# #1 - Nintendo Wii Sports Golf Subtraction

4 Player round

Start by making a note of the length of the hole you are about to play (A).

Choose someone to come out and tee off. When their ball comes to a rest it will show how far to the hole (B). It dnoes not show the length of their shot – so complete the subtractio with the class A – B = C (shot length)

We repeated this for the other three players.

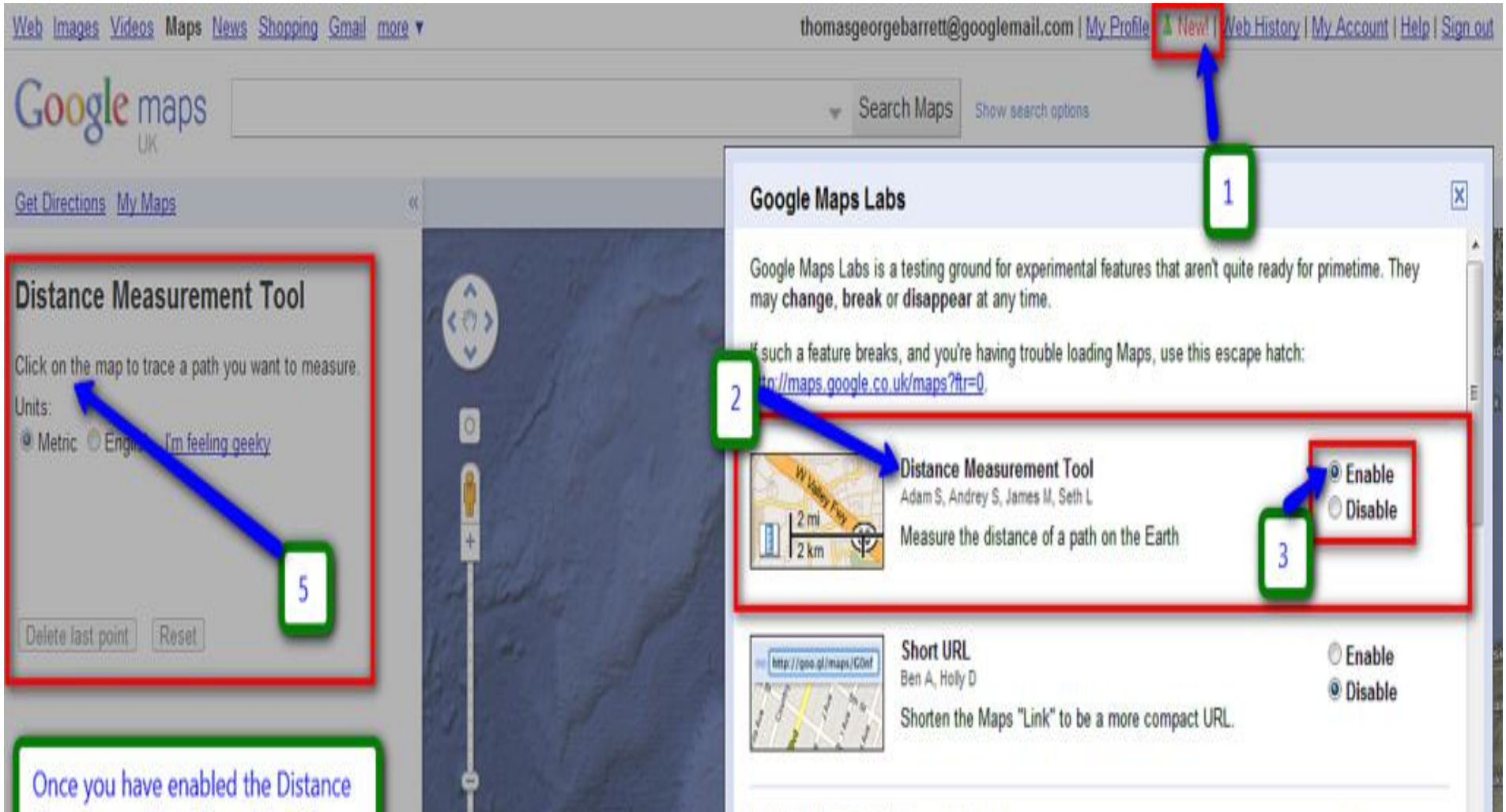

*Pic: Look at Mii golf!*

More here

@tombarrett

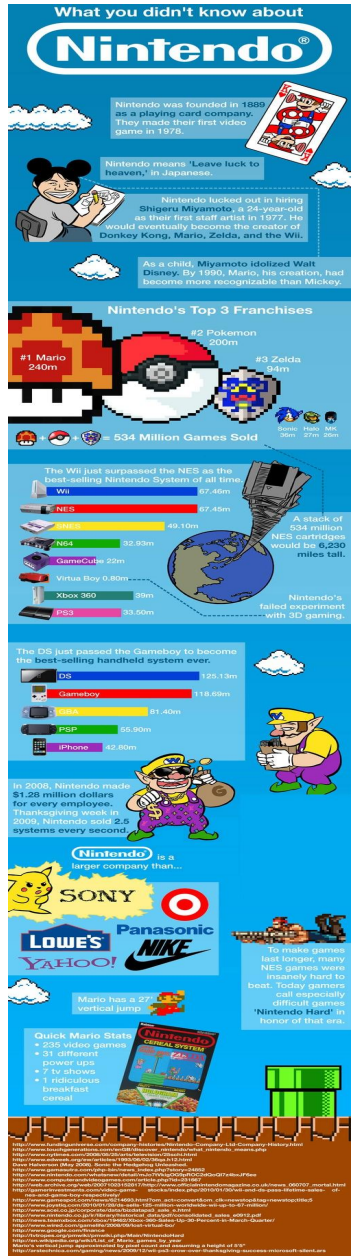
# #2 - Distance Measurement Tool

Use the Distance Measurement Tool in Google Maps and the varied units of measurement to compare lengths on your school grounds.
[Smoots Away!]

