

#tmwyk

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#tmwy-what?

- ▶ #tmwyk is a Twitter hashtag.
- ▶ It stands for some approximation of:

Talking math(s) with your/young kids.

- ▶ Used to share mathematical interactions with children.
- ▶ For me, this is playful mathematics, following my son's interests and the mathematics that occurs in the world around him.

100s

100

100

100

10s

10

10

1s

1

~~10~~

~~23~~

~~24~~

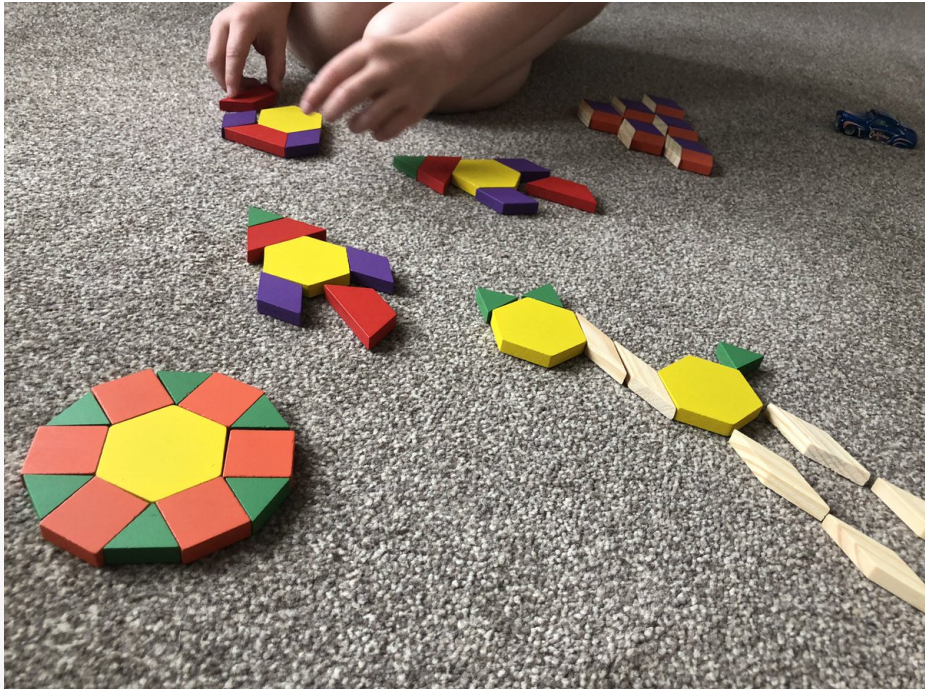
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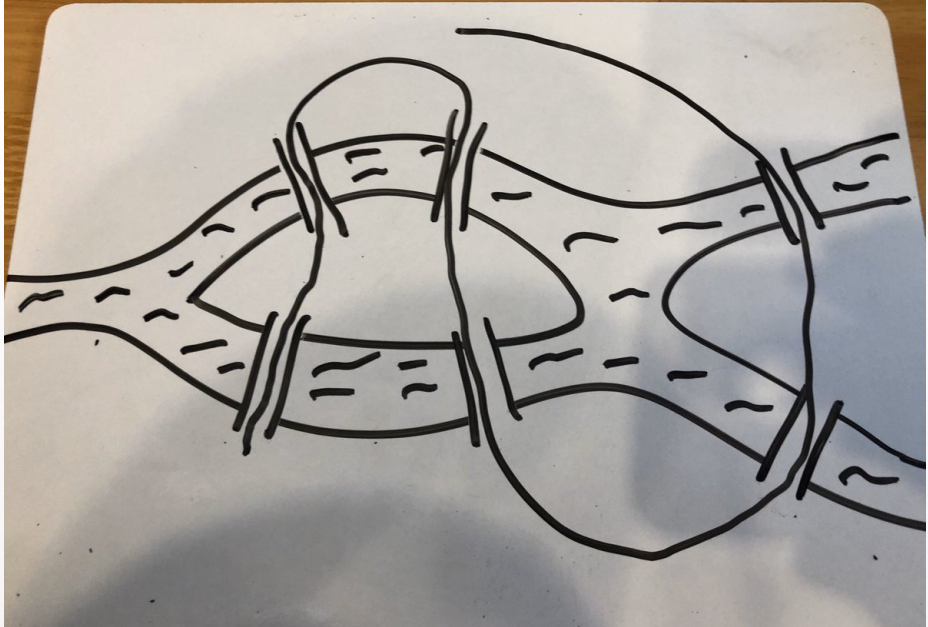
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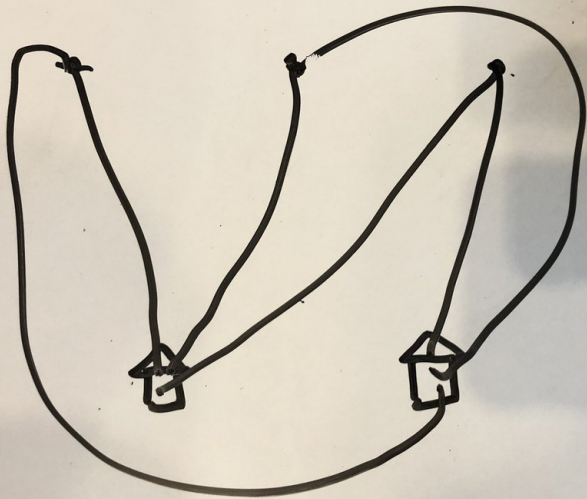
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321







- ▶ “Wide, thin, wide, thin, ...”
- ▶ What’s that?

