

COUNT ON US

PRIMARY CHALLENGE 2020-21



Taster Pack



Hello!

This pack has been designed to give you a taster of the Count on Us Primary Challenge, with an overview of the programme and some of the activities to try out in the staffroom or classrooms. After you've tried it out, I really hope that you'll <u>sign your school up</u> to the 2020-2021 Count on Us Primary Challenge.

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What is the Count on Us Primary Challenge programme?

This exciting maths programme for pupils in Years 4 and 5 from schools across London, culminates in a tournament at City Hall. If we can't hold it in-person, we have an equally exciting online alternative planned for your team. Before choosing your team, you will set up a maths clubs and inclass opportunities to practise, practise, practise with 30-60 pupils.

The 4 stages to the Count on Us Challenge programme:

I. Training

This year this will be online. You'll be taken through each of the activities to practise with your pupils. You'll also get a Resource Kit if you're new to the programme and access to a resource area on our website, only available to participating schools. Here you will find everything you need from getting started with your maths clubs to getting ready for the Heats, including:

- Teacher Handbook
- Pupil Workbook
- Tournament Guide

2. In school practising

Teachers are expected to provide as much opportunity to practise as possible. Schools set up daily mental maths starters / shape challenges, use coded messages and run weekly maths clubs.

3. In-school tournaments

Before choosing the team of 3 pupils, all schools are expected to run an in-school Tournament. It's always a surprise for teachers to realise that the team they choose isn't the same as the one they assumed at the beginning!

4. The Heats and Final

And now your team will have practised as much as possible, taken part in a tournament at school and are ready to take part in the Heats in April, with the highest scoring teams going through to the Final at the end of June.



The 3 rounds of the tournament

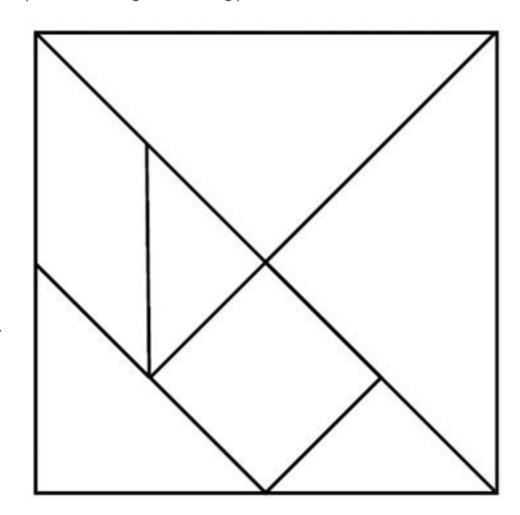
Round I: SHAPE - Tangrams and Pentominoes

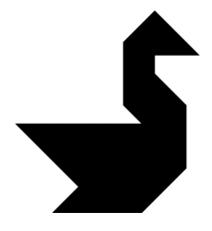
Teams compete to complete the challenges set, earning points and bonuses.

Tangrams

If you don't have a Tangram set, print onto card and cut out to make the following pictures.

At the training session, we will go through how to get started with these and how to support pupils to become really good at understanding and manipulating shapes.





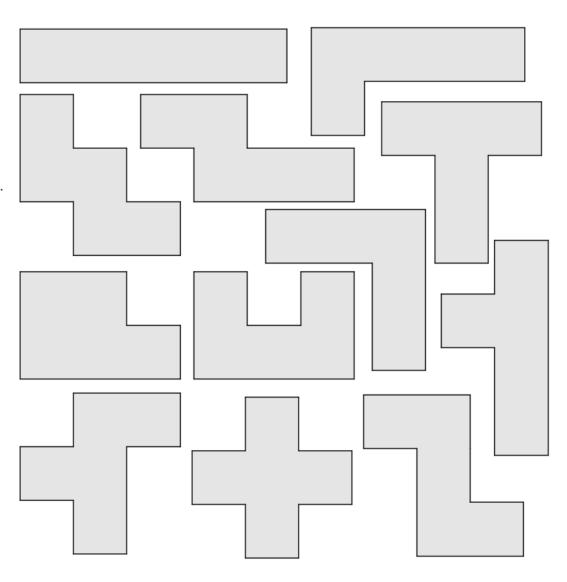


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Pentominoes

If you don't have a set of Pentominoes print onto card and cut out to try out the challenges below.



Challenge I

Make a 3 x 5 rectangle

Challenge 2

Make another 3 x 5 rectangle using different pieces



Round 2: Mental Arithmetic using 24® Game

This is a slightly different way of playing the 24® Game but will give you an idea of the challenge and excitement of this fast-paced round.

Instructions:

The answers must give the **LAST STAGE FIRST** (see below).



$$\begin{array}{c}
12 \times 2 \\
4 \times 3 = 12 \\
4 - 2 = 2
\end{array}$$

Now try these using that same rule. I've been kind and only given you the easiest I dot cards. Your pupils will begin to get very quick at spotting key number bonds and able to solve the hardest cards very quickly. You'll be shown how to support this at the training.









Round 3: Code breaking

Pupils often say that this is their favourite round. By the time they come to the Heats, they will be proficient at using a Caesar Cipher and working out key enciphered messages to complete the challenge.

Have a go at deciphering these messages, using a Caesar Shift of 3. To work this out look at the example below and create a table to continue the alphabet.



plaintext	a	b	С	d	е	f	g	h	i	j	k		m
cipher text	ם	Ψ	f	500	h								
plaintext	n	0	Р	Р	r	S	t	u	٧	8	X	У	Z
cipher text													

So, if you get a message saying **Frxqw rq Xv Fkdoohqjh** and you use a Shift of 3 you will see that it says ... Count on Us Challenge, because F=C r=o x=u q=n w=t etc

Now, using the same cipher chart as above for Shift 3, decipher the following:

- I. FRGHEUHDNLQJ LV IXQ!
- 2. SOHDVH VLJQ XS
- 3. VHH BRX DW WKH WUDLQLQJ

Finally, we hope you've had fun in your staffroom or classroom with these Count on Us Primary Challenge taster activities. <u>Click here</u> to for the online sign up form. We hope to see you at the training sessions in December / January.

Val and Marie