

#mathscpdchat 28 June 2022

How can you use maths games effectively to support learning?

Hosted by [Simon Ball](#)

This is a summary of the discussion – to see all the tweets, follow the hashtag #mathscpdchat in Twitter



The graphic features a dark teal background with a large, stylized green hashtag symbol on the left. The text '#mathscpdchat' is prominently displayed in white. To the right, a yellow box contains the word 'Today', and below it, the date and time 'Tuesday, 28 June, 7-8pm' are written in white. A central photograph shows two students in school uniforms sitting at a table, focused on a game with cards. Below the photo, the question 'How can you use maths games effectively to support learning?' is written in white. At the bottom left, it says 'Hosted by Simon Ball @ballyzero' and 'ncetm.org.uk/mathscpdchat'. The NCETM logo is in the bottom right corner.

#mathscpdchat

Today
Tuesday, 28 June, 7-8pm

How can you use maths games effectively to support learning ?

Hosted by Simon Ball @ballyzero

ncetm.org.uk/mathscpdchat

The links shared during this discussion were:

[What Kind of Game is Algebra?](#) which is a book from the ATM by Gillian Hatch. It is a collection of more than 50 photocopiable algebra games that are suitable for whole class and collaborative group work. It includes games with names such as 'The Yin Yang Game' and 'Quadratic Dominoes Rules'. It was shared by [Alex J-W](#)

[NRICH resources tagged with: Games](#) which are NRICH mathematical resources connected to games. It was shared by [Maryse](#)

[Quadrilaterals Game](#) which is a game from NRICH for two or more players. You will need a set of special shape-cards which you can print out from the website page. The game fits well into a unit of work on the properties of polygons. There is a link, on the 'Teachers' Resources' page for this game, to an article, 'Using Games in the Classroom' by Gillian Hatch. It was shared by [Maryse](#)

[Nice or Nasty](#) which is also a game from NRICH. The various forms of the game that are described involve rolling a die and writing numbers (scores when the die is rolled) in a set of (for example 4) cells in order to show a (for example four-digit) number. The winner is the player who makes the largest (or smallest) number. In some variations of the game a player can choose a cell belonging to the set of cells of another player in which to insert their score, which is how the game can become 'nasty', and usually (particularly when played by teachers) hilariously funny! It was shared by [Tweeting Cynical](#)

[Shut the Box](#) which is another game from NRICH. The game uses two dice, and cards with the numbers 1 to 12 on them. Players turn over cards that match dice scores, and the aim of the game is to be the first (or last) player to turn over all the cards. It was shared by [G Cooksey](#)

[Denise Gaskins' Let's Play Math](#) which is where on the website of [Denise Gaskins](#) you will find her Substitution Game, which features low-floor, high ceiling cooperative play that works with any age. 'It's great for building algebraic thinking.' It was shared by [Mark Greenaway](#)

[5 x 5 game](#) which is a blog by Sara Van Der Werf about a game in which players enter numbers into the cells of a 5-by-5 square grid. It was shared by [Mark Greenaway](#)

[Play To Win With Nim](#) which is an illustrated article by Marianne Freiberger in *Plus* magazine. The author discusses mathematics involved in explorations of winning/loosing strategies when playing the traditional game of Nim. It was shared by [Mary Pardoe](#)

[Focus on non-transitive dice](#) which is an illustrated 'Focus on...' article in the archived NCETM Secondary Magazine 82. It was shared by [Mary Pardoe](#)

[Outstanding Outcomes](#) which where you will find mathematical games and associated materials designed, presented and collected by [Heather Scott](#). It was shared by [Mary Pardoe](#)

A full illustrated summary of the discussions in this #mathsCPDchat follows

Simon's first question ...



Simon Ball @ballyzero · 18h

...

Q1) Do you make maths games a regular feature of your teaching? If so, how often do you play them? [#mathscpdchat](#)

... prompted this conversation ...



Tweeting Cynical @TweetingCynical · 18h

...

Replying to @ballyzero and @PardoeMary

I used to put times up or dice games on the desk for when the children came in in the morning, and they played amongst themselves whilst I did the registered and heard a few children read.

Upside: Children loved doing maths games.

Downside: They hated being picked to read 🙄📖



Simon Ball @ballyzero · 17h

...

Oh dear, poor readers! Did you ever have whole lessons of playing games? [#mathscpdchat](#)



Tweeting Cynical @TweetingCynical · 17h

...

Yes! I had a once a fortnight maths lesson where we'd do 4 games around the room and they would do 15 minutes on each in a carousel.

We'd introduce a new game each week, and then those two new ones would go alongside 2 of the children choice.



Simon Ball @ballyzero · 17h

...

That's brilliant! So things were kept fresh for everyone. Did the students keep the same games in the carousel every time? [#mathscpdchat](#)



Tweeting Cynical @TweetingCynical · 17h

...

Exactly, and by introducing the new games, they'd normally be specifically geared towards a new skill/maths knowledge that either we've just worked on, or even better, going to work on in the next few weeks. Great way to use AfL and teach by accident too.



