Success with Primary Computing

The Hermitage Academy
Tuesday 10th March 2015

Martin Bailey *(Director – Animate 2 Educate Ltd)*

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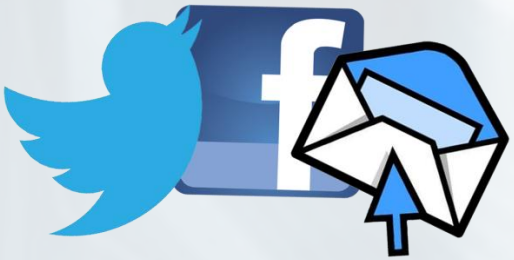

Mr Bailey is a visionary for how ICT can be used creatively to motivate, stimulate and raise standards.
Nick Anderson (Headteacher, Bede Community Primary School)

Timetable

8:45am – 9:00am: Registration and Welcome – refreshments available.

9:00am – 10:45am: **Session 1 (Curriculum 2014 - Primary Computing. What to Teach. How to Assess)**

10:45am – 11:00am: Morning Break

11:00am – 11:45am: **Session 2 (KS2 'ICT' Objectives: Computer Networks and Searching the Internet)**

11:45am – 12:15pm: Hot Lunch

12:15pm – 1:15pm: **Session 3 (Computer Programming Resources)**

1:15pm – 2:15pm: **Session 4 (Digital Literacy Resources)**

2:15pm - 2:30pm: Afternoon Break

2:30pm – 3:20pm: **Session 5 (Teaching E-Safety at KS1 and KS2)**

3:20pm – 3:30pm: **Q&A, Closing Remarks and Evaluation**

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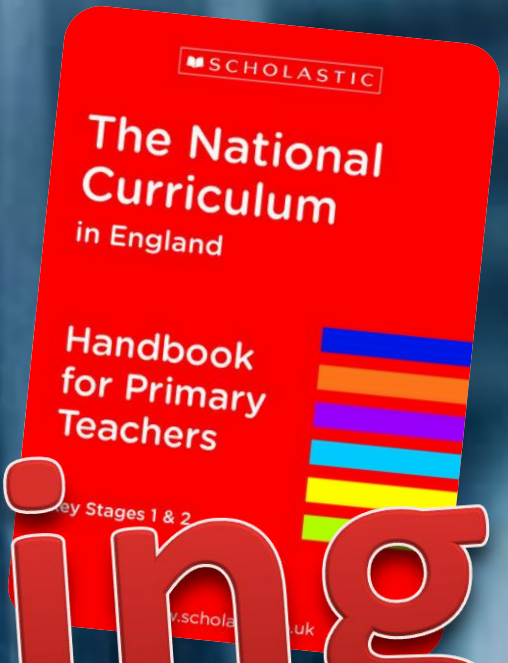
Primary Curriculum 2014



Computing

Programming/Coding

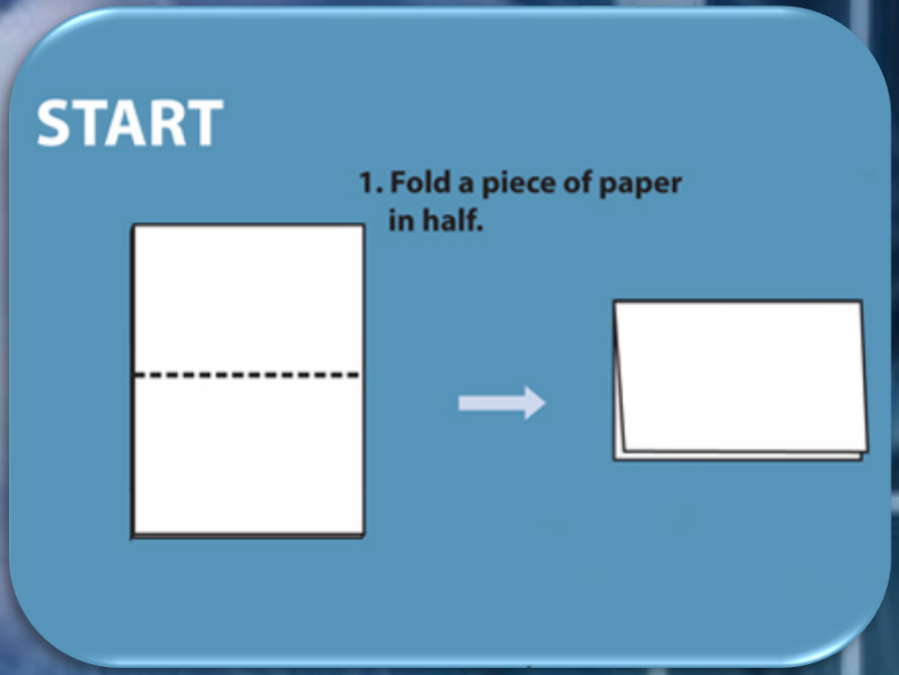
Algorithms????

