## COUNT ON US

## PRIMARY CHALLENGE



IN-SCHOOL TOURNAMENT HANDBOOK 2023

## COUNT ON US PRIMARY CHALLENGE

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## COUNT ON US PRIMARY CHALLENGE

## RUNNING AN IN-SCHOOL TOURNAMENT

## Why run an in-school tournament?

The Count on Us Primary Challenge is designed to motivate and challenge all pupils in Years 4 and 5 in maths. The regional Heats are very exciting, with teams having practised for months to improve their speed and problemsolving skills. This Handbook is designed to prepare your pupils for the Heats.

Once you've used the Primary Challenge activities in class and/or in clubs and your pupils have completed their Pupil Activity Book, it's time to run a tournament in your school or across your Federation.

This will help you to choose the three pupils to represent your school in the Count on Us
 Challenge Heats.

When you choose your team, you will need to consider which pupils work well together. Have you made sure you have covered the range of skills needed and chosen pupils who work well together.

Don't forget that your team MUST be:

- a mixed gender team (no all boy or all girl teams)
- Year 4 and/or Year 5 (they can be all from one year group or mixed)
- new to the Challenge! Use your experienced pupils from previous years to help you run your clubs.

To make your tournament even more exciting, why not reach out to local Primary Challenge schools to make the tournament even bigger! If your school is part of a federation, this is a great time to get together and plan a joint tournament.

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## Benefits of running an in-school tournament:

- Pupils get the chance to practise the activities in a competition setting before the Heats.
- You can determine who should represent your school at the Heats in a fair way - you might be surprised by who stands out!
- You can invite parents to come along and watch - or even to compete against their children!
- It's a great opportunity for personal development - organising an event and making it as fun as possible.
- There is the chance to build community links by reaching out to other schools locally and collaborating with them.
- It will provide you with positive maths stories for your newsletters.
- It's lots of fun! Pupils love taking part.


## WHEN TO RUN YOUR IN-SCHOOL TOURNAMENT:

Between the training and the Heats, you will be busy running your maths clubs and using activities in class with as many pupils as possible. It is important to leave your tournament until as late as possible, so that you keep the excitement and motivation going as long as possible for your clubs. After your tournament, you will be able to select your team and make sure they have resources and sufficient practice time to get ready.

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## SETTING UP A COUNT ON US TOURNAMENT IN SCHOOL

Choose a suitable hall/large space - you can even run it in your classroom!
This is an example layout - and is how we set out the room for the in-person Heats.

${ }^{-1}$ Primary Challenge Heats Layout

Make sure you have enough tables to group three pupils and one adult referee/older pupil per table.

This layout is particularly helpful during the 24® Game round, when pupils move round tables. However, it may not be possible due to the size/shape of your space. Be creative!

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You may prefer to use larger tables and have two groups of three pupils at either end - see picture below.


Taken at the Regional Heats 2018!
If you are using longer tables and want to follow the Tournament layout as in the Heats, remember you need an adult per team of three pupils/table.
If you don't have enough adults, you may want to consider joining the tables together, or having one adult per every three or four teams of three.


You will also need:

- A chair per pupil (+ for every adult who is helping to referee)
- Pencils/pens for each pupil + referee
- Projector \& screen
- Stopwatch/timer
- Hooter/whistle
- Printed copies of activity sheets and scoresheets


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## TOURNAMENT ROUNDS: getting ready

You may want to create your own activities for each of the three rounds. However, we have prepared an in-school Tournament presentation, with all of the activities, ready for you to use, if you wish. This is based on last year's Heats and the new Round 1 outlined at training.

To find the prepared in-school Tournament presentation, go to the Resource Area / Tournament Time section on the Mayor's Fund for London website and click on the 'In-school Tournament Presentation'. You will find all the documentation (activity sheets, scoresheet etc) you need to print out ready for your tournament in the Tournament Time section also.

## Reminder:

password for 2022-23 Count on Us Primary Challenge Resource Area: CLARKE1883

The tournament presentation is a PowerPoint file. Please feel free to adapt and make it yours to suit your time and space.

If you would prefer to create your own activities, you will need to design: Round 1:

- Part 1 - a sheet with a Domino, Pentomino and T-Shape puzzle
- Part 2 - Bonus points: 5 Domino, Pentomino and T-Shape puzzles
- Part 3 - Find a super challenging puzzle for each of the puzzles Round 2:
- Why not get pupils to design their own 24 Game Mats.