Tweeting Cynical @TweetingCynical · 17h

...

Replying to @ballyzero and @PardoeMary

I remember that one game spent 5 weeks in the carousel and that was Take It Away (1-20 die, both children start on 100 and take in turns to roll aiming to get to zero first, but had to nominate their subtraction strategy on every move [bridging, round/adjust, partitioning, etc]).

... these linked replies ...



Peter Williams @MathsImpact · 18h

...

Replying to @ballyzero

I often fill in the gaps with games.

Nim is a firm favourite. Always good for a spare 5 minutes at the end of a lesson, and there are so many variations you explore.

[#mathscpdchat](#)



Simon Ball @ballyzero · 18h

...

Replying to @MathsImpact

This is a great idea! Do you find it makes students finish their work more quickly? And what are you hoping to encourage, mathematically, with the game? [#mathscpdchat](#)



Mary Pardoe @PardoeMary · 18h

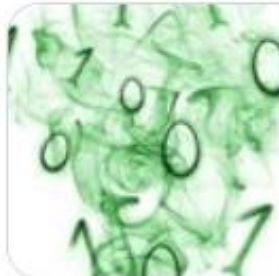
...

Replying to @MathsImpact and @ballyzero

This is an interesting article ...

plus.maths.org/content/play-w...

[#mathscpdchat](#)



plus.maths.org

Play to win with Nim

In the game of Nim one player always has a winning strategy — it depends on an unusual way of addin...

(link provided above)

... these useful connected tweets ...



Alan Wood 3.5% ❤️ @alwoodwork · 4h

Replying to @ballyzero

We would invent maths games frequently in the 70s/80s. Here's a bingo version I made earlier.



Alex J-W 🇮🇹 🇫🇷 🇬🇧 @Trudgeteacher · 4h

Gill Hatch RIP was a master of the maths game. atm.org.uk/shop/What-Kind...

(link provided above)

... this pair of tweets ...



Ally @LinearColada · 17h

...

Replying to @ballyzero

I like bingo and it gets the whole class involved in trying to work out the answers. I sometimes use it after fluency practice. I also like maths relays. My Y8s absolutely love them too! We do one each half term
[#mathscpdchat](#)



Simon Ball @ballyzero · 17h

...

What spin do you put on the bingo? I've found everyone does it slightly differently! [#mathscpdchat](#)

... and these related comments:



MrHawesMaths @HawesMaths · 15h

...

Replying to @ballyzero

I like to do a DFM live game at some point in the lesson. Great for competition and for retrieval practice. I have kept a record/leaderboard in the past and this has worked well [#mathscpdchat](#) @DrFrostMaths



Nordin Zuber @enzuber · 9h

...

My students LOVE @DrFrostMaths math live. And I like how I can select skills and use it for retrieval practice. Totally superior to other systems. Students love seeing their name come - and so do I. So many powerful ways to use it.

All the other 'replies' to Q1 were many suggestions, of great variety, each tweeted separately, from [Maryse](#), including this one, to which there was one reply ...



Maryse ❤️ [#Antiracist](#) @AllThingsMaths · 19h

...

I'm now deep into looking at these.

nrich.maths.org/public/topic.p...