Purpose of study:

A high-quality computing education equips pupils to use computational thinking and creativity to understand and ***change the world.***

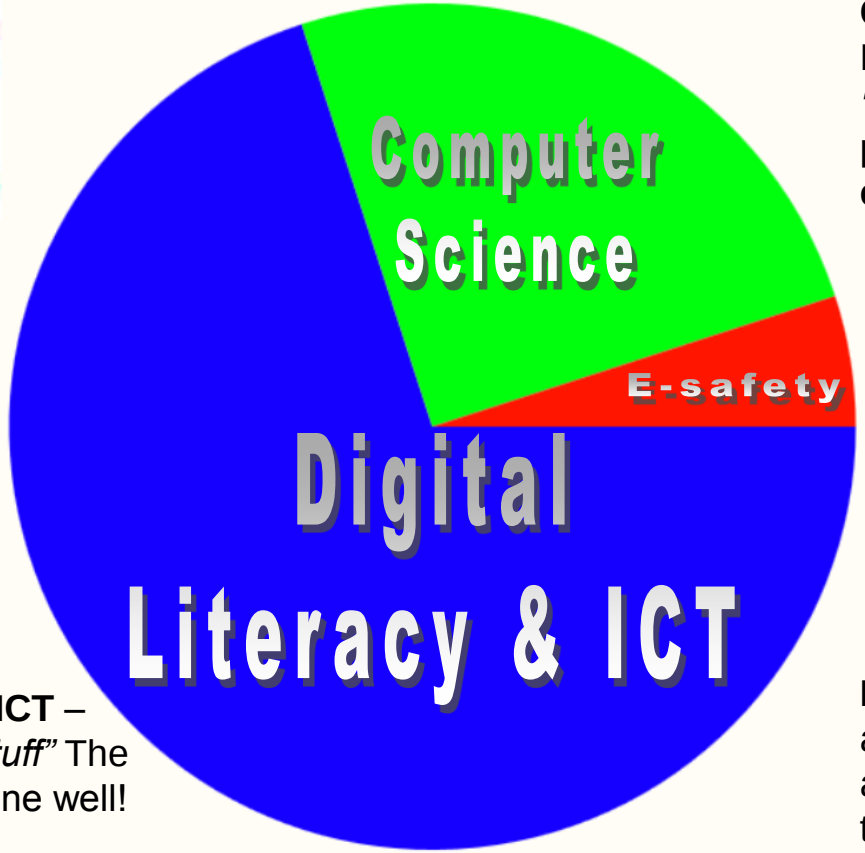
Success with Primary Computing

Algorithm: A **PRECISE** step-by-step guide to achieving a specific goal



Primary Computing

Helping you succeed with CURRICULUM 2014



Computer Science – Programming and coding. The ***'tricky bit'*** or bit that we've previously missed out! (**More emphasis)**

Digital Literacy
Computer Science
E-Safety

Digital Literacy & ICT – *"Using stuff to do stuff"* The bit we've always done well! **(Freedom)**

E-Safety – One or two lessons a year with age specific advice and then underpinned throughout the curriculum.