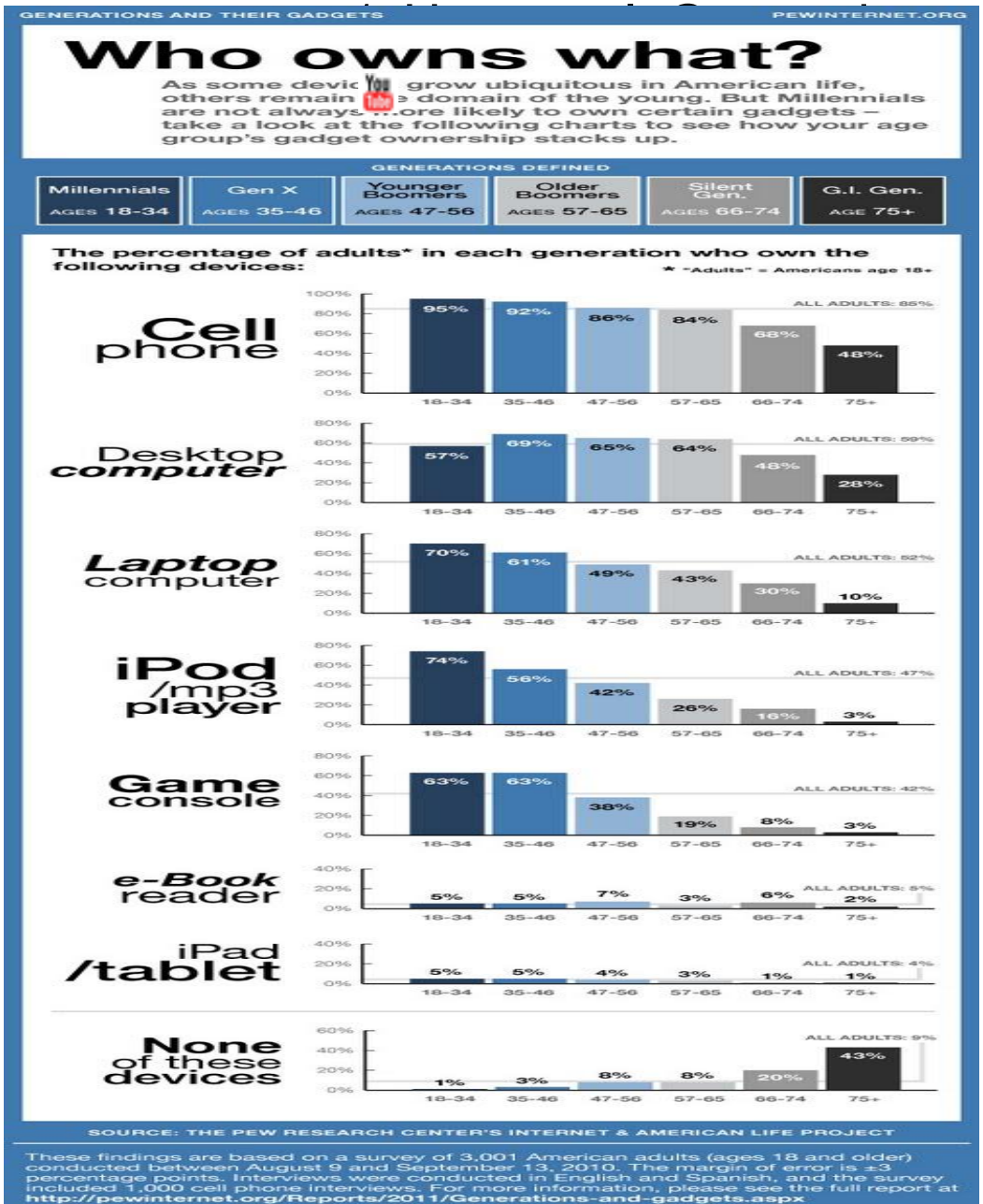


# #3 - Infographing and estimation

1. Use
2. [edu.glogster](edu.glogster) to [info graph](info graph) (this is the clean version!) an article for estimation of units of Consoles sold totally, yearly, monthly, weekly daily etc. See [this](this)
3. Research the topic relate to history of Consoles see how they changed.
4. What are bits, binary?




@glennmalcolm



# #4 - How long ago was...

I've often struggled to get numeracy into the history classroom. Here a couple of ideas that work quite well...

Midway through introducing a new topic I'll pause and throw out 'so how long ago was this...'. Students have 60 seconds to come up with an answer.

**All** answers are added to the board. Any obvious mistakes are corrected by other class members and then we do the maths together on the board.

I then work the answer into the next part of the introduction!

@davestacey

# #5 - Timelines

A good way of getting students to think about showing data is to constuct a timeline. Depending on the age group, you can skip some of the steps.

- Extract a list of dates from some text
- Put them in chronological order
- Work out a suitable scale (remembering the gaps between years should be equal)