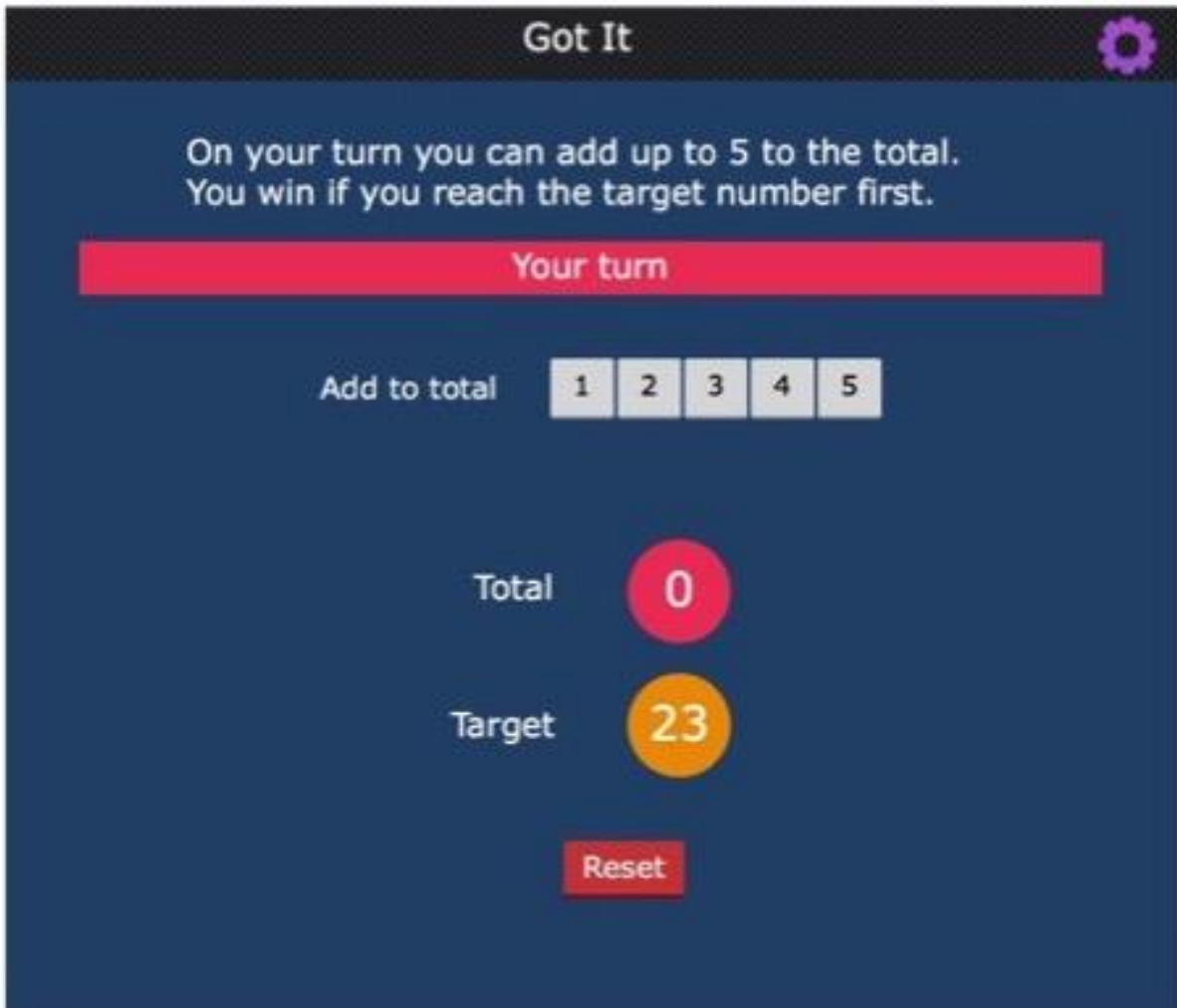
[#mathscpdchat](#)



Mary Pardoe @PardoeMary · 23h

...

There are currently 134! This is the 134th ...



To change the game, choose a new target or a new range of numbers to add.

Test out the strategy you found earlier. Does it need adapting?

Can you work out a winning strategy for any target?

Can you work out a winning strategy for any range of numbers?

Is it best to start the game? Always?

(link provided above)

... all Maryse's other suggestions were made in the following 'single' tweets:



Maryse ❤️ **#Antiracist** @AllThingsMaths · 19h

...

A boring one but I like doing stuff with dice so they generate their own understanding of probability.

[#mathscpdchat](#)

 **Maryse** ❤️ #Antiracist @AllThingsMaths · 19h ...
I also put maths cards games and a normal pack of cards into D's party bags. Trying to share the love of equivalent fractions 🤞

[#mathscpdchat](#)

 **Maryse** ❤️ #Antiracist @AllThingsMaths · 22h ...
[#mathscpdchat](#)

Remembered our number prisoners. Tabards with numbers on. Shout a property, e.g. primes. Non primes had to capture primes and put them in "prison". Super summer fun.

 **Maryse** ❤️ #Antiracist @AllThingsMaths · 22h ...
[#mathscpdchat](#)

Another not-quite-a-game.

Using a clinometer and just playing with it outside. Mini whiteboard. Trundle wheel. Clinometer. Happy days.
Trig becomes concrete.

 **Maryse** ❤️ #Antiracist @AllThingsMaths · 22h ...
[#mathscpdchat](#)

We also had axes painted outside in the playground and lots of different maths bits. Not games as such but exposure to maths constantly.

Responses to Simon's second question ...

 **Simon Ball** @ballyzero · 20h ...
Q2) What would you say the value of maths games in class is?
[#mathscpdchat](#)

... included this conversation, initiated by another tweet from Maryse ...



Maryse ❤️ #Antiracist @AllThingsMaths · 21h

...

Replying to @ballyzero

nrich.maths.org/2924

We always used this with great success. Brings out the properties of quadrilaterals.

#mathscpdchat



nrich.maths.org

Quadrilaterals Game

A game for 2 or more people, based on the traditional card game Rummy.

(link provided above)



Simon Ball @ballyzero · 21h

...

Ah, that looks like a great way to encourage learning the properties of quadrilaterals! How do you check the effectiveness of the learning?

#mathscpdchat



Maryse ❤️ #Antiracist @AllThingsMaths · 21h

...

We'd switch to traditional assessment in class for that. E.g. mini whiteboards or even topic tests. Students built a great understanding of what, say, makes a trapezium a trapezium.

#mathscpdchat



Maryse ❤️ **#Antiracist** @AllThingsMaths · 21h

...

Also generated lovely chats about a square being a rectangle, or a rhombus is not a square. Leads to some super Venn diagrams too.