Key stage 1

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

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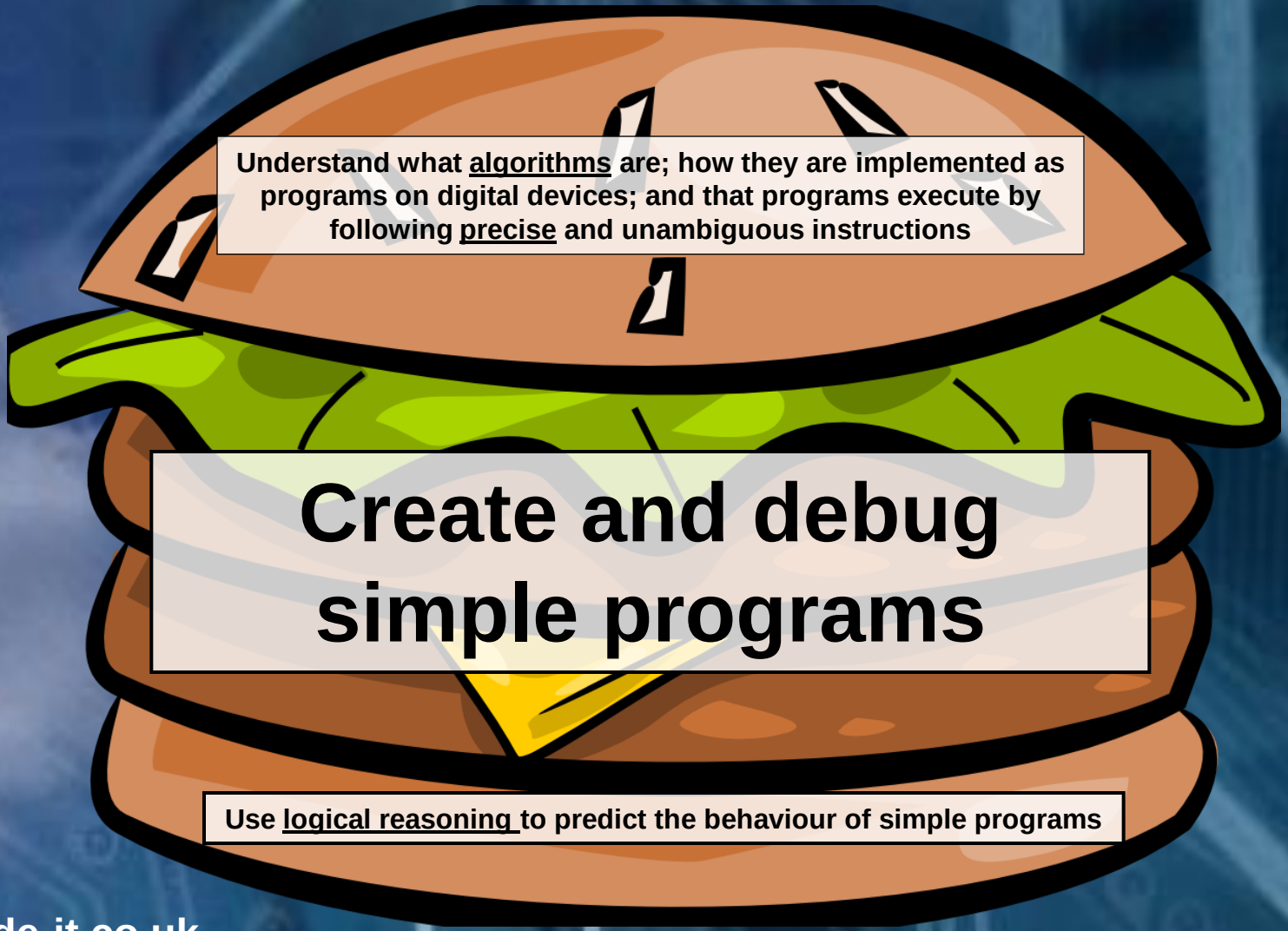
KS1 Programming Burger



Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Create and debug simple programs

Use logical reasoning to predict the behaviour of simple programs

KS1 Computer Science

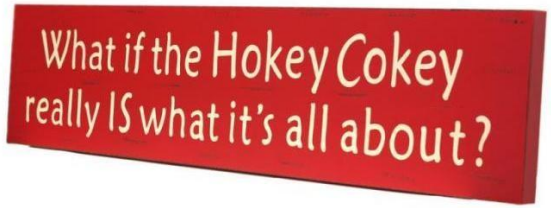
Algorithm: A **PRECISE** step-by-step guide to achieving a specific goal

