Solve the puzzles, which increase in difficulty from 1 to 7. They have been designed for those in secondary school education. Link each answer to the glowing node on the tree that best matches the question or answer. Once complete, discover the hidden message, reading from top to bottom. Good luck!

- 1: Clue here: reading initials spells this message's answer. Simple! Christmas
- 2: Enter your four-letter answers in the grid.
 - 1. This is the word you want
 - 2. Noise made by owl
 - 3. US state with capital Des Moines
 - 4. Adult male deer

¹ T	²h	3 	4 S
²h	0	0	t
³ i	0	w	а
⁴ s	t	а	g

- 3: What completes the sequence: GRYFFINDOR, UFFLEPUF, VENCL, ???
 GRYFFINDOR, hUFFLEPUF, raVENCLaw, slyTHErin -> THE
- 4: Within the grid are a number of hidden mines. The number clues show how many mines are in the squares adjacent to each number. Locate the mines to reveal a four-letter word

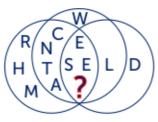
4		2	1	1			2			2	
					1						
3	4		3	2			4	4		4	4
					2						
2		1			2	2			3	2	

5: Do Kindly Place Cover On Fresh Green Spring Vegetables is a mnemonic meant to help you remember a list of scientific words. Which word does Kindly help you remember?

KINGDOM. The Taxonomic rank mnemonic has the same initials as Domain, Kingdom, Phylum, Order, Family, Genus, Species and Variety.

6: What six-letter word does the **?** represent in this Venn Diagram?

UNITED. The letters in the complete circles form the names MANCHESTER, NEWCASTLE and LEEDS, all football clubs ending with 'United'.



7: Solve the code; answer the question; encode the answer: Cwog og cwi 7[™]ahigcoet: xiexui kent kicziit toticiit lencj gov stf toticiit govcj lehn sni yeppetuj dtezt sg kskj zwsc? **KEEPING**

#GCHQChristmasChallenge





Answers



11-12 years

Clue here: reading initials spells this message's answer. Simple!

Answer: The initial letters of all the words in the question spell CHRISTMAS.

12-13 years

Enter your four-letter answers in the grid. This is the word you want
 Noise made by owl

3. US state with capital Des Moines

Answer: THIS 4. Adult male deer



13-14 years

What completes the sequence: GRYFFINDOR, UFFLEPUF, VENCL, ???

Answer: THE. The list is the four Hogwarts houses in alphabetical order, but with 0, 1, 2, 3 letters removed from the start and end of the names: GRYFFINDOR, hUFFLEPUFF, raVENCLaw, slyTHErin

14-15 years

Within the grid are a number of hidden mines. The numbers indicate how many mines are in the squares adjacent to each number. Locate the mines to reveal a four-letter word.

1		2	П	1	٦	Π.	2			2	
			Ш		1						
3	•		3	2			4	а	1	4	4
		ш	П		2	ш					
2		1			2	2			3	2	

Answer: The squares without mines in the 4 areas of the grid form the shapes of the letters of SAFE.

15-16 years

Do Kindly Place Cover On Fresh Green Spring Vegetables is a mnemonic meant to help you remember a list of scientific words. Which word does Kindly help you remember?

Answer: KINGDOM. The Taxonomic rank mnemonic has the same initials as Domain, Kingdom, Phylum, Order, Family, Genus, Species, Variety.

16-17 years

What six-letter word does the ? represent in this Venn diagram?

Answer: UNITED. The letters in the complete circles form the names

MANCHESTER, NEWCASTLE and LEEDS. All these have Premier League football
teams which end UNITED.



17-18 years

Solve the code; answer the question; encode the answer: Cwog og cwi 7stahigcoet: xiexui kent kicziit toticiit lencj gov stf toticiit govcj lehn sni yeppetuj dtezt sg kskj zwsc?

Answer: KEEPING. This is a simple substitution code in which each letter of the alphabet has been replaced by a different one. Here is the original message, and answer, alongside the encrypted version:

This is the 7th question: people born between nineteen forty six and Cwog og cwi 7cw ahigcoet: xiexui kent kicziit toticiit lencj gov stf

nineteen sixty four are commonly known as baby what? BOOMERS toticiit govcjlehn sni yeppetuj dtezt sq kski zwsc? KEEPING

Overall answer: Each of the seven puzzles or answers can be associated with one of the pictures on the front of the card. In order, reading from top to bottom:

Pram: KEEPING
Lightning bolt: THE
Football: UNITED
Crown: KINGDOM
Padlock: SAFE
Stag: THIS
Present: CHRISTMAS

Merry Christmas and a Happy New Year

Key

abcdefghijklmnopqrstuvwxyz

This clear text ...

skyvilfwomduptexangchrzbjq ... maps to this cipher text