[#mathscpdchat](#)

... and this short discussion was generated ...



Tweeting Cynical @TweetingCynical · 21h

...

Replying to [@ballyzero](#)

Provided there is good structure and feedback that aids their strategies, IMO there is no better way of learning in maths classes.



Simon Ball @ballyzero · 21h

...

How do you check the learning once the game is over? [#mathscpdchat](#)



Tweeting Cynical @TweetingCynical · 21h

..

Great question... What better way to check learning than to ask children to share their best and worst strategies to another group.

They'd start by saying... If you want to win, definitely (don't) do this: ...

We always tried to get a Q and A going as well to find out why.



Tweeting Cynical @TweetingCynical · 21h

...

They were usually called out pretty quickly if they did. That's a really good sign that they understand the game, and are getting to grips with the underlying maths.

... as was this conversation ...



Emma Mitchell @ollieindy · 21h

...

Replying to [@ballyzero](#)

I always like using 0-9 die for place value, roll 7 times and pupils have to create a number placing each digit when rolled. Watching the idea of what is happening as it occurs and seeing different strategies develop as we play again.



Simon Ball @ballyzero · 21h

...

A lot of people are talking about strategy development - are you ever tempted to nudge them in certain directions? [#mathscpdchat](#)



Emma Mitchell @ollieindy · 21h

...

I do try and encourage some discussion to see if they can understand why some people are placing numbers in different positions.

... and the following comment from Peter Williams prompted a suggested example game ...



Peter Williams @MathsImpact · 20h

...

Replying to @ballyzero

Games are a great way to help students think about strategy and efficiency.

If you want to win, you have to work out the best way to play, reflect on each attempt and make improvements.

#mathscpdchat



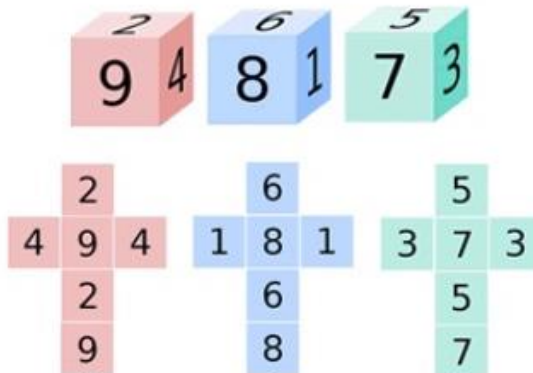
Mary Pardoe @PardoeMary · 20h

...

Playing with non-transitive dice is good for that ...
(I'll try to find a link to the article this is from.)

#mathscpdchat

But, what if the dice are unbiased, but not normal? For example, what happens if the two players each choose a die from this set of three dice?



Students could make this set of dice, and play against each other in pairs – with a game consisting of, say, 20 throws, and the final winner being the player who has ‘clocked up’ the highest number of wins by the end of the game. Can students discover a winning strategy?



Mary Pardoe @PardoeMary · 19h

...

I think this is the link: ncetm.org.uk/resources/31452

#mathscpdchat

(link provided above)

... and also the following long conversation:



Peter Williams @MathsImpact · 20h ...

Replying to @ballyzero

Games are a great way to help students think about strategy and efficiency.

If you want to win, you have to work out the best way to play, reflect on each attempt and make improvements.

[#mathscpdchat](#)



Simon Ball @ballyzero · 20h ...

Replying to @MathsImpact

So a neat way to teach mathematical thinking: making attempts and refining them with a little thought. Do you find this increases their resilience in the face of problem solving questions? [#mathscpdchat](#)



Peter Williams @MathsImpact · 20h ...

Not without me being explicit, but ultimately yes.

We can have conversations like "did you win the first game you played?"
"How many tries until you worked out the best strategy?"
"Can we apply that same thinking to this problem?"

[#mathscpdchat](#)



Simon Ball @ballyzero · 20h ...

Gently leading rather than dragging by the nose! I like that very much. Do you ever play with teams (e.g. pairs), to encourage more conversation and out loud thinking? [#mathscpdchat](#)



Peter Williams @MathsImpact · 20h ...

Yes, most games work better if they play in pairs.

They get to play a lot of games, then have some reflection as a class on good strategies they've discovered.

Then I'll usually let them play again with those new ideas rattling around their heads.

[#mathscpdchat](#)



Simon Ball @ballyzero · 22h

...

Replying to @MathsImpact

It sounds like you've thought a lot about this! How long did it take to refine your strategies surrounding the use of games in class? #mathscpdchat



Peter Williams @MathsImpact · 22h

...

It's been a natural evolution over the years, but the first seeds were planted on my PGCE, we had a training session where we played lots of games together, then talked about all the maths we'd explored.

I'm a magpie for ideas, and I love games myself!

#mathscpdchat



Simon Ball @ballyzero · 22h

...

Permission to be slightly jealous! 😏 Would you ever give an entire lesson to playing games? #mathscpdchat



Peter Williams @MathsImpact · 22h

...