## Round 3

- Create your own finance themed codebreaking / problem-solving scenario!
- Remember to use Simon Singh's Black Chamber website to help you: https://www.simonsingh.net/The Black Chamber/caesar.html.
- Encipher some clues and create a problem that the pupils need to find the answer to.


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## Printing required

## You will need to print out (either from the COU website or your own):

- Round 1, Round 2 and Round 3 team scoresheets. One per table, for the referee.
- Round 1:
- Part 1 sheet
- Part 2 Bonus Sheets
- Part 3 Super Bonus Sheets
- Round 2:
- 24® Game scorecards - one set of A, B, C cards per table.
- Round 3:
- Codebreaking Pupil Pack - one per table.
- Answer Sheet 1 for pupils
- Answer Sheet 2 for pupils
- Answer Sheet 1 for teachers
- Market stall picture
- Tournament scoresheet (can also be filled in electronically) for the Tournament Lead (the teacher running the event - TL)
- Tournament presentation - if you wish to make notes (I usually print out as 3 or 6 slides / page).


## Equipment to set out on each table:

- $1 \times$ Domino set
- $1 \times$ Pentomino set
- $1 \times$ T Shape puzzle set
- $1 \times 24$ Game Single Digits pack* + pupil scoresheets
- $1 \times$ Codebreaking pupil pack
*If you don't have enough, split the packs. Just try to ensure that each team has the same number of 1,2 and 3 dot cards, for fairness.


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## Staffing/Helpers:

You will need:

- assistance to help set up the hall (ask pupils to help).
- One staff member to host the tournament: Tournament Lead (TL: introduces rounds, clarifies rules and acts as timekeeper).
- One staff member/adult/older pupil helper to referee each team of three.
- It may be easier to assign a few teams to each available staff member. For shape and codebreaking this will not make much difference to scoring; for 24® Game there may be some extent of pupils scoring themselves (and trusting each other to be correct with their solutions!)
- Another option is that all pupils are given scorecards and must keep track of their own scores. These are marked and tallied up afterwards instead of being marked alongside the rounds.
- One adult/older pupil looking after refreshments (optional).


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TOURNAMENT TIMINGS (an example)

| 1.00pm | Welcome/Intro |  |
| :---: | :---: | :---: |
| $\begin{aligned} & 1.15 \mathrm{pm}- \\ & 1.45 \mathrm{pm} \end{aligned}$ | R1: Dominoes, Pentominoes and T-Shapes (Team activity) | Part 1 on screen and/or given to teams Bonus sheets ready |
| $\begin{aligned} & 1.45 \mathrm{pm}- \\ & 2.05 \mathrm{pm} \end{aligned}$ | R2: 24 Game (Individual activity) | Individual scoresheets <br> $3 \times 24$ Game rounds <br> 3 minutes each <br> (Allow time for pupils to change tables) |
| $\begin{aligned} & \text { 2.05pm - } \\ & \text { 2.20pm } \end{aligned}$ | Break |  |
| $\begin{aligned} & \text { 2.20pm - } \\ & \text { 2.50pm } \end{aligned}$ | R3: Code Breaking (team activity) | Codebreaking packs given to teams 15-20 minutes (dependent on level of difficulty) |
| $\begin{aligned} & \text { 2.50pm - } \\ & \text { 3.00pm } \end{aligned}$ | Scoring, results \& celebration! |  |

This example shows how you can organise a 1.5-2 hours tournament. The timings allow for introductions, explanations and scoring.

If you have less time, you could:

- Split the tournament over two days.
- Do the scoring for Codebreaking after the event and announce results later.


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## TOURNAMENT LOGISTICS ON THE DAY

See Teacher Guide for full activity instructions.

## To start:

Pupils should sit in their teams of three (team sizes may be bigger depending on the number of pupils competing) with a table referee. Each team fill out its name on the team scorecard and their individual names on the 24 Game scorecards.


## Round 1: Pattern and Problem Solving

- Domino, Pentomino and T Shape sets should be out on tables (but ask pupils to put hands over them while you are introducing the activity).
- Bonus Sheets for each of the activities are placed in the middle of the room, ready to be collected.
- Tournament Leader (TL) explains Part 1, 2 and 3 (see presentation).
- TL either shows Part 1 on large screen or tells table referee (TR) to give out Part 1 sheet.
- Part 2: Once they complete all 3 on the part 1 sheet, one team member can collect ONE Bonus Sheet from the middle of the room.
- NOTE: Teams can only do up to 3 Bonus Sheets for each of the 2 puzzles. So can get a maximum of 9 bonuses.
- Part 3: Teams collect a super Bonus Sheet.
- TR quickly awards marks for completion (or not) on team scoresheet.
- Make sure all puzzle pieces are put back carefully.


