GCHQ releases annual Christmas Challenge 2025 with puzzles designed by schoolchildren and spies

To mark a decade of festive puzzles, our in-house puzzlers have masterminded seven fiendish brainteasers and teamed up with schoolchildren on three festive designs

Download the Challenge

Download the 2025 GCHQ Christmas Challenge here or head to the bottom of the page for additional resources.

We have today (10 December 2025) released our annual Christmas Challenge, which for the first time features designs from schoolchildren as well as spies.

Over 500 schoolchildren took part in a competition to design the cover of Director GCHQ's Christmas card which every year is sent across the world. Director GCHQ Anne Keast-Butler and Colin, GCHQ's Chief Puzzler chose three winning designs from different age groups.

Students were asked '*What do you think GCHQ looks like on Christmas Day?*' with the additional quest of including hidden codes, puzzles, as well as calling on their creativity and imagination.

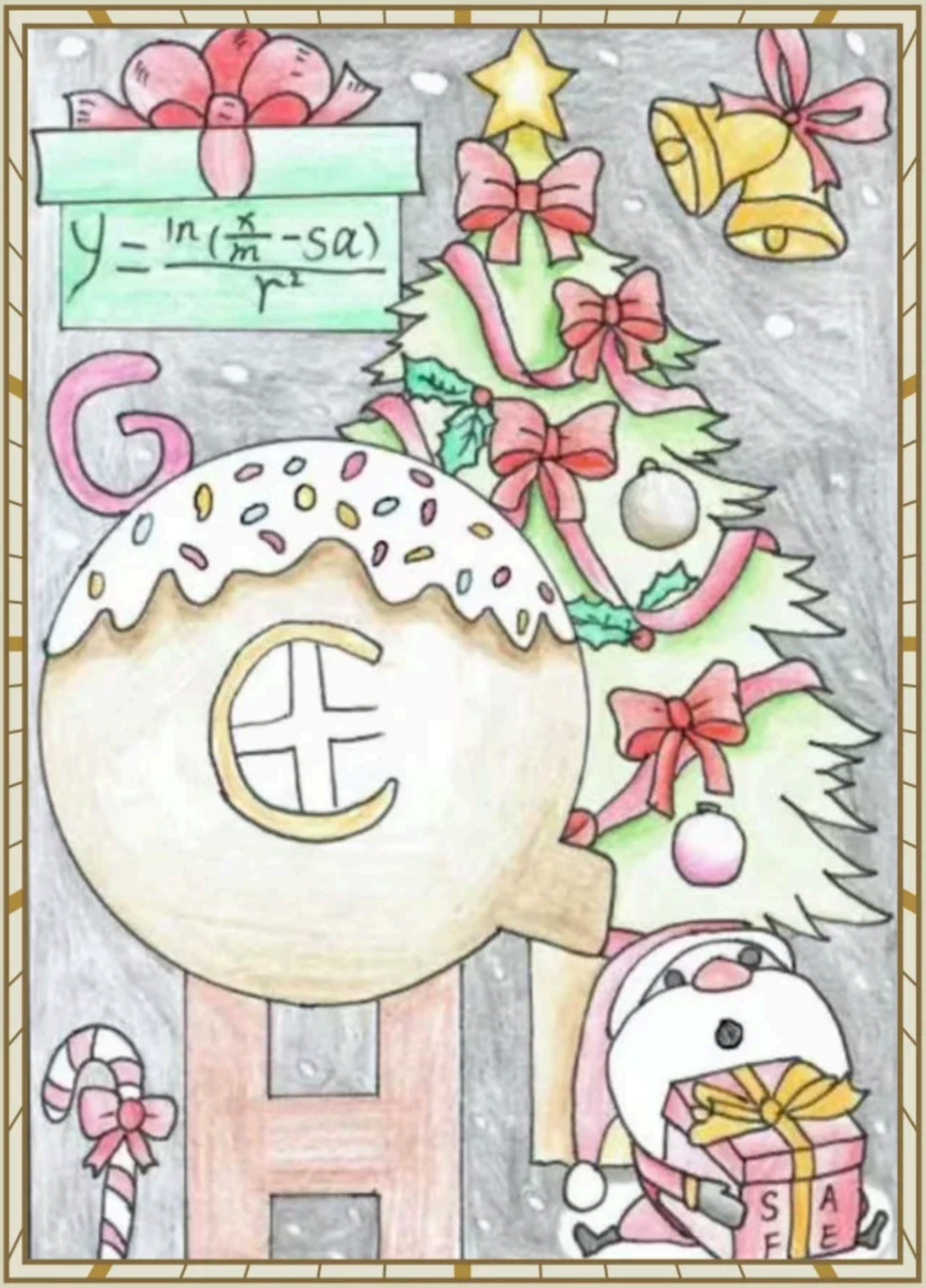
Alongside the schoolchildren's designs, GCHQ's in-house puzzlers have created a brand-new set of seven puzzles designed to test a range of problem-solving skills, including intuitive reasoning and creativity for the back of the card.

