Using ICT In Primary School Mathematics

bit.ly/bett0114
Any views expressed here are my own.
There is no single right way.
Other apps, programs and environments are available.

DISCLAIMERS

No basic skills were harmed in the making of this presentation.
In arithmetic, the representation of figures results in a large proportion of entrants (to trade courses) have forgotten how to deal with simple vulgar and decimal fractions, have very hazy ideas on some easy arithmetical processes, and retain no trace of knowledge of algebra, graphs or geometry, if, in fact, they ever did possess any. 

“In both primary and secondary schools, teachers should use their judgement about when ICT tools should be used.”

The national curriculum in England Key stages 1 and 2 framework document September 2013 (p100)

“Problem solving and investigative approaches are central to learning for all pupils.”

Generic grade descriptors and supplementary subject-specific guidance for inspectors on making judgements during subject survey visits to schools – Ofsted 20th December 2013 (p8)
So why use ICT?

1. It enhances learning.
2. It allows you to do something that can't be done any other way.
3. It makes life easier (without damaging standards).
4. It connects with children's lives outside school.
Key questions

• What are your learning objectives?
• How does the technology fit?
• What is your assessment telling you?
• Will the technology get in the way of the maths?
Babies and bathwater

243 Mathematics teaching at all levels should include opportunities for:

• **exposition** by the teacher
• **discussion** between teacher and pupils and between pupils themselves
• appropriate **practical work**
• **consolidation and practice** of fundamental skills and routines
• **problem solving**, including the application of mathematics to everyday situations
• **investigational work**

Mathematics Counts (1982)
A Revision of Bloom's Taxonomy

1. Creating
2. Evaluating
3. Analysing
4. Applying
5. Understanding
6. Remembering

Anderson and Krathwohl (2001)
CALCULATORS

1.6 x 10
3.8 x 10
7.2 x 10
23.5 x 10
2.45 x 10
8.32 x 10
9.01 x 10
17.74 x 10
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**SPREADSHEETS**

One brick is doing something different to all the rest.
Which is it?
What is it doing?
Vertically Opposite Angles

A

C

c = 131°

a = 49°
b = 49°
d = 131°

Show Green  a = b = 49°
Show Orange  c = d = 131°

ENvironments

@icttalk

CC BY NC SA
“If you really want to check you understand math then write a program to do it.”
Conrad Wolfram

PROGRAMMING
EXPERTISE AND COLLECTIONS
USING THE ENVIRONMENT

In the heat of the day
SHORT APPLICATIONS / PROGRAMS
SCREENCASTS AND ‘HOWTOS’
BEFORE I GO
Thank you for listening

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Questions?

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