No, I want the games to be fun but purposeful so they need to end with some discussion of the maths we've been exploring.

I've found that if the game keeps going for too long the maths gets a bit lost.

They work better as punctuation.

#mathscpdchat



Simon Ball @ballyzero · 22h

...

That makes a lot of sense! How long would you say the ideal maths game session should be, in your experience? #mathscpdchat



Mary Pardoe @PardoeMary · 19h

...

A game that I found works brilliantly, and is very revealing of students' understanding is ... draw a column of about 8 'cells' . Invite a student to choose a number (say 2.53) to go in top cell and another in bottom cell (say 1.05) ... select another cell ... 1/? #mathscpdchat



Mary Pardoe @PardoeMary · 19h ...

2/? ... and a student chooses a number between top/bottom numbers ... then choose another cell and another student chooses a number for that ... aim is to get an ordered list of numbers (top-bottom) eventually ... can use units e.g. km, m, cm ...3/3 #mathscpdchat



Mary Pardoe @PardoeMary · 21h ...

... for example, perhaps players (say there are 2 or 3) have reached this stage in a game ... the next player has to choose one of the as-yet-unfilled cells and enter in it any number that will keep the 'flow' going (always larger at each upwards step).

1.43 km
cm
1, 425 m
cm
m
1, 421 m
km
1.42 km



Dan Rodriguez-Clark @InteractMaths · 17h ...

This is almost the reverse of something I play. Get them each to draw 10 cells. Then use a random number generator (e.g. Randbetween on excel) to create a random number between a min and max value. They have to place it in a cell. When they can't do anymore, they are out.

A sequence of three tweets from Peter Williams generated the following discussion:



Peter Williams @MathsImpact · 20h



Yes, most games work better if they play in pairs.

They get to play a lot of games, then have some reflection as a class on good strategies they've discovered.

Then I'll usually let them play again with those new ideas rattling around their heads.

[#mathscpdchat](#)



Peter Williams @MathsImpact · 20h



A good curriculum example:
Four empty boxes and a dice.

Roll a dice and write it in one box.

Goal: largest/smallest/nearest to 3000 etc.

Repeat for a while.

[#mathscpdchat](#)



Peter Williams @MathsImpact · 20h



To make it competitive, two rows of boxes, one yours, one your friends.

This time the goal is to make your number the biggest.

Sneaky part:

You can write numbers in any box, even your friends.

[#mathscodchat](#)



Simon Ball @ballyzero · 20h



Replying to @MathsImpact

That's a beauty! Very straightforward, needs equipment most departments already have on hand, and can be endlessly repeated with different goals!

[#mathscpdchat](#)



Sam Blatherwick @blatherwick_sam · 10h

...

Replying to @MathsImpact and @ballyzero

Variant of this... six boxes like this:

-- < -- < --

Aim of the game is to fill the boxes so that it works with the symbols.

Once they're up to speed on that you take your "score" for a round as what's in the middle unless you lose in which case you score 0

[#mathscpdchat](#)



Sam Blatherwick @blatherwick_sam · 10h

...

Credit for this to the maths department ~2009 at Beverley GS where I did my pgce placement! They loved this game there!

A reply from Maryse was the starting-point of another long conversation generated by Simon's Q2 ...



Simon Ball @ballyzero · 20h

...

Q2) What would you say the value of maths games in class is?

[#mathscpdchat](#)



Maryse ❤️ #Antiracist @AllThingsMaths · 21h

...

Replying to @ballyzero

It can generate different outcomes to explore. E.g. throwing 2 dice. Or looking at "Higher or Lower" card games. Students are looking at maths without realising it. Thus the maths is embedded and we're demonstrating how maths is thinking.

[#mathscpdchat](#)



Simon Ball @ballyzero · 21h

...

Maths by stealth, almost! Do you think this helps with later problem solving? [#mathscpdchat](#)




Maryse ❤️ #Antiracist @AllThingsMaths · 21h

...

Yes. Defo. It generates conversation and it shows different contexts.

[#mathscpdchat](#)

 **Maryse** ❤️ **#Antiracist** @AllThingsMaths · 21h ...
Not a game but rather manipulatives... using blocks to work out missing numbers (i.e. given the mean, what's the missing number, or what could it be). By playing around students develop conceptual understanding and can later solve those problems in writing. [#mathscpdchat](#)

 **Simon Ball** @ballyzero · 21h ...
An excellent thought! A game that I imagine most departments can access without needing to be connected to the Internet or buying new resources! Have you made games out of other things like this? [#mathscpdchat](#)

 **Maryse** ❤️ **#Antiracist** @AllThingsMaths · 21h ...
We used to do shed loads but still shattered from a weekend of DoE. Head's not working yet!

We did maggot racing to get loads of maths and so much fun.

[#mathscpdchat](#)

 **Maryse** ❤️ **#Antiracist** @AllThingsMaths · 21h ...
Speed, distance, time.
Vectors to describe direction.
Hypothesis testing.
Averages to compare groups of maggots.