The puzzles test codebreaking, maths and analysis, and skills such as lateral thinking, ingenuity and perseverance. Just like the work that goes on at GCHQ every day to keep the country safe, the brainteasers require different ways of thinking and groups are encouraged to work together to reveal a final festive message using the front of the card.

The competition to design the cover of the card was run with thousands of schools that have taken part in the Christmas Challenge in previous years.

This year's winning designs

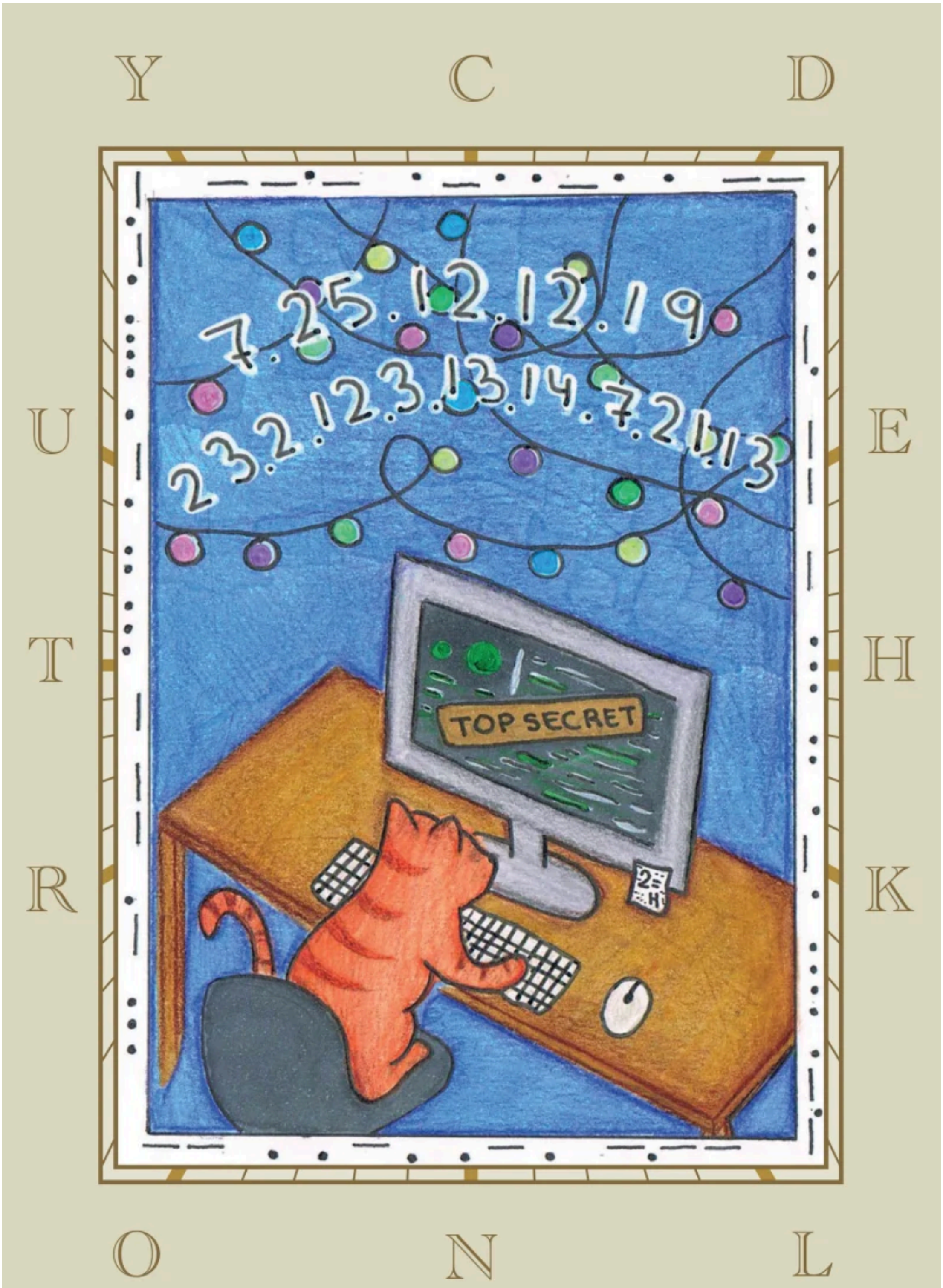
There are three winning Christmas card designs on the front of this year's Christmas Challenge:



KS3/Year 8: Haoran – Wilson's School, London

Haoran's charming hand drawn design features many traditional festive elements. The judges said: "*Among many strong*

entries, Haoran's art and puzzle skills stood out!"



KS4/Year 10: Mariia – The Henry Beaufort School, Winchester

Colourful, clever, Christmas and a cat – Mariia's design has it all! The judges said: "*The artistic and puzzle elements of Mariia's card are equally impressive.*"

KS5/Year 12: Amelie – South Wilts Grammar School, Salisbury

The judges said: "*Amelie's striking, digitally designed card is chock-full of puzzles! Cleverly incorporated into the design of*

the card – the longer you look, the more you see."

2024's challenged was downloaded over 140,000 times by schools and members of the public across the UK. And again this year has been set for schoolchildren who are encouraged to take the puzzles home to tackle the challenge family and friends and continue the problem-solving.

Director GCHQ, Anne Keast-Butler, said:

"Puzzles are at the heart of GCHQ's work to keep the country safe from hostile states, terrorists and criminals; challenging our teams to think creatively and analytically every day.

"I'm delighted that this year's Christmas Challenge combines puzzles created by our own experts with brilliant designs from schoolchildren across the country.

"It was a pleasure to judge the competition alongside Colin, GCHQ's Chief Puzzler. The winning designs beautifully captured what they thought GCHQ looks like on Christmas Day and incorporated some clever codes and ciphers.

"I hope this Challenge inspires the next generation to explore STEM subjects and consider the rewarding careers available in cybersecurity and intelligence. Who knows – some of these talented schoolchildren might be solving our own puzzles in the future."

GCHQ's Chief Puzzler, Colin, said:
"This year's Christmas Challenge features seven puzzles designed to test everything from codebreaking and mathematical analysis to lateral thinking and creativity – the same blend of skills our teams use every day to keep the country safe.

"We've designed the puzzles to suit different skill sets. Some will suit analytical minds; others require creative leaps of perseverance. That's entirely intentional – we want groups of classmates, families and friends working together, combining their different strengths to reveal the final festive message.

"With over 140,000 downloads last year, we know these puzzles bring people together over the festive period. All ages are encouraged to give them a go and remember puzzle-solving is often better as a team effort and more fun too!

"We'd love to see how you get on with the Challenge, so please share your progress by tagging us @GCHQ on Instagram, X or LinkedIn. Happy puzzle-solving!"
Join the Top Secret Puzzle Club on GCHQ's Instagram, where you can get some bonus puzzles and handy hints to help you on your journey to solving the puzzles.

Share your progress, ask for help and triumph in your completion by using the hashtag #GCHQChristmasChallenge across

X Instagram LinkedIn.

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