- **Algorithms are written by humans for HUMANS to understand.**
- **Algorithms can be written in any format *(pictures, words, diagrams, songs etc).***
- **Programs are written by humans for COMPUTERS to understand.**
- **ALL programs are algorithms, but not all algorithms are programs!**
- **To be a program, the algorithm must be written in a language that the computer can understand.**

Algorithms

YOU PUT YOUR
LEFT LEG IN
YOUR LEFT LEG OUT
IN OUT IN OUT
YOU SHAKE IT ALL ABOUT

Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*



The Algo-rhythm!

Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

The Algo-rhythm!

Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Algorithms

PE lessons etc are a great place for introducing algorithms. We all have our own personal *'getting ready'* algorithm. Pupils need to understand that ***'put on shoes'*** is not a single instruction.

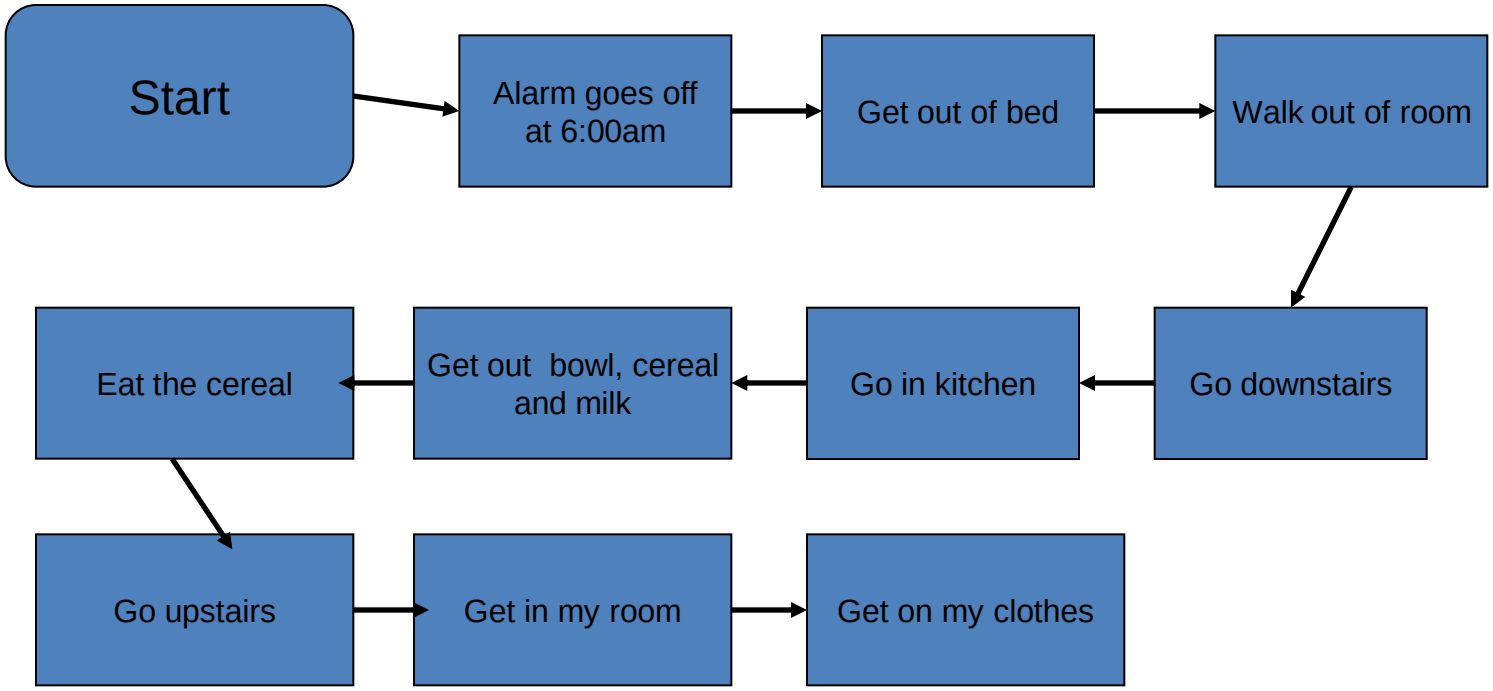
Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Algorithms

- Use the classroom, playground and school hall for lots of practical algorithms.
- Children needs lots of experience of both writing and following **PRECISE** instructions.

Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Getting Up Algorithm



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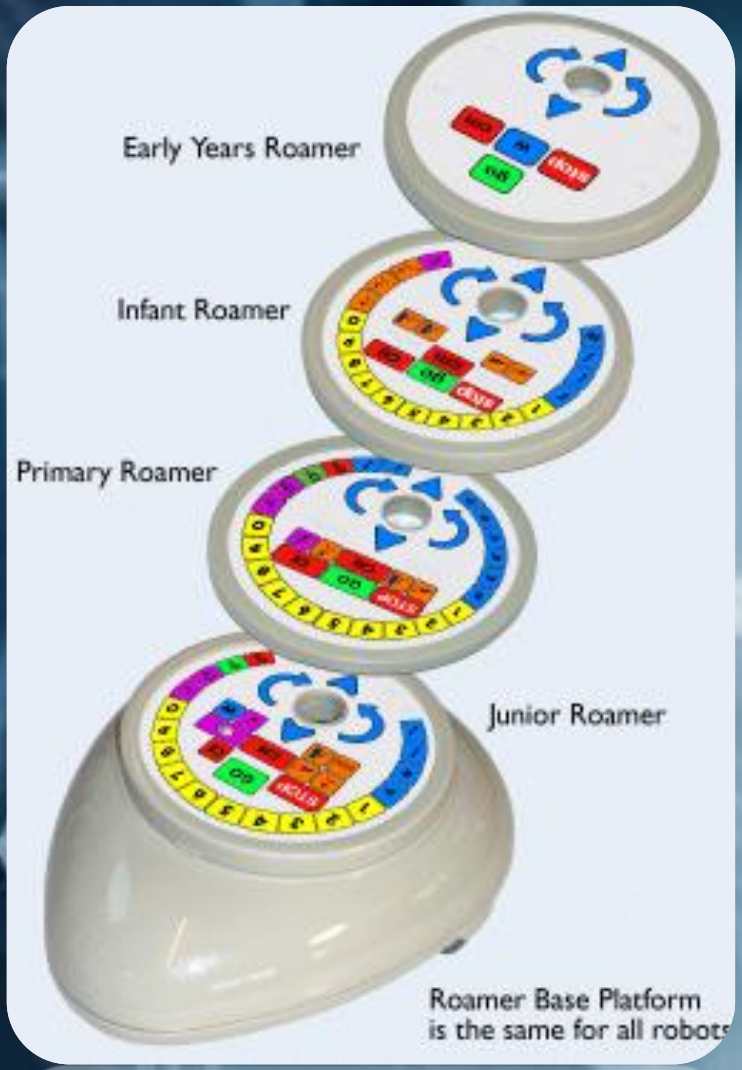
Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Algorithms



Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Algorithms & Programs

busy things .co.uk
Award winning activities for nursery and primary

Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Program – *An algorithm written in a language that a computer can understand.*

Key stage 2

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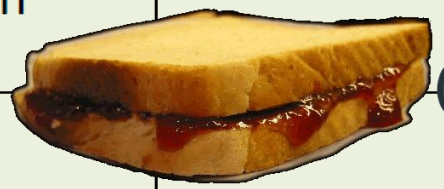
Pupils should be taught to:

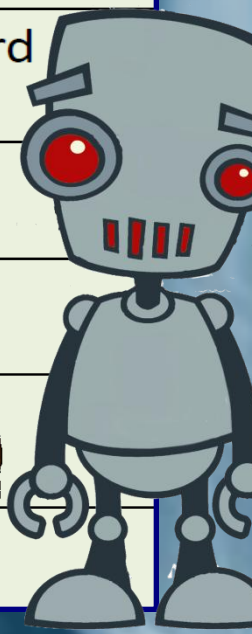
- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Sandwich Bot