## Timings

- Total of 20 minutes


## Scoring

- Points are awarded for each completed puzzle within the allocated time - see Team scoresheet.


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## Round 2: 24® Game

## IMPORTANT:

## Before the tournament, ensure that pupils and table referees (TR) understand how this round is played (explained in the Teacher Guide).

Pupils are allocated A, B \& C and given scorecard to write their name and Team name on (this only works if your pupils are in teams of multiples of three. If you cannot do this, try to swap pupils around between rounds so they play different people).

Each team member will play two pupils from two other schools/teams. Therefore, the movement of pupils is important to get right!

- All 'A' players should move one table clockwise before each round (they will end up sitting in another 'A' players' seat).
- All 'C' players should move one table anti-clockwise at the end of each round (they will end up sitting in another ' $C$ ' players' seat).
- 'B’ players do not move.
- TL reminds players of the rule.
- NOTE: new claiming card rule. Players keep hand on card while giving last stage.
- Pupils play the 24 ® Game competitively for three minutes.
- After 3 minutes, scores should be added up and verified by TR.
- Players ' $A$ ' and ' $C$ ' then move around one seat in their respective directions again, so they are competing against two new people.
- Pupils play another three minute round.
- Repeat player rotations and play one more round.


## Scoring

- Each pupil has an individual scorecard for this round, which they need to take with them when they move seats.
- Points for each round are calculated by adding the number of spots in the corners of the cards they claimed and won (see Teacher Guide for rules).
- After this round, all pupils move back to their original teams and add their scores up together for Team scorecard.


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## Round 3: Codebreaking

## Set up

- If using the activity from the COU website, print the codebreaking pack and give one to each TR. Print Answer Sheet 1 and 2 and the team scoresheet / answersheet and also give to TR.
- Pupils sit at their original team tables, with a new TR (optional).
- There is a lot of flexibility and creativity to be had with this round.
- TL introduces the activity, making sure that each team has the required information and answer sheets. Full instructions are on the Tournament presentation
- TL blows whistle to start (and after 20 minutes to end).


## Timings

- We recommend around 20 minutes for this round - unless you have designed your own shorter codebreaking activity.


## Scoring

Points are awarded for:

- each enciphered word or phrase correctly deciphered
- solving the overall problem

If you are using last year's Heats activity the scorecard is quite straightforward and you can use this for inspiration to create your own if you'd like.

## Tournament scoring

- Add together the points for each of the rounds (these can be entered on the Tournament spreadsheet, which already has formulae added for quick calculations).


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## CHOOSING YOUR TEAM FOR THE REGIONAL HEATS

There is no best way of choosing your team for the heats. Some schools use this as a reward for those who have tried hardest and really enjoyed the activities. Others look at who their highest scorers were. What is important is to select a team that will work well together.

For schools who are new to the programme, you may be surprised at the levels of excitement and intensity for pupils in the tournament. Teams will have been using every opportunity to practise, develop strategies and get used to working together to solve puzzles as quickly as they can. The inschool tournament is invaluable in helping you to choose pupils who you think would benefit most from this experience.

## SOME ADDITIONAL IDEAS

- Hand out school tournament certificates in assembly.
- Make a display board with photos from your tournament.
- Write about the tournament in the school newsletter or local paper!
- Upload photos to Twitter and Tweet us @mayorsfund \#PrimaryChallenge

Remember, this is just a guide to help you run a tournament similar to the one we will be running for the Regional Heats. Feel free to be creative and adapt the activities and rules to fit your school and your facilities. The most important thing is that your pupils enjoy themselves and feel empowered to have a go at the Count on Us Challenge tournament.

## APPENDIX 1: Summary of printing required

- TL: Tournament Presentation
- Team Scoresheet
- Round 1: Part 1 sheet
- Round 1: Part 2 bonuses
- Round 3: Super Bonus Sheets
- Round 2: 24 game scorecards
- Round 3: Codebreaking pack
- Round 3: Answer sheet 1
- Round 3: Answer sheet 2
- Round 3: TR answers and scoresheet
$\square$ Tournament Scoresheet


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NOTES PAGE:

