

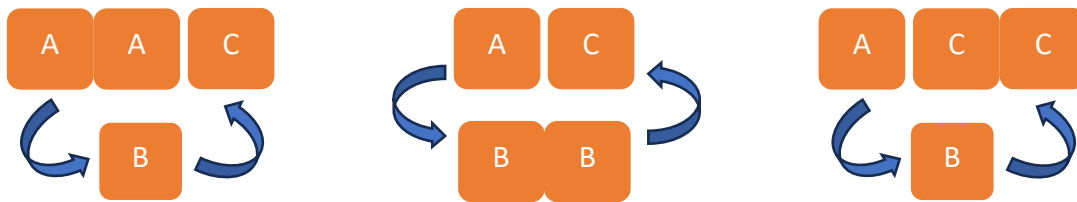
Team Round 1 – Mathematician (45 minutes)

Participants work individually on a set of 15 questions to be completed in 45 minutes. 5 marks are given for a correct response, – 2 for an incorrect answer, – 4 for an unanswered question. Participants will be required to use electronic devices connected to the internet (not just calculators) to help. This is an open book experience.

Scores will be collated, and weighted where necessary, as teams for the overall competition winner.

Team Round 2 – Shuttle (45 minutes)

Teams will be split into three stations A, B and C. Each team can choose which station the 4th member will sit at. The possible arrangements are shown below. **Once decided this cannot change throughout this round.**



Each question pack is designed so that the answer from A is needed to complete the B question and the B answer for the C question. Participants at station B and C can complete some pre-calculations before they receive the additional information they need.

Answers are written onto the answer sheet that is then passed, “shuttled”, to the next station via the adjudicator. If a station thinks a previous answer is wrong, it can be passed back for correction. There can be no communication between the different stations.

Marks are only awarded for completed work across all three stations. Each question pack will last for 5 minutes. There are 9 packs to be completed.

After every **three** question packs the participants will swap positions so eventually, they will all work at each station A, B and C.

Team Round 3 – Duel (60 minutes)

Participants will compete directly against each other in a short fast paced game. The game is introduced to everyone at the event and is simple to learn. Participants develop strategies and approaches to the game as they battle it out. After each head to head, win or lose, all players

shift position and play again. Points are awarded for wins on the players scorecards and collated as team scores.

Team Round 4 – Crypto (60 minutes)

Each team will be presented with a set of loop cards. On each card is a question, answer and a single letter. These three pieces of information are encrypted. Teams need to break the codes and use the question – answer matches on the cards to form the correct loop. Teams will be provided with a Hint sheet detailing common codes to help. Once completed the single letters are entered onto the loop on the answer sheet. Bonus points are awarded if a team can correctly decipher the letters in the loop and form a word in the English dictionary.

Team Round 5 – Lightning (60 minutes)

The room will be setup with the teams forming a large loop like a running track. Each team will have a total of 30 questions to complete. Once a question is complete one team member will take the question to the official scoring area. If it is correct on the 1st try 3 marks are awarded and they are given the next question. If it is wrong, they must return to their team. If the question is correct on the 2nd try, then 2 marks will be awarded. If it is correct on the 3rd or any subsequent try then 1 mark will be awarded. Teams can only pass a question **after** three tries. Once a question is passed it cannot be returned. This is a very active round, and teams should rotate their “runners” every 20 minutes.

Team Round 6 – Codebreaking (60 minutes)

Each team will work as two pairs each trying to break their code. Each code starts with two pairs of information, and they must break the code to complete the next term. They have one minute to write the answer on their answer sheet. This will be checked and then the correct answer is revealed. They then need to continue to crack the code for the next term. This is repeated for up to 8 entries per code. In total there are 10 different codes to break, 5 for each pair. Each code will be cracked for 12 minutes, with this round lasting 60 minutes.