[#mathscpdchat](#)

 **Maryse** ❤️ **#Antiracist** @AllThingsMaths · 21h ...
Replying to [@ballyzero](#)
Games are fun too so it can change the energy, break up the lesson, intro a topic, refresh a topic.

[#mathscpdchat](#)

 **Simon Ball** @ballyzero · 21h ...
Replying to [@AllThingsMaths](#)
Forgive me - maggot racing?! Is that... exactly what I think it is?! [#eek](#)
[#mathscpdchat](#)

 **Maryse** ❤️ **#Antiracist** @AllThingsMaths · 21h ...
Oh yes. A visit to the local fishing shop before the lesson and you're good to go 🐟

[#mathscpdchat](#)



Simon Ball @ballyzero · 21h

Oh, boy. You'll have to forgive me if I don't take this one up!

[#mathscpdchat](#)



... and there was this short interchange:



Joanne Green @MsJoanneGreen · 22h

[#mathscpdchat](#) Mathslink cubes are also very good to play with, but I don't have any. Children create their own model, take a photo of it, then calculate it, to help them to calculate volume. It also helps them to draw in 3D too.



Peter Williams @MathsImpact · 22h

Replying to [@MsJoanneGreen](#)

I do a task where students pair up, each has the same number of cubes, then they sit back to back.

One student builds a model then they describe it to the other who has to reproduce it.

So much language development happens!

[#mathscpdchat](#)



Maryse ❤️ [#Antiracist](#) @AllThingsMaths · 21h

Love this. It could apply to describing 2D shapes too.

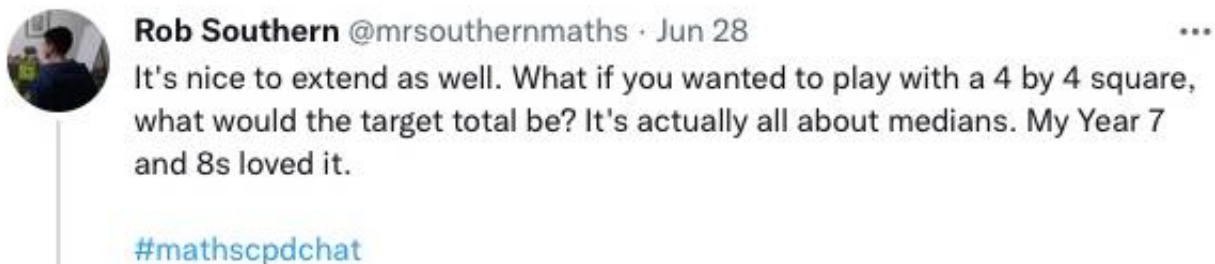
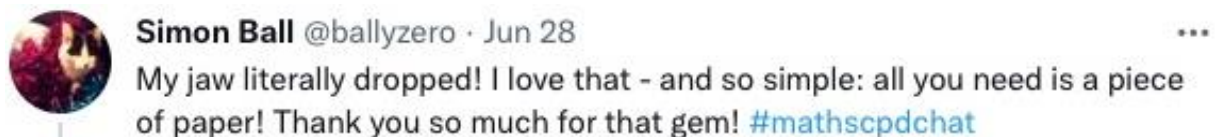
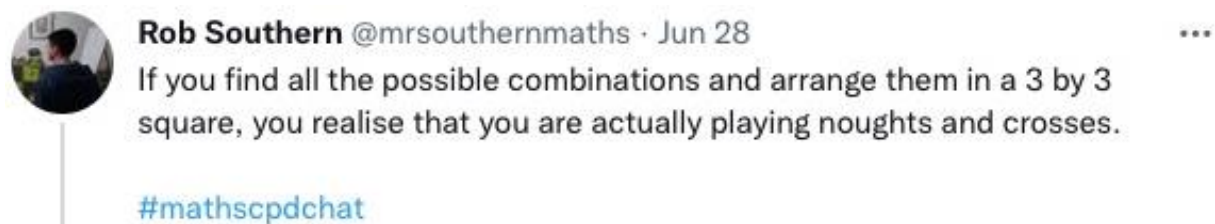
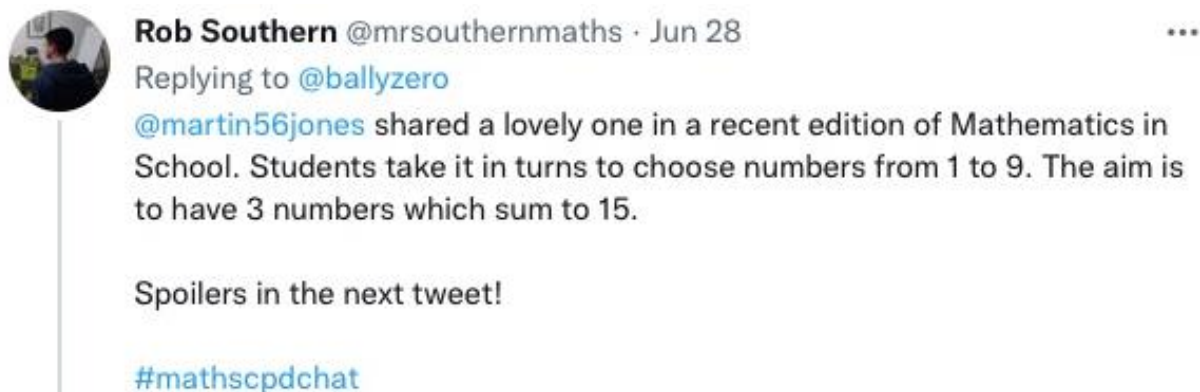
[#mathscpdchat](#)