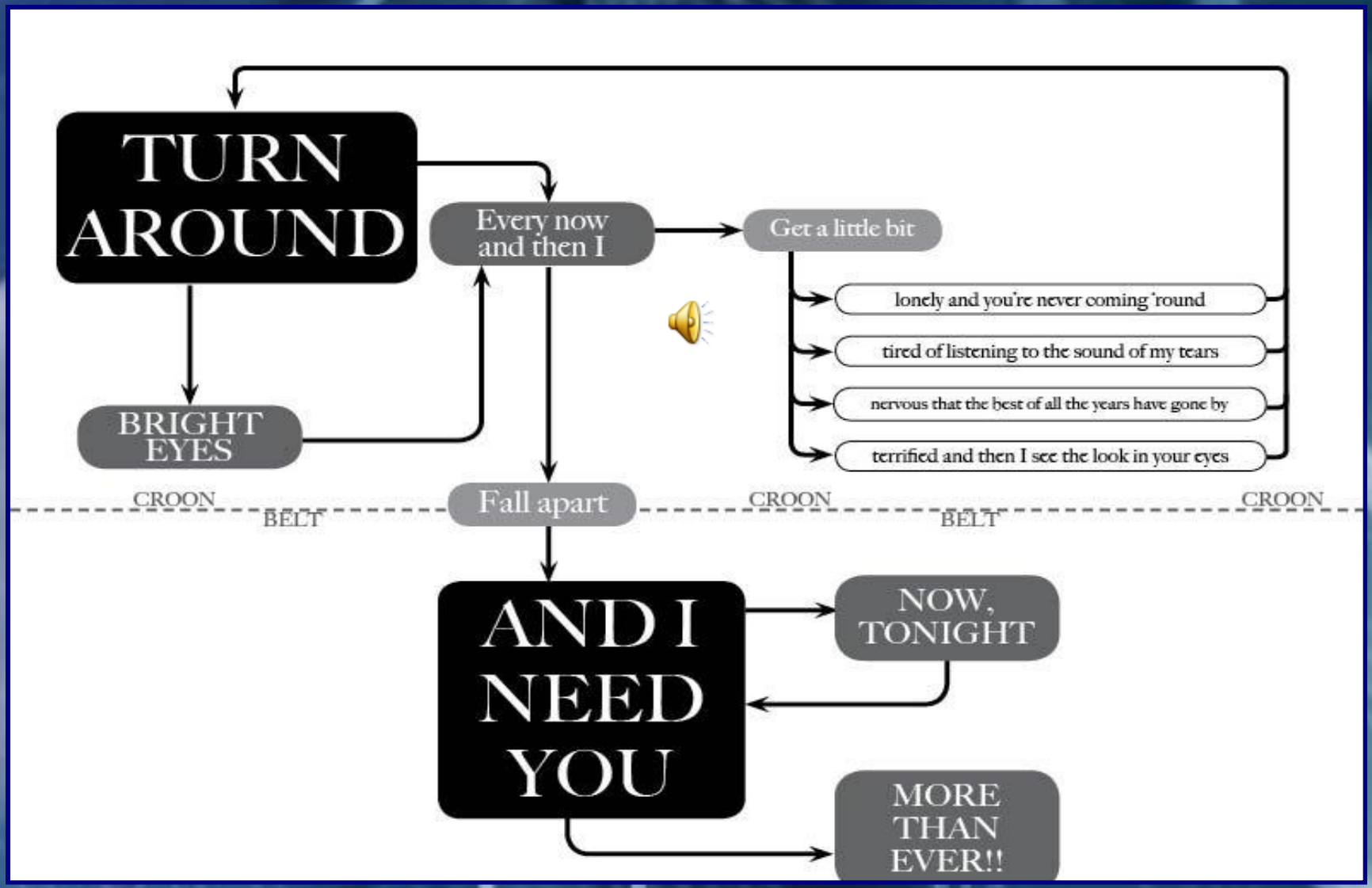
precise and unambiguous instructions

Right Hand	spread	butter	fast
Left Hand	scoop	tub	repeat
Pick up	packet	bread	hard
Press down	knife	slice	soft
cut	blade	plate	forward
Put down	handle	turn	back
hold	jam	top	put
unscrew	jar	bottom	
remove	lid	slow	