- Mark the events in the correct place

**Variations**

- Add events that lasted several years
- Consider getting students to 'rank' something link importance on the y axis. Have a look at this page on thinkinghistory for some ideas on how to develop this
- Use something like ditpy to create an online version (note, I'd have the conversation about scale etc FIRST, to keep the numeracy focus)

@davestacey

# #6 - WolframAlpha

Try WolframAlpha to support Maths (and other subjects).

For some questions younger children could try see this WolframAlpha blog post.

Look at the fun facts on Twitter.

The extensive gallery of examples should provide plenty of inspiration.

You can even say hello! For more fun questions see Slideshow 6 here.

Colleen Young

# #7 - Use TenMarks

TenMarks is an free on-line supplemental program for students in grades 3 through high school.

Teachers may set up their classes and assign content for their students.

Go to TenMarks to register for the program.

@sallyboone

# #8 - Use Khan Academy

Watch Sal teach almost any math skill from basic math to advanced math and science.  Along with the 2,000+ videos, there are self-paced lessons.

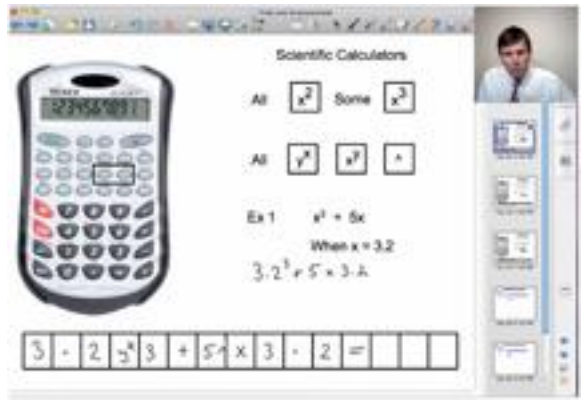
Watch this lesson on multiplying fractions.

Search the library for specific lessons.

@sallyboone

# Watch proper lessons online - then have a go!

themathsteacher.com has some free videos (but the whole package is only £20).




You could ...

Choose the topic, play the video to the class and spend your time working with small groups.

Set a video for homework and then work through the examples together in class.

Provide a supply teacher with the video so that no learning is lost.

Use the videos for CPD.

Provide the videos for any long term absentees/illness etc.

# #9 - Make a film to teach others

After teaching new skills or concepts, students take on the role of teacher as they think of a way to teach the new learning to others. Students pair up to design their demonstration or lesson. One partner uses a flip video camera to film the other teaching. Videos are viewed by the class and posted to Youtube and our class blog for a larger audience. Research shows that we remember 90% of what we teach to others. We are teaching to learn....
Here are a few examples:

Expanded Form
Adding 3 digits with regrouping

Cheryl Arnett

# #10 - Use Geogebra

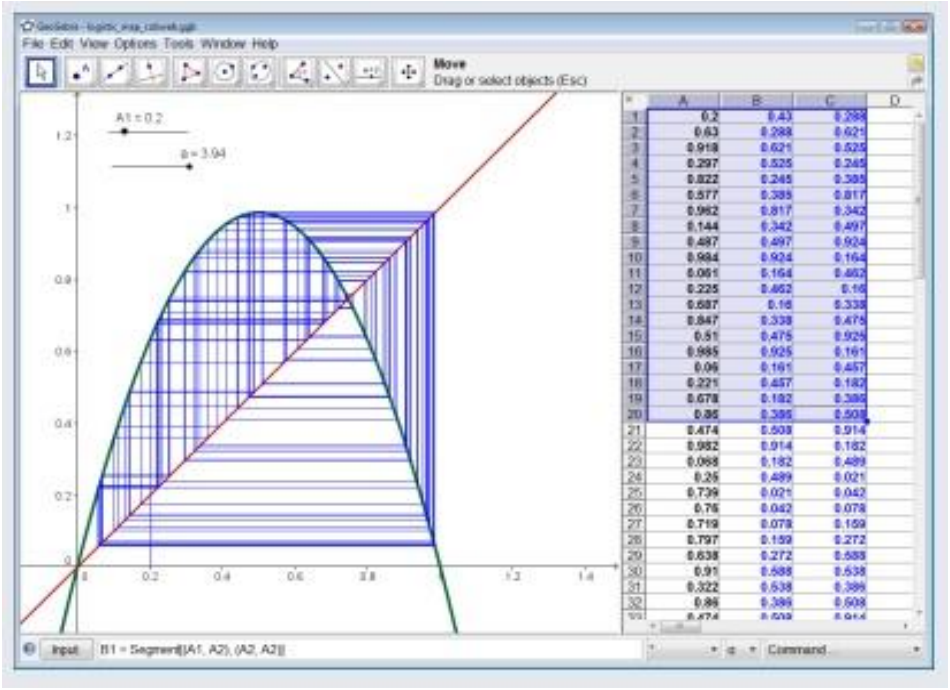
From the Geogebra website:

> *GeoGebra is a free and multi-platform dynamic mathematics software for all levels of education that joins geometry, algebra, tables, graphing, statistics and calculus in one easy-to-use package. It has received several educational software awards in Europe and the USA.*

Geogebra can be freely downloaded and there is extensive documentation, a helpful forum and a wiki with free resources.

It takes a bit of getting used to but is worth it for interactive worksheets and graphs. The pages can be easily embedded in websites etc. And best of all it is free!

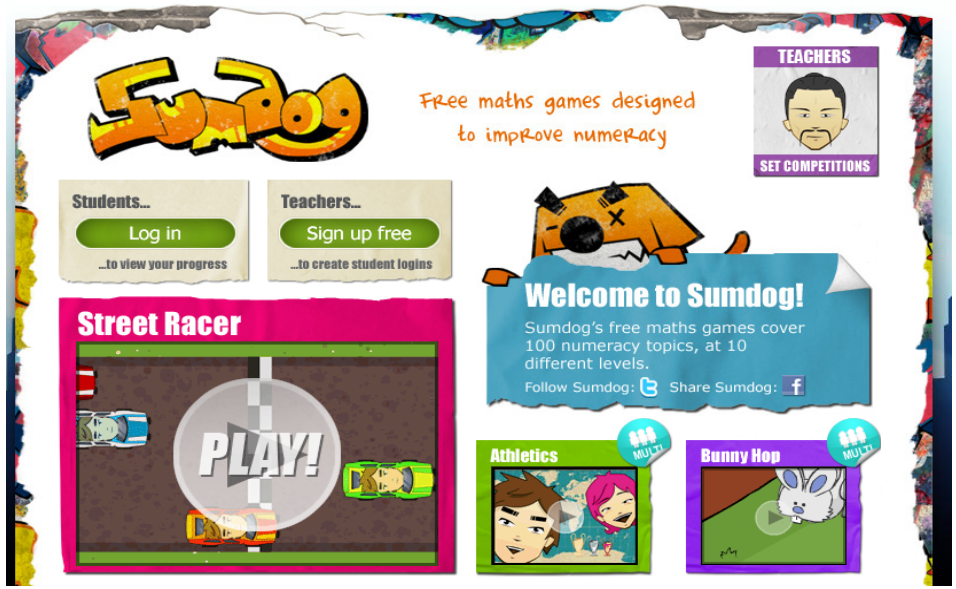
@cjshore



# #11 - Use online games e.g. SumDog

Numeracy games can often be seen as more suitable for the primary classroom, but I found some very useful for disaffected & struggling year 11 students.

I used SumDog - mostly because it's free, easy and doesn't look too 'young' for older students.
Simply set up competitions within the class (or with players around the world).
I found it a brilliant way of improving core numeracy skills in a class who were fairly switched off to learning Maths.




www.sumdog.com

@fionahenryvital

# #12 - I want to be a Mathematician

Played just like I want to be a Millionaire!
Fastest player to answer a really hard maths question gets to try the Mathematician questions!
Including:
Call a Friend-ask someone else in the class
50/50-where two answers are taken away
Ask the Audience-player gets to ask the class to vote on correct answer!

All you need now are some prizes for the £1000 £32000 and million pound questions!

Great for tables or any kind of maths in class!

# #13 - Create a Maths Game


Use [What2Learn.com](What2Learn.com) to create a game based on Maths Knowledge. Create a single class login, make your games and play them and those from other people too.

@idletim

# #14 - History of Maths in Context

Make a list of what ancient people needed maths for?

- Taxation
- Building
- Surveying
- Bartering
- Craftsmen
- Proportions in Artwork
- Rationing Bread

Can you gather some evidence that they did this?

# #15 - Everyday Maths

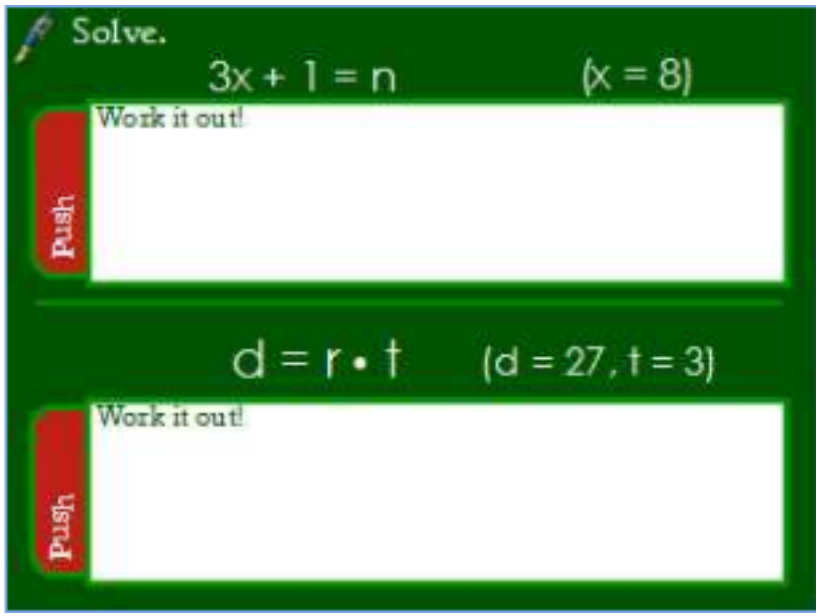
I used to teach Math to people who found math very difficult. Most of them were concrete thinkers who needed more real life math examples and needed to get their hands on what we were learning in order to realize they were using math every day without thinking about it. Since many of their math issues started with not understanding the concept of fractions, I started by getting them to think about how they used pieces of something in their everyday life. Pretty quickly they identified cutting and measuring various items as examples. At that point, I usually brought in a pizza and got them to cut it in ½, ¼ etc. I then put 2 slices on one plate and talked about it being 2 pieces of pizza that was cut into 16 pieces (my class size). They then did the same with different numbers on the plates while someone else wrote the proper fractions on the board. At this point they ate the pizza and we continued the discussion with adding and subtracting. After lunch, they did paper based drill and practice much more willingly than previously.

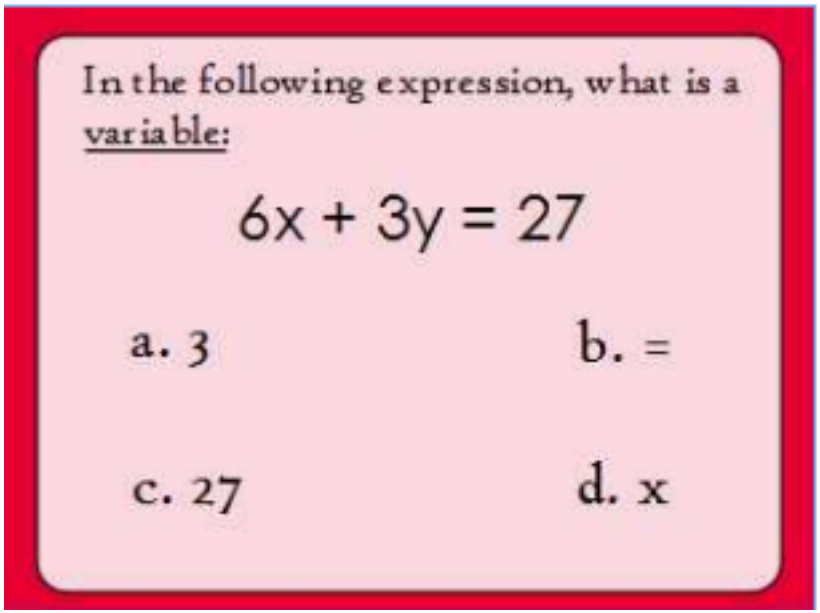
The real test came with the concept of increasing or decreasing something because that is how many people use fractions in their day to day life. I liked to start with recipes because measuring ingredients is something they usually understood but the idea of doubling or halving was less clear, let alone 1/3 or 3X of something. Long story short, they took turns in small groups figuring out how to increase and decrease ingredients, then convert the process they used to a math formula. We then continued by discussing how a carpenter, chemist or clothing designer would use these formulas. I usually rewarded them with a cake made with 2X the recipe. This also acted as a refresher because they had to demonstrate how to cut it into 16 even pieces.

Deirdre Bonnycastle

# #16 - Interactive White Board Tools

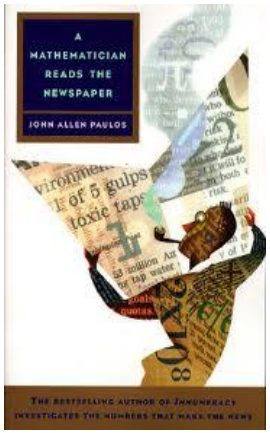
ActivInspire and SMART Notebook come with some great math tools, i.e., a protractor, ruler, compass, dice, flash games, video, voting devices, pen tool, highlighter...



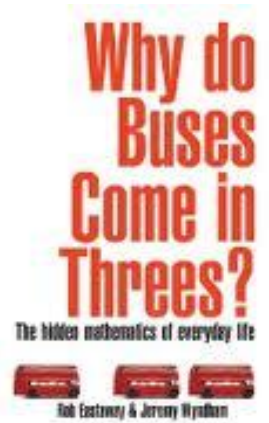




@cheryltice
USA

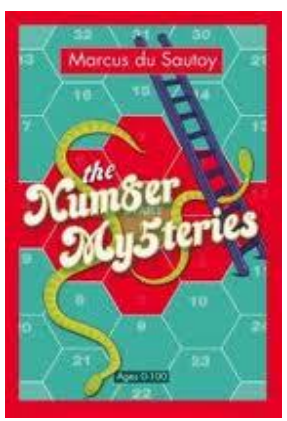
# #17 - Reading aloud from great books!



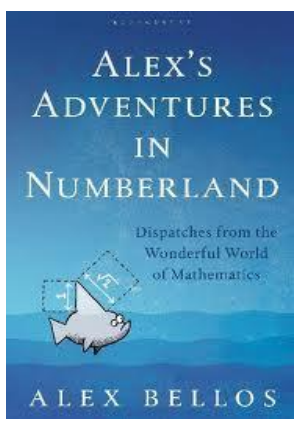

[A Mathematician reads the newspaper]



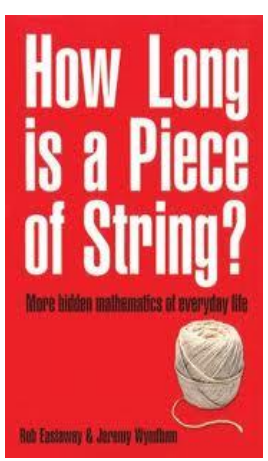

[Why do buses come in threes?]




[The number Mysteries]




[Adventures in Numberland]

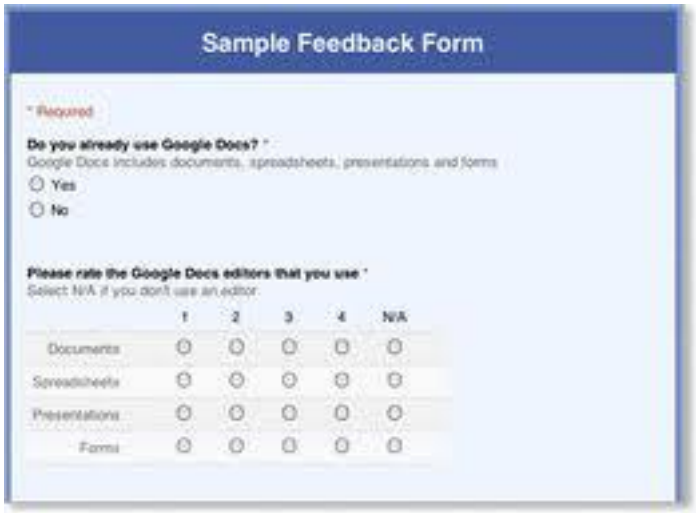



[How long is a piece of string]

These and other great books are a great read for maths teachers and students a like. I like to pick out some of the stories and curiosities a read about them to students. Its just a bit different and can really help engage some curiosity in students!

@teachmaths, The International SChool of Toulouse, France
allthenobles@gmail.com

# #18 - Use google forms to collect real data




Google forms are a fantastic way of collecting real live data. You can do it locally or spread it out around the world with a click of a button and then watch the results come in live! Students (and me) love it! Video below gives an outline!

Here are a couple of examples
Live data for Independence tests This took about 6 minutes to put together and can then be sent to whoever you want. We will use the data a day later with the students who thought of the questions.

International Student Survey a project we started to try and collect data from students all over the world for use with 11 - 14 year olds.

Doesn't have to be a big project - and can be fun jsut with your class!

PLUS - see interesting ways to use google forms


@teachmaths, The International SChool of Toulouse, France
allthenobles@gmail.com

If you would like to:

- Contribute your ideas and tips to the presentation.
- Let me know how you have used the resource.
- Get in touch.
  You can email me or I am @tombarrett on Twitter

If you add a tip (or even if you don't) please tweet about it and the link so more people can contribute.

*Image: 'Sharing'*

I have created a page for all of the **Interesting Ways** presentations on my blog.

The whole family in one place :-)

Thanks for helping
*Tom Barrett*

Have you seen Maths Maps yet?