Christmas Day, also a Lady) |

The image on the left above the $6 \times 6$ grid is of the Playfair Cricket Annual (36th edition, of course), suggesting a Playfair cipher. Using the Playfair cipher with the above grid on the ciphertext to the right of the image decodes it to:

## USE A 36-CHARACTER VIGENERE FOR THE 2ND TEXT

The image below the grid is of the Ophel Treasure, with 36 coins. The ciphertext to its right can be decoded as a Vigenere cipher with the key 'VI squared' (VI being the first two letters of Vigenere and also 6 in Roman numerals, 6 squared being 36), to give:

## WELCOME TO THE 36TH ATH USE SAME GRID AND KEY

This is indeed the 36th annual Armchair Treasure Hunt. Using the same grid as above and the key 'VI squared' to translate the left-hand pair of 36 -character strings of ADFGV and X from an ADFGVX ciphertext this time gives:

## 2ND KEY IS 1ST GATECRASHER PLUS COLLEAGUE NO 9

This is referring to the gatecrashers mentioned on page 8. The first of these is Vixen and the second is Donner, so the ninth is Rudolph. Using the key VIXENRUDOLPH to decode the right-hand pair of 36 -character strings of ADFGV and $X$ from an ADFGVX ciphertext gives:

## FINAL ORDER PHOTO TRAIL CARDS PAGE 13 P12 P6

This means that the route to the treasure is:

- EAST FROM CCL GM OAK, i.e. east from the Cold Christmas Lane Greenwich Meridian oak tree;
- HEDGE BY XRD, go east to crossroads by post box;
- 13 STEPS, i.e. find the wooden staircase of 13 steps by the post box;
- PATH SOUTH OR TAKE TRACK, i.e. after climbing the staircase follow the footpath south or take the track that arrives at the same point but is longer;
- SECOND TREE, look in the second tree along the route.

The treasure was hidden in that second tree in a tupperware box.

Decoding the numbers at the bottom of the page using the Base36 cipher gives:

## 36K FROM EQUAL PAY HEROINES

The Ford Dagenham works where the 1968 equal pay strike took place is approximately 36 km south of the treasure location.

## PAGE 3 - FIVE GOLD RINGS

The 'In Memoriam' at the top of the page refers to the tragic death of James Medhurst, one of the hunt's original setters.

The five men in the pictures are all Olympic gold medallists called James, and are wearing clothes with the colours of the corresponding Olympic ring: James Guy (swimming, 2020); James Cracknell (rowing, 2000 and 2004); James (Jim) Hartung (gymnastics, 1984); James DeGale (boxing, 2008) and Kirani James (athletics, 2012). The treasure was found near James Wood.

The image below is a hexagonal crossword. The first 14 clues are solved normally; the second 20 clues each has a misprint in it which must be corrected before solving. The corrections in clue order spell:

## ROTATE AROUND TOP RINGS

The solutions to the clues in clue order are:

EARL, ROE, END, NEON, YARD, EYE, EKE, LOP, RISE, ENABLER, COLD, TREACLE, INCITES, ERG, TSETSE, FAIRLY, ENLOCK, FEE, RECAP, RIVEN, RABID, ROBESON, SOP, NEAFFE, KEDGER, IRON, TEIL, ACCRUE, KAREN, ERGO, REPTILE, TRUCK, PENCE and NERINE.

The completed grid is as follows:


The bars on the crossword in each direction are shown on the page in the correct numbers. Following the misprint message, if the first ring is rotated three positions, the second ring is rotated two positions (clockwise) and the third ring is rotated two positions (anticlockwise), then the third line of the crossword reads:

## REST IN PEACE

## PAGE 4 - EIGHT MAIDS A-MILKING

(The Christmas cards are covered on page 11)
The left-hand image shows Ag47 in four bells, Ag being the symbol for the 47th element, silver. Silver bells and cockle shells refer to the nursery rhyme 'Mary, Mary, Quite Contrary'. The four tombstones below are the 'pretty maids all in a row', attendants to Mary, Queen of Scots known as the Four Marys (Mary Livingston (d. 1585), Mary Beaton (d. 1597), Mary Fleming (d. c1600) and Mary Seton (d. after 1615)) (ODNB is the Oxford Dictionary of National Biography, which uses the dates given).

The middle images are clues to the Three Little Maids from School in The Mikado: the first image is of the American donut, the 'yum yum', also denoted by 'mmm' round the edge, the first maid is Yum-Yum. The second image is of Bo Peep upside down, with the letters of MIKADO round the edge, the second maid is Peep-Bo. The third image is of a (blue) tit, with the letters SIP and GIN, which are an anagram of the third maid, Pitti-Sing.

The right-hand image is of the Queen of Spades, which is the Old Maid in the game of that name. Those account for eight maids (a milking) (-> Twelve Days of Christmas).