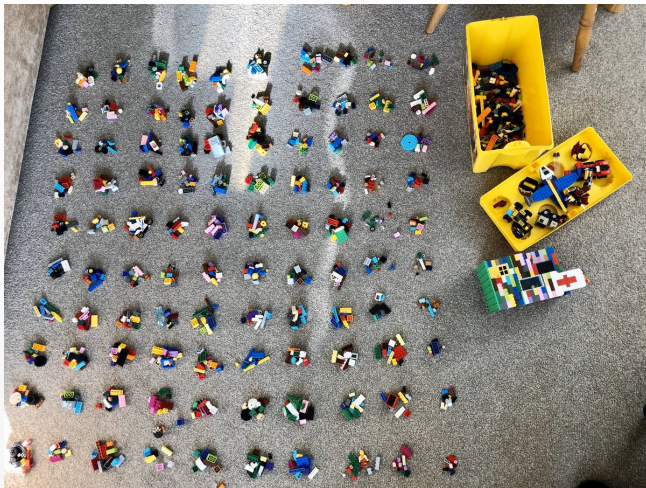
- ▶ “Wide, thin, wide, thin, ...”
- ▶ What’s that?
- ▶ “I’m just reading out the mat. There are 8 wide and 7 thin, so wides win!”



- ▶ Him: “Do I have more than one thousand pieces of Lego?”



- ▶ Him: “Do I have more than one thousand pieces of Lego?” Yes!
- ▶ As a bonus, we noticed 1,000 is a square number.



Object graphs





red 22
orange 5
yellow 11 1/2
green 17 1/2
blue 22
purple 2
grey 9
white 13
brown 10
black 5



Ships

Ground vehicles

Droids

Han in Carbonite

People who changed sides

Jedi

Bounty hunters

Pilots

Engineers

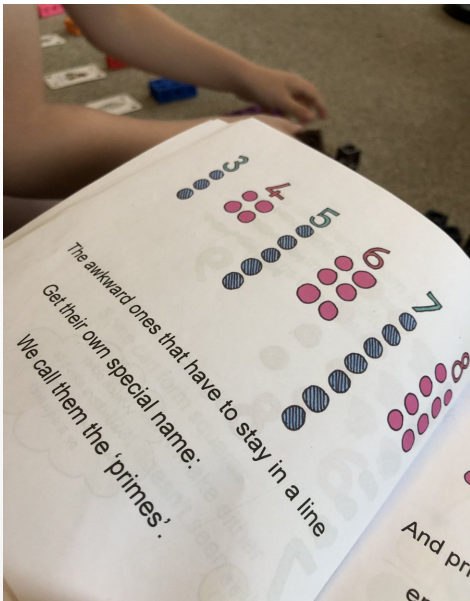
Troopers

Rebel leaders
Sith Lord

Number blocks

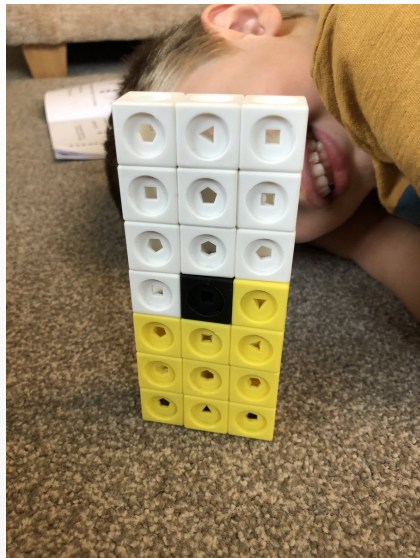


Here Come The Numbers by Kyle Evans



Three of his conjectures

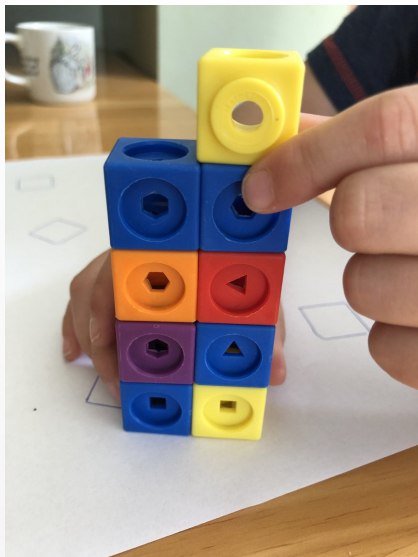
21 is prime



99 can break into some 6s and one 3.



All squares are even



Thinking big

Sillion

- ▶ He invented a number “sillion”, in the line of million, billion, trillion, etc. except it's silly big, and behaves silly
 - ▶ there are no bigger numbers than a sillion;
 - ▶ if you adds lots of sillions the total get smaller.



- ▶ “There’s no first number! It goes on and on forever backwards and on and on forever forwards.”
(Heavy sigh.)
“We’ll never know what the last number is.”

4yo proof

- ▶ If I lined up all the numbers, would there be more odds or evens?
- ▶ Him: “The same.”
- ▶ How do you know?
- ▶ “There’s evens between odds.”

Play in education

- ▶ I am not qualified to speak about early years or primary education.
- ▶ But: Game Theory and Recreational Mathematics (final year undergrad).
- ▶ bit.ly/recmaths-free



Game Theory and Recreational Mathematics module book

Peter Rowlett, Alex Corner and Katie Steckles

2019/20

Thanks!

Share conversations:

#tmwyk

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Mathematical Objects Podcast



aperiodical.com/podcasts