



## UKMT Team Maths Challenge

### Head-to-Head Competition (Mini Relay) Guidelines for teachers

Split your team into two pairs, with you sitting between them (as for the Crossnumber).

There are 4 rounds (A to D) with 4 questions per round. For each round, Question 1 can be solved independently but the answer to each subsequent question is dependent on the previous answer, so the answer to Q1 feeds into Q2 and so on.

- For Round 1, give Q1 and Q3 (and a blank Record Sheet) to Pair A, and Q2 and Q4 to Pair B. Switch this for Round 2, i.e. give Q2 and Q4 to Pair A, and Q1 and Q3 to Pair B.
- Once Pair A has the answer to Q1, they write it on the Record Sheet and pass this (via you) to Pair B. This continues with Pair B passing the answer to Q2 to Pair A (via you) and so on.
- Where a question begins "T is the number that you will receive", T is the answer to the previous question.
- Pairs can work on either of their questions at any time and should be encouraged to do some preparatory work while waiting for the answer to the previous question.
- Once they have written down the answer to Q4, Pair B hands the Record Sheet to you.
- Mark the answers, starting from Q1 (see 'Scoring' instructions further down the page).
  - **If all answers are correct**, your team has successfully completed the round. If they beat the opposing team in doing so, they are also eligible for the bonus points for that round.

**OR:**

- **At the first incorrect answer stop marking**, circle the incorrect answer and pass the Record Sheet back to the relevant pair to reattempt. **There is no limit on the number of further attempts.**
- If your team fails to complete the round in the time given, collect in their Record Sheet and mark those answers written on it. If the second pair has written the answer to Q4 on the sheet but failed to hand it to you in time, Q4 **should** still be marked; however, **bonus points are not available in that situation.**
- **No communication is allowed between the two pairs.** Final answers (and nothing else) are written on the Record Sheet which is passed between the pairs **via you**.
- *If a pair knows that the answer they have received must be wrong, they can circle it on the Record Sheet and pass this back to the other pair (via you) to reattempt.*
- *If a pair realises they have passed on an incorrect answer, they can ask you to retrieve the Record Sheet from the other pair, **but only before Q4 is submitted to you for marking.***

### SCORING (record scores by circling '3' or '1' - as appropriate - on the score sheet)

- **Award 3 points per correct answer if correct on the first attempt, or 1 point if correct on a subsequent attempt.** If an answer is incorrect on the first attempt, cross out the '3' next to that question on the score sheet (only 1 mark is now available). Subsequent questions can still get the full 3 marks.
- **A bonus of 3 points is given to the first team in each pair to present a complete set of correct answers, whether on their first attempt or not.** 3 points can be awarded to both teams in the case of a tie. In this rare situation, the decision of the two teachers is final.