The screenshots below show conversations and single replies generated by **Simon's Q3**. A wide variety of games were described. Links to online presentations of some of the games were provided, and adaptations/modifications were suggested for some. Possible learning outcomes were also sometimes discussed. **Click on any of the following screenshots of a tweet to go to that actual tweet on Twitter.** The conversations and replies were generated by this (last) question from [Simon Ball](#):



The game described by [Rob Southern](#) in his conversation with [Simon Ball](#) ...





Simon Ball @ballyzero · Jun 28

That's an interesting thought: thinking about new games rather than necessarily playing them! Do you use that strategy often? #mathscpdchat

... prompted a question from [Joanne Green](#):



Joanne Green @MsJoanneGreen · Jun 28

#mathscpdchat Can they use all operations? like $9 \times 2 - 3$.



Rob Southern @mrsouthernmaths · Jun 28

Replying to @MsJoanneGreen

No it has to be the sum of the 3 numbers. Adding only.

The Nice or Nasty game generated some discussion between [Tweeting Cynical](#) and [Simon Ball](#) ...



Tweeting Cynical @TweetingCynical · Jun 28

Replying to @ballyzero

Times Up is a favourite because of the speed element.

But I always found the children liked Nice or Nasty (work together or work against each other).



nrich.maths.org

Nice or Nasty

There are nasty versions of this dice game but we'll start with the nice ones...

(link provided above)



Simon Ball @ballyzero · Jun 28

Ouch! I'd be worried about setting the nasty version of that game! How do you manage play? [#mathscpdchat](#)



Tweeting Cynical @TweetingCynical · Jun 28

Interesting point... Luckily we had a bit of a joke about the "Nasty" part because competition doesn't need to be nasty, and at Year 4 they were old enough to accept that it's just called that for effect.



Tweeting Cynical @TweetingCynical · Jun 28

Replying to [@ballyzero](#)

Teachers should definitely try this too:

If a child "cheats", have a whole discussion about whether this was good maths, or outside the rules, and if a new rule should be allowed to permit that kind of maths. Fascinating insight into what children will and won't accept.

... and games played with dominoes were mentioned by [Mary Pardoe](#):



Mary Pardoe @PardoeMary · Jun 28

Replying to [@ballyzero](#)

Some teachers use dominoes effectively. This booklet by Heather Scott, [@MathsladyScott](#), is a great source of ideas ...

(An example, links to her website, and where you can find it on next tweets.)

[#mathscpdchat](#)

Mathematical



Dominoes

By Heather Scott



Mary Pardoe @PardoeMary · Jun 28

An example page from 'Mathematical Dominoes' by Heather Scott,
@MathsladyScott, ...
#mathscpdchat

Domino operations

(A game for 2 or 3 players)

Before you start, you will need to decide four things, which are ...

- 1 choose a rule: *the person with the **highest** result wins the dominoes*
or
*the person with the **lowest** result wins the dominoes,*
- 2 choose an operation: **addition, subtraction, multiplication** or **division,**
- 3 decide if you are going to play a **calculator** game or a **non-calculator** game,
- 4 decide who is going to go first, second, and third.

When you start ...

- place all the dominoes face down on the table;
- each player chooses 6 dominoes from those dominoes on the table;
- do not show your dominoes to the other players.

For each round ...

- each player decides which domino to play;
- each player places their chosen domino face up on the table;
- the players together agree about which player has won the round according to the chosen rule;
- the winner keeps all the dominoes that have been played to count towards their total - those dominoes must not be used again.

Play continues ...

- each player takes another domino from the remaining face-down dominoes on the table - if there are no dominoes left, play continues until everyone has used up all their dominoes.

At the end of the game ...

- when all the dominoes have been used up, each player adds up the spots on the dominoes that they have won - the winner is the person with the greatest number of spots.