The cipher below is the Babington Cipher used by Mary, Queen of Scots, and translates to:

PART OF THIS GIFT HAS GONE ASTRAY FIND THE CULPRITS IF YOU MAY

Unsolved

## PAGE 5 - FOUR CALLING BIRDS AND TWELVE DRUMMERS DRUMMING

The first puzzle is for Four Calling Birds (-> Twelve Days of Christmas). The images at the top are: Mel Gibson and Goldie Hawn in 'Bird on a Wire', part of the logo of the phone company Ningbo Bird, Tina Humphrey (note: Humphrey) and her dog Chandi from Britain's Got Talent, the Allosaurus 'Big Al', the snooker player Neal Foulds, and the goose Grumpy Gertie. The cipher to the right of each image is the Pigpen cipher, and translates in each case to:

## GLKGGBL, KFOCBBO, OLDLINE, TOOEARLY, PFPKHRLG, FLCMGCCP

The four that are incomprehensible are next to what might be described as 'calling birds' - 'Bird on a Wire', a bird phone company, Neal 'Buzby' Foulds, whose nickname is the same as an early British Telecom mascot and Grumpy Gertie is in a phone box. Chandi and Tina Humphrey could be described as 'collie/bird' which is not only an old version of 'calling bird' but a very outdated word for a woman. Big Al is calling but is 'too early', evolutionarily, to be a bird.

The thermometer shows six degrees and is made in Philadelphia, near where the concept of 'Six Degrees of Kevin Bacon' came from. There are then six films leading from Pigpen to Kevin Bacon: The Peanuts Movie, Kristen Chenoweth, Deck the Halls, Danny de Vito, LA Confidential, Kevin Spacey, Fred Claus, John Michael Higgins and Elizabeth Banks, Pitch Perfect 3, John Lithgow, Footloose, Kevin Bacon.

This suggests using a Bacon code on the Pigpen code. Treating the four incomprehensible ones so that symbols without a dot are $A$ and symbols with a dot are $B$ deciphers to NO DOTS.

Removing the dots and treating the symbols as positions on a phone keypad (from the calling birds) translates to PEARS BECOME ACORNS AT ZERO DEGREES. This is in reference to the pear tree (-> Twelve Days of Christmas) and the oak tree at Cold Christmas Lane (zero degrees both in terms of longitude and 'cold')
(Incidentally, treating only the symbols without dots as positions on a phone keypad, the first clue could be translated to RSPB, another bird reference)

The second puzzle is for Twelve Drummers Drumming (-> Twelve Days of Christmas). The riddles underneath all have drummers as answers, suggested by 'turkey legs', which are drumsticks (for all but two because there are only 12 drummers in the carol). The answers are:

Unsolved; Neil Peart (was in Rush (=in a hurry), Rolling Stone magazine said he was the fourth best drummer of all time, namesake of Charlie Watts' band); unsolved; Ringo Starr (voiced train Thomas the Tank Engine); Micky Dolenz?; Frank Beard of ZZ Top (appeared in Back to the Future III (= McFly); doesn't have a beard (topless), was in the Zombies (might bite)); Chad Smith (Red Hot Chilli Peppers - looks like Will Ferrell who coached the Tigers in Kicking \& Screaming); Animal (from the Muppets - band leader was Dr Teeth (dentist) and the mother of Janice in the band was Daisy); Will Champion (previously worked as a doorman for Ricky

Gervais); Tony McCarroll (watering hole = Oasis; wrote a book called 'Oasis: The Truth'); Art Blakey (was nicknamed Thunder (=Thor) and worked with Dexter Gordon); unsolved (but embarrassed himself with a fox is probably a reference to Mick Fleetwood who presented the Brit awards (badly) with Sam Fox); Jim Keltner (had pseudonym Buster Sidebury for Traveling Wilburys, Beatles records referred to a Jim Keltner fan club; he worked with Ringo Starr who was called the worst Beatle by Jasper Carrott (real name Richard Davis)); Trent Reznor (was in Nine Inch Nails (-> manicurist need), won an Oscar for Pixar film Soul), may be one of the two non-drummers as he plays everything else.

The meaning of the answers to the clues is unsolved.

## PAGE 6 - ELEVEN PIPERS PIPING

The chart is for the years that Pipe Smoker of the Year was awarded, i.e. starting in 1968, until 2009, five years after it stopped being awarded in 2004, in anticipation of SI 2006/3368, the Smoke Free (Premises and Enforcement) Regulations, coming into force in 2006. The left column is the year (i.e. 1968 to 2009) denoted by the calendar, the middle column is the Christmas No. 1 band or solo artist denoted by the ' 1 ' and the right column is the Pipe Smoker of the Year, denoted by the pipe, except there are additionally three clues to Billie Piper singles (denoted by the rose, her character in Doctor Who, at the top).

The specific clues are for the Isle of Harris for Rolf Harris in 1969, Elizabeth I for Queen in 1974 and 1991, Houston, Texas for Whitney Houston in 1992, Robert Adam for Bob the Builder in 2000; the Isle of Lewis for Leona Lewis in 2006; and Rage Against the Machine in 2009; the town of Morecambe for Eric Morecambe in 1970, the logo of Yorkshire County Cricket Club for Fred Trueman in 1974, Cold Wilson for Harold Wilson in 1976, the town of Galway for James Galway in 1981, the town of Hull for Rod Hull in 1993, Jethro Tull for Jethro in 1995; Joss Ackland saying "Really? I was in their video"(answering Nigel Hawthorne, as he was in a Pet Shop Boys video). The Billie Piper singles are (honey -> bee) for Honey to the Bee (1999), '( $\because$ we want to)' for Because we want to (1998) and 'some deep thing' for Something Deep Inside (2000).

There are ten clues round the edge, whose answers are, starting top left and going clockwise, each linking with another page: 1971 (Michael Parkinson chat show started - link to page 13) (Lord Shinwell), unsolved (but gives an E, so 1970 or 1994), 1968 (Apollo 8 astronauts landed link to page 1) (Peter Cushing), 1972 (the year James Cracknell was born - he is wearing black on page 3) (Jimmy Osmond), 1987 (400 years after boss of the four Marys, Mary, Queen of Scots died - link to page 4) (Barry Norman), the Baltic Gallery opened in Gateshead in 2002 (link to page 10) (Richard Dunhill), 1974 (Abba won with Waterloo (was in the Netherlands at the time of the battle) at the Eurovision Song Contest in Brighton that year - link to page 11) (Fred Trueman), 1990 (Screaming Lord Sutch stood in the Bootle by-election twice - link to page 8) (Cliff Richard), 1994 (Gus O'Donnell awarded Order of the Bath - link to page 9) (East 17), 1994 (36D is track 10 on Beautiful South's number 1 Christmas album - link to page 2) (East 17).

Taking the initial of the surname of the pipe smoker of the year if the clue is preceded by a dot and the initial of the surname / group of the Christmas No. 1 if the clue is preceded by a 1 spelling:

## SECOND TREE

## PAGE 7 - SIX GEESE A-LAYING, NINE LADIES DANCING AND TEN LORDS A-LEAPING

The images on this page each contribute a letter to the word or phrase that solves the clue for each group. Each image corresponds to either French hens, geese, pipers, ladies or lords. The ones for geese have been rotated by 90 degrees clockwise; the ones for ladies have been rotated by 45 degrees clockwise; the ones for lords have been raised; the others are unchanged.

Some images are alternates for people and things elsewhere - as indicated on the invitation these consist of three French hens, three crackers, three roses and five maps. The French hens are the solutions to the French hens puzzle on page 9 and the alternates are French chicken-related items associated with the same colours; the crackers are the solutions to the cracker puzzles on page 9 and the alternates are people who cracked codes; the roses are people named rose and the alternates are the pipe smokers in the same row as the Billie Piper singles on page 6 and are in the same job; and the maps are people associated with maps and the alternates are the question marks on the map on page 10.

The answers are as follows:

| Picture | Notes | Alternate | Category | Letter |
| :--- | :--- | :--- | :--- | :--- |
| Coriolanus Snow | Snow goose |  | Goose | S |
| Jeremy Irons | In Longitude series |  | Piper | I |
| Lady X | The Divorce of Lady X |  | Lady | X |


| Edward VIII |  |  | Piper | E |
| :--- | :--- | :--- | :--- | :--- |
| Vincent van Gogh |  |  | Piper | V |
| Baroness Evans |  |  | Lady | E |
| Captain Flint |  | Lord Nelson | Lord | N |
| Lady Tottington |  |  | Lady | T |


| CS Lewis |  |  | Piper | L |
| :--- | :--- | :--- | :--- | :--- |
| Lady Elliot Island |  |  | Lady | E |
| Incomplete Answer | I.e. anser (type of <br> goose) |  | Goose | A |
| Cyril Fletcher | As Mother Goose |  | Goose | F |


| Lord Infamous | Three 6 Mafia (36) |  | Lord | I |
| :--- | :--- | :--- | :--- | :--- |
| Albert Einstein |  |  | Piper | E |
| Lady Sherlock | Ordained as a priest |  | Lady | S |
| Lord Triesman |  |  | Lord | T |


| Ruby Rose | Rose - Actor | Joss Ackland | Piper | A |
| :--- | :--- | :--- | :--- | :--- |
| Nene Park | Rushden \& Diamonds <br> ground, type of goose |  | Goose | N |
| Baton Rouge Chicken <br> Shack | Red Hen | Orpington | French hen | O |
| Lord Trees | Is a vet |  | Lord | T |
| Alexander Hamilton | Lady Hamilton |  | Lady | H |
| Walk like an Egyptian <br> (Susanna Hoffs, <br> Bangles) | Egyptian goose |  | Goose | E |
| Lord Rossendale (with <br> Sean Bean in Sharpe's <br> Waterloo) | Traditional PablosATH <br> Sean Bean question |  | Lord | R |
| Hugh Rodley | 'Lord of Fraud' |  | Lord | R |
| Umber Chicken |  |  | French hen | U |
| Rene Magritte |  |  | Piper | M |


| Floella Benjamin |  |  | Lady | B |
| :--- | :--- | :--- | :--- | :--- |
| Emperor penguin | Emperor Goose |  | Goose | E |
| Chicken cordon bleu | Blue hen | Australorp | French hen | A |
| Brian Rose | Rose - Boxer | Henry Cooper | Piper | C |
| Hugh Hefner |  |  | Piper | H |
| Miltonhead Trig point | Birthplace of William <br> Roy - cartographer <br> (meridian link) | Brent oilfield | Goose | B |


| Gerardus Mercator | Cartographer | Oilfield named <br> 'Piper' | Piper | O |
| :--- | :--- | :--- | :--- | :--- |
| Orinoco womble | Orinoco Goose |  | Goose | O |
| John Wallis | Code cracker | Lord Kinnock | Lord | K |

## PAGE 8 - CHRISTMAS PARTY

| Yul Brynner |  |  | Piper | B |
| :--- | :--- | :--- | :--- | :--- |
| Ada Lovelace |  |  | Piper | L |
| Sieve of Eratosthenes | Cartographer | Lord Aberdeen | Lord | A |
| Laurent Blanc | White hen (number 5 <br> jersey, white cockerel <br> emblem) | Naked Neck | French hen | N |
| Lord Dubs |  |  | Lord | D |


| Baroness Trumpington |  |  | Lady | T |
| :--- | :--- | :--- | :--- | :--- |
| Sandford Fleming | Cartographer | Lord Hutton | Lord | H |
| Onna-Joshu | The Lady Warrior |  | Lady | O |
| Alan Turing | Code cracker | Ross | Goose | R |
| Lord North |  |  | Lord | N |
| Screaming Lord Sutch |  |  | Lord | S |

This spells out SIX EVENT LEAFIEST ANOTHER RUM BEACH BOOK BLAND THORNS
Smoking Area: (move pipe smokers here)

| Hugh Hefner |  |  | Piper | H |
| :--- | :--- | :--- | :--- | :--- |
| Cindy Rose | Rose - company director | Campbell <br> Adamson | Piper | A |
| Vincent Van Gogh | (is a painter) |  | Piper | V |
| Edward VIII |  |  | Piper | E |
| Ruby Rose | (is an actor) | Joss Ackland | Piper | A |
| Brian Rose |  | Henry Cooper | Piper | C |
| Mercator | Oilfield | Piper | O |  |
| Charles Babbage |  | Gus O'Donnell | Lord | O |


| CS Lewis |  |  | Piper | L |
| :--- | :--- | :--- | :--- | :--- |
| Yul Brynner | (is an actor) |  | Piper | YUL |
| Albert Einstein | (is a mathematician) |  | Piper | E |

HAVE A COOL YULE is consistent with the Cold Christmas theme.
Uninvited Guests: (move those who don't fit their category here)

| Orinoco | Is a shelduck, not a <br> goose |  | Goose | O |
| :--- | :--- | :--- | :--- | :--- |
| Cyril Fletcher | Is a dame not a real lady |  | Lady | F |
| Magritte | Doesn't actually smoke |  | Piper | M |
| Lord Infamous | Isn't really a lord |  | Lord | I |
| Lord Sutch | Isn't really a lord |  | Lord | S |
| Lord Rodley | Wasn't really a lord |  | Lord | R |
| Umber Chicken | Isn't a French hen |  | Piper | L |
| Ada Lovelace | Doesn't actually smoke |  | Goose | E |
| Egyptian | Only 'like' an Egyptian |  | U |  |

The Lord OF MISRULE was an anarchic figure at Christmas time.
The surplus members of each category in the last room leave the correct numbers of French hens (3), geese (6), ladies (9), lords (10) and pipers (11).

Removing the letters corresponding to the people that went to the smoking room and uninvited guests, anagramming the 'mingling allowed' and leaving the 'seated' in the same order spells:

## SIX TEN EAST NORTH KEBAB AND NORTH

This can be decoded to VI X E N DONER \& N, i.e. Vixen and Donner, two of Santa's reindeer, who are the two gatecrashers and are required to find a key needed on page 2.

## PAGE 9 - THREE FRENCH HENS

The three cracker messages at the top are clues to Neil Kinnock - Lord (lost to John Major, joined the Santer Commission, his wife Glenys was also an MEP); Ross Geller (was a holiday armadillo in Friends, Chandler was Santa, his capuchin (in the page 1 wordsearch) was Michel. He was 'on a break' when he was unfaithful to Rachel); and Gus O'Donnell (known as GOD, Gus short for (Saint) Augustine, his job was split in three when he retired as cabinet secretary in 2011, and he is now in the House of Lords).

The puzzle below is for Three French Hens (<- Twelve Days of Christmas).
The three messages below in French can be untangled to 'non un oeuf ne suffit pas cette poule a battu tous les records il y a cent ans', which means 'no one egg is not enough this hen broke all records a hundred years ago'; 'il vaudrait mieux se couvrir pour eviter les morsures dans la region d'origine de cette poule' which means 'it would be better to cover up to avoid bites in the region of origin of this hen' and 'un voyage en Eurostar passe par la region d'origine de cette poule', which means 'a Eurostar trip passes through the region of origin of this hen'.

These are clues to three types of chicken: the Australorp, Naked Neck and Orpington, from Australia, Romania and England as suggested by the text above the pictures. The pictures are of Hahn/Cock, sculpture by Katharina Fritsch displayed on the fourth plinth in Trafalgar Square, a Portmeirion hen casserole dish and a red chicken mascot costume, blue, white and red being the colours of the French flag.

## PAGE 10 - SEVEN SWANS A-SWIMMING

The answers to the nine questions on the left are: the Hungnam evacuation, the 'nut' being Edward Almond (15-24/12/1950); Bombs Away by Harry Turtledove, (imagines if Hungnam evacuation had been unsuccessful); Fallout by Harry Turtledove (Washington DC and Fakenham (p1) destroyed); British nuclear test at Christmas Island (Kiribati) (28/04/1958); last Russian nuclear test at Novaya Zemlya (=F, see below) (25/12/1962); potential Vietnam War Christmas truce in 1965, 51 years after English and German troops played football during the Christmas truce of 1914; Soviet campaign in Afghanistan (25/12/1979); death of Nicolae and Elena Ceacescu (PhD in chemistry), General Octavian being one of the firing squad (25/12/1989); Russia recreated by Boris Yeltsin (25/12/1991). What do do with the answers is unsolved.

The map insert consists of two segments of the North Sea, the dotted line represents the prime meridian. The question marks are the substitutes for the party guests on pages 7-8: Hutton (oilfield and Lord), Brent (oilfield and type of goose), Aberdeen (city and Lord), Nelson (oil field and Lord) and Piper (oilfield called Piper). The L on the map is Norway, starting the sequence of logical operations below.
$X$ is Cold Christmas and $Y$ is seven swans a-swimming. The rest of the letters are: $A=b e a r$, $B=$ island, $C=$ sea, $D=$ Bewick, $E=$ Barents, $F=$ Novaya Zemlya, $G=$ swimming, $H=$ Svalbard, I=Spitsbergen, J=archipelago, K=seven, L=Norway, M=east, N=Christmas, P=Baltic, Q=Sweden, R=Turnblad, S=Gateshead, T=swan, U=Sven, V=Jane Eyre, W=Siberia, Z=cold

The logic sequences are:

| $L \ni A B$ | Norway contains Bear Island |
| :--- | :--- |
| $A B$ was named by E after GA | Bear Island was named by Barents after a swimming bear |
| the J of $\mathrm{H} \ni \mathrm{AB}$ and the B of I | The archipelago of Svalbard contains Bear Island and the <br> Island of Spitsbergen |
| $\mathrm{L} \ni$ the J of $\mathrm{H} \because$ the treaty of <br> I | Norway contains the archipelago of Svalbard because of the <br> treaty of Spitsbergen |
| the J of F is M of EC, which is <br> M of the J of H | The archipelago of Novaya Zemlya is east of the Barents <br> Sea, which is east of the archipelago of Svalbard |
| PC is M of Q which is M of L | Baltic Sea is east of Sweden which is east of Norway |
| $\mathrm{S} \ni \mathrm{P}$ art gallery | Gateshead contains the Baltic art gallery |
| ch 2 of $\mathrm{V} \ni \mathrm{S}$ | Chapter 2 of Jane Eyre contains Gateshead |


| ch 1 of $\mathrm{V} \ni \mathrm{D}, \mathrm{F}, \mathrm{I}$ and W | Chapter 1 of Jane Eyre contains Bewick, Novaya Zemlya, Spitsbergen and Siberia |
| :---: | :---: |
| D d in S | Bewick died in Gateshead |
| T-®-S | Swan invented lightbulb in Gateshead |
| F $\ni \mathrm{DT}$ and $\mathrm{W} \ni \mathrm{DT}$ | Novaya Zemlya contains Bewick's swan and Siberia contains Bewick's swan |
| $Z \equiv P \equiv(\mathrm{~W}$ \& n$) \equiv \mathrm{G}$ | Cold is Baltic is Siberian is not swimming |
| if $t(D T \rightarrow u k)$ < late oct then ZN | If Bewick's Swan comes to the UK before late October then Cold Christmas |
| $\mathrm{X}=\mathrm{ZN}$ | X is Cold Christmas |
| U became TR $\because \mathrm{Q} \rightarrow$ usa | Sven became Swan Turnblad because he went from Sweden to the USA |
| $\mathrm{K}=(\mathrm{U}$ \& M$)$ | K is Sven and east $=$ seven |
| $Y=K \times T G$ | Y is seven swans a-swimming |

The ciphertext below the map uses the Beaufort cipher (hinted by wind speed symbol on the map) with keyword 'SCARF' (as worn by Great Britain on the map) to yield:

## FIND THE FIVE INVITED GUESTS

This is a hint for the alternates for pipers on pages 7-8. The pins on the main map are unsolved and are approximately at:

Rum
Durham (possibly Gainsford, location of the coldest recorded Christmas temperature)
Whitby
Snowdon
somewhere near Thames estuary
The symbol represents wind blowing from the northeast at 25 knots and is approximately at Raglan, Wales. Winds from this direction tend to be cold. The scarf could represent COLD

The pictures below the map are of Humphrey de Bohun's swan (note: Humphrey), denoting 'swan', which is T according to the logic puzzle; the assistant of Humphrey Lyttelton (note: Humphrey), who is (sometimes) Sven, which is U; Jason Statham as Lee Christmas in the Expendables 2, which is N ; Thomas Bewick's Aesop's Bear and the Bees (Bewick is a type of
swan), Bewick is D; John Travolta as Edna Turnblad in Hairspray (there is a newspaper publisher called Swan Turnblad), Turnblad is $R$; the Bewick image again with an $A$ on the bear, since A is bear. This spells TUNDRA, a type of swan of which Bewick's and whistling are subspecies.

The cipher below the pictures is a Caesar cipher by four places and translates to:

## FIND THE THEMATIC LINKS IN THE QUESTIONS SIX DATES ONE PLACE TWO BIRDS

The six dates are all events on Christmas Day relating to the Cold War; the place is Kiritimati / Christmas Island (also relating to the Cold War) - i.e. Cold Christmas. The two questions in red relate to two turtle doves (i.e. two books by Harry Turtledove) part of the Hot War trilogy - which is why they are in red, the opposite of the Cold War.

## PAGE 11 - CHRISTMAS CARDS

The 16 Christmas cards from various pages come into play here, to be matched with the images on this page to identify songs in the Christmas charts across the years (the charts have been produced since 1952).

| Picture | Card | Song | Year | Pos | Notes |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Seven <br> boomerang - <br> S Club 7? |  |  |  |  |  |
| Garth in <br> Wayne's <br> World 2 - <br> Queen? |  |  |  |  |  |
| Wombles <br> activist group <br> - the <br> Wombles | Page 9 <br> bottom left | Wombling <br> Merry <br> Christmas | 1974 | 5 | Merry Christmas from <br> Bulgaria |
| Rock and <br> Jell-O - <br> Jennifer <br> Lopez | Page 4, top <br> left | Jenny From <br> the Block | 2002 | 24 | 'Jack' and 'Selena' <br> were Jennifer Lopez <br> films in 1996 and <br> 1997; Lyrics refer to <br> 'In Living Color', which <br> starred Jim Carrey, <br> and rocks (refer to |
| picture) |  |  |  |  |  |$|$


| Montenegro - <br> Hugo <br> Montenegro | left | the Bad and the Ugly |  |  | famous tune This is the first one in chronological order |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Quatrain with swede reference and rhyming scheme ABBA - Abba |  |  |  |  |  |
| Mariah circuit board - <br> Mariah Carey | Page 4 top right | All I Want for Christmas is You | 2018 | 4 | She used match dot com |
| Justine Chase Tears for Fears? |  |  |  |  |  |
| Bill \& Mrs <br> Pogue - The Pogues | Page 12 bottom right | Fairytale of New York | 2009 | 18 | Shane MacGowan's birthday is Christmas day <br> Fairytale of New York lyrics: "Got on a lucky one, Came in eighteen to one" <br> Number 2 on 20th December 1987 |
| Bright Man from Mega Man IV Sarah Brighman | Page 12 top right | I Lost My Heart To A Starship Trooper | 1978 | 7 |  |
| Blondie Cambridge crew Blondie |  |  |  |  |  |
| Death of Buddha Nirvana | Page 4 bottom right | Smells Like Teen Spirit | 1991 | 25 | Lyrics: ""Hello, hello, hello, how low" "Here we are now, entertain us" |
| Kenneth Branagh and Judi Dench in A Winter's Tale - |  |  |  |  |  |


| Coldplay |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

Unmatched: A Boy Named Sue, Johnny Cash (Page 2 top let), 1969, 36 (Dad is a dirty dog, could have named him Bill or George or Frank); Stan, Eminem (Page 4 middle left), 2000, 3 ("Dear Slim, I wrote you but still ain't callin'; I left my cell, my pager, and my home phone at the bottom"; Dido's birthday is 25th Dec; Eminem also had song "Bonnie \& Clyde"); Stop the Cavalry, Jona Lewie (Page 4 middle right), 1980, 3 ("Hey Mr Churchill" (Clementine's other half) John Lewis is Jona Lewie's original name; 21 Dec 1980 John Lennon had 3 songs in top 10, at positions 2, 9 and 4 - BID); Earth Song, Michael Jackson (Page 4 bottom left), 1995, 1 (Bjork was at number 4 with "Oh so quiet" Christmas 1995-24th Dec chart; Michael Jackson was at number 1 (Earth Song); Michael bought Neverland (then Sycamore Valley Ranch) from the Bones in 1988); Walking In The Air, Aled Jones (Page 9 top right), 1985, 5; Ice Ice Baby, Vanilla Ice (Page 9 bottom right), 1990, 2 ("Rollin' in my 5.0" - 5.0 is a Mustang; "With my ragtop down so my hair can blow" - he called his hair his "beak" https://www.mentalfloss.com/article/504978/10-things-we-learned-vanilla-ices-1990-autobiograp hy-ice-ice; He was at number 1 the previous week); The Power Of Love, Frankie Goes to Hollywood or Gabrielle Aplin, (Page 13 bottom left), 2012 or 1984, 9 or 6 ("I'll protect you from the hooded claw" - Hooded Claw is Wacky Races character; "Keep the vampires from your door" - prevent Harmony \& Spike from Buffy from entering (Could be either version, but Harmony \& Spike weren't around in 1984)).

Unsolved cards: Dear MM (Page 2 top right) (might be Coldplay, Christmas Lights, 2010, 17(Possibly Coldplay, who were annoyed to be beaten to number 1 by Crazy Frog in 2005, so this would be Christmas Lights, which reached No 17 on 19 December 2010 Don't understand MM or three months ago references though)); supernatural knee-joints (Page 12 bottom left).

To solve the puzzle involves taking the letter of the alphabet corresponding to the position that the single was in the Christmas chart, for those that match with pictures, as hinted by 'I got a B', John Lennon got a BID. In chronological order, this spells:

## HEDGE BY XRD

## PAGE 12

Christmas Pie: unsolved.

Departures table:

Take the countries that correspond to the capitals, their initials spell 'LAMBDA DELTA AS DECIMAL'. Lambda means longitude and delta means difference. Taking the difference in longitude between the departure and arrival cities for each flight yields the alphabet positions of INCLUDE DEPARTURE HOUR. Then adding the departure hour to each (mod 26) and taking the alphabet positions gets FINALLY DEDUCT MINUTES. Deducting the minutes from each spells the final message:

## PATH SOUTH OR TAKE TRACK

## PAGE 13 -COLD CHRISTMAS

(For Christmas card see page 11)

AC's Weather Briefs for the Year 1741: these temperatures are ASCII, either directly, or if 25 is added, for
ac first used his hot and cold scale on christmas dax (we think the last letter should be a y)
The direct codes are 'cold' and 'christmas', and Cold Christmas is a village on the Greenwich Meridian.

Anders Celsius first used his temperature scale on 25 December 1742, having founded the Royal Society of Sciences in Uppsala, Sweden in 1741.

The six pictures below this are:

- Michael Parkinson
- Rihanna with a nose piercing
- Luis Suarez biting Giorgio Chiellini
- The Arctic Monkeys album My Propeller
- Elsa from the film Frozen
- De Ranke XXX bitter

These (parky, piercing, biting, arctic, frozen and bitter) are all synonyms for cold.

The box below this says SANTA'S WORKSHOP ACHTUNG! ELF WARNING! LOOK UP ONCE. GRACIAS plus a cipher. Achtung is German and elf is German for 11; gracias is Spanish and once is Spanish for 11. This is a clue to the cipher being a transposition cipher of period 11. It translates to:

## MY TRUE LOVE COUNTS THE TOP ROW ITEMS BASED ON THE VERSIONS BELOW

In the pictures below, the top row is an item in an alternative version of 'The Twelve Days of Christmas' suggested by the lower row, namely:

- Seven rusty bins in the Sesame Street version
- 12 parrots prattling in an Australian version
- One bowl full of parmesan cheese in Joe Dolce's Italian version
- Three studded belts in Twisted Sister's version (the picture being of the evil nun in The Nun)
- Nine knitted jumpers in Eddie Stobart's version
- One nose goblin in Ren and Stimpy's version
- 12 pack of Bud in the redneck version

Indexing the numbers into the alphabet gives GLACIAL

This is confirmed by the number cipher below, where letters are encoded by $\Pi \mathrm{n}^{\mathrm{m}}, \mathrm{n}$ being the nth prime number corresponding to the letter and $m$ being the position in the string. 116365000 is $17.37^{2} .2^{3} .5^{4}$, i.e. GLAC and 4660076 is IAL similarly -> GLACIAL

The temperature scale below shows -18.3 celsius, which was the lowest temperature recorded on Christmas Day in the UK, in Gainford, county Durham in 1878 (hence made in Durham).

Subtracting 18.3 from each of the numbers on the right and then using the same number cipher as above yields THI RTE EN STE PS -> THIRTEEN STEPS

## PAGE 14 - PRIME MERIDIANS

On this page there are 16 images and 20 items of text interspersed among them.

The images are all of scenes along the Prime (Greenwich) Meridian (reading in column order):

- Gilwell Park (51.65 degrees north)
- Peacehaven (50.79)
- Paydens Chemist (51.25)
- Lezz et Mangal Restaurant (51.42)
- Easneye Wood (51.8)
- Greenwich (51.48)
- Hither Green Station (51.45)
- Cold Christmas (51.83)
- Bulwer Road (51.57)
- Abbey Mill (51.53)
- Chailey (50.98)
- Sheffield Park Station (51)
- New Addington (51.33)
- Waltham Abbey (51.69)
- Thompson \& Craighead 'Here’ (51.5)
- Forest Row (51.08)

The text is also in column order and contains hidden countries (France, Algeria, Togo, Gahana, Spain, Mali):

OFF RAN CEDRIC THE IDEAL GERIATRIC TO GO \& PLOUGH AN ACRE BUT HIS PAIN \& ASTHMA LIMITED HIM

These countries are all on the Prime Meridian (and are all of them except the UK and Burkina Faso - hard to hide!)

Finally, the numbers each point to one of the sixteen pictures. They are all longitudes of alternative prime meridians:

| Madrid | Antwerp | Giza | Rio de Janeiro |
| :--- | :--- | :--- | :--- |
| El Hierro | Cadiz | Lisbon | Oslo |
| Florence | Mecca | Alexandria | Copenhagen |
| Oslo | Kyoto | St Petersburg | Tenerife |

Taking them in order of the corresponding meridian markers from south to north gives:
El Hierro, Alexandria, St Petersburg, Tenerife, Florence, Rio de Janeiro, Oslo, Mecca, Cadiz, Copenhagen, Lisbon, Giza, Madrid, Oslo, Antwerp, Kyoto

Taking the initials spells EAST FROM CCL GM OAK, which stands for 'East from Cold Christmas Lane Greenwich Meridian Oak', the oak tree planted in 2002 at Cold Christmas, Hertfordshire.

## THE TWELVE DAYS OF CHRISTMAS

1. Alan Partridge
2. Bombs Away; Fallout
3. Australorp; Naked Neck; Orpington
4. Bird on a Wire; Ningbo Bird; Buzby; Grumpy Gertie
5. James Guy; James Cracknell; James Hartung; James DeGale; Kirani James
6. (Coriolanus) Snow; Incomplete answer: Anser; Nene (Park); Emperor (penguin); Brent (oilfield); Ross (Geller)
7. Humphrey Bogart; Hubert Humphrey; Tina Humphrey; Sir Humphrey Appleby; Humphrey de Bohun; Humphrey Lyttelton; Humphrey (Sesame Street)
8. Mary Livingstone; Mary Beaton; Mary Fleming; Mary Seton; Yum-Yum; Peep-Bo; Pitti-Sing; Old Maid
9. Lady X; Lady Evans; Lady Tottington; Lady Elliot Island; Lady Sherlock; Lady Hamilton; Lady Benjamin; Lady Trumpington; Onna-Joshu, the Lady Warrior
10. Lord Nelson; Lord Triesman; Lord Trees; Lord Rossendale; Lord Kinnock; Lord Aberdeen; Lord Dubs; Lord Hutton; Lord North; Lord O'Donnell
11. Jeremy Irons; Edward VIII; Vincent Van Gogh; CS Lewis; Albert Einstein; Joss Ackland; Henry Cooper; Hugh Hefner; Piper Oilfield; Yul Brynner; Campbell Adamson
12. [Drummers from page 5]; ...; ?, Neil Peart, ?, Ringo Starr, ?, Frank Beard, Chad Smith, Animal, Will Champion, [Tony McCarroll], Art Blakey, [Joe Walsh(?)], Jim Keltner, [Trent Reznor]