Mary Pardoe @PardoeMary · Jun 28



Link to her Outstanding Outcomes website is: outstanding-outcomes.com
And you can find many great games devised by her here:
ebay.co.uk/str/outstandin...
[#mathscpdchat](https://twitter.com/mathscpdchat)



(links provided above)

All the other tweets generated by [Simon](#)'s Q3 were single replies, each suggesting at least one game. Those replies were from [Leann de Belder](#), [G Cooksey](#), [Julie Clawson](#), [Andrew Higgins](#), [Deborah T](#), and [Mark Greenaway](#):



Leann de Belder @LMPeters16 · 18h



Replying to [@ballyzero](#)

Fizz Buzz and times table around the world

Fizz Buzz – A Divisibility Game

- If a number is divisible by 3, the student says “fizz” rather than the number.
- If a number is divisible by 5, they say “buzz” rather than the number.
- If a number is divisible by both, they say “fizz buzz”

(The game can be modified by changing the 3 and/or the 5 to other numbers, and/or introducing more numbers whose multiples are replaced by other words, such as “dazz”, “wezz”, etc.)



G Cooksey @gcooksey · 10h



Replying to [@ballyzero](#)

Shut the box is amazing

Here is a game that uses two dice and cards with the numbers 1 to 12 on them. The aim of the game is to turn over all the cards. You can turn over the cards that match the numbers on the dice.



(link provided above)



Julie Clawson @clawson_julie · Jun 29

...

Replying to @ballyzero

Closest to 1000. Students have a 3x3 grid. You roll a dice. On each roll they choose which square to put the number in. At the end they have three 3-digit numbers to add up. The closest to 1000 wins.



Andrew Higgins @Learner_Profile · Jun 29

...

Replying to @ballyzero

Pebbles ... Start with 15 pebbles and take it in turns to play. Each person can take 1, 2 or 3 pebbles on their turn. The objective is to force your opponent to take the last pebble. Variations: Start with a different number of pebbles, change the rules, etc.



Deborah T @Deborah_maths · Jun 29

...

Replying to @ballyzero

I have made a PowerPoint of maths games, aimed mostly at KS3 but some would be suitable for KS2 or 4. Happy to share it with people if they want

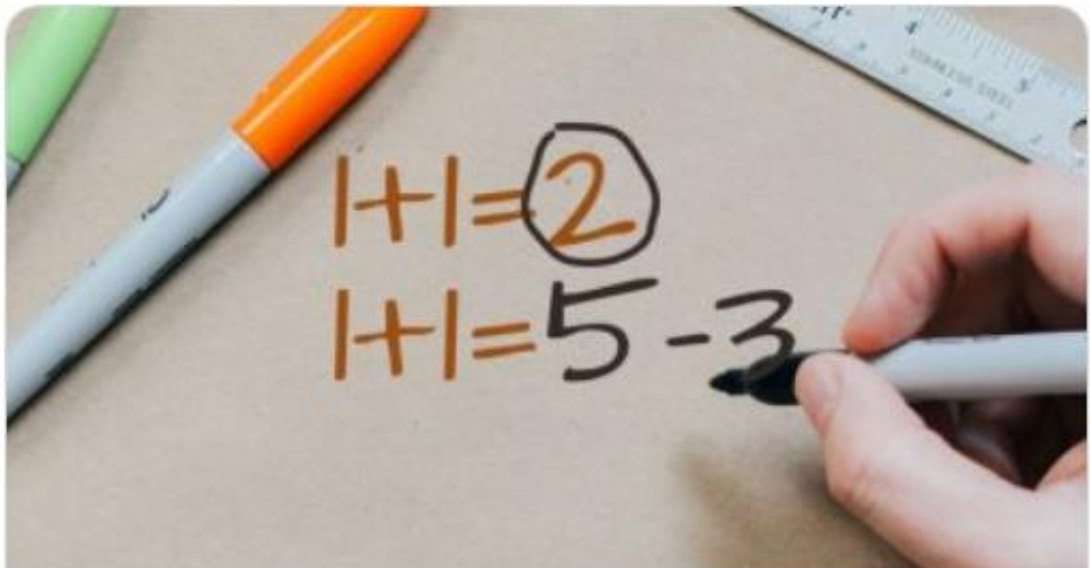


Mark Greenaway @suffolkmaths · Jun 28

...

Replying to @ballyzero

Denise's Game



denisegaskins.com

The Best Math Game Ever

The Substitution Game features low-floor, high-ceiling cooperative play that works with any age (or with a mixed-age group) — and you can us...

(link provided above)



Mark Greenaway @suffolkmaths · Jun 28

...

Replying to @ballyzero

or Sara's 5x5 game @saravdwerf

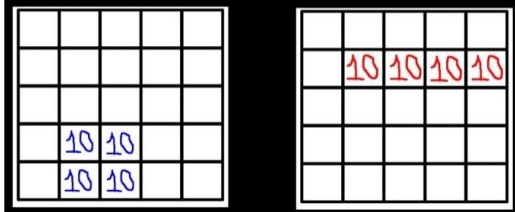


saravanderwerf.com

5x5 Most Amazing Just for Fun Game - Sara VanDerWerf

UPDATE DECEMBER 2021 - Simplified Version: I've spent quite a bit of time in K-5 world the last several years. This year I introduced this ga...

HINT: Which is a better strategy?



(link provided above)

(to read the discussion sequence generated by any tweet look at the 'replies' to that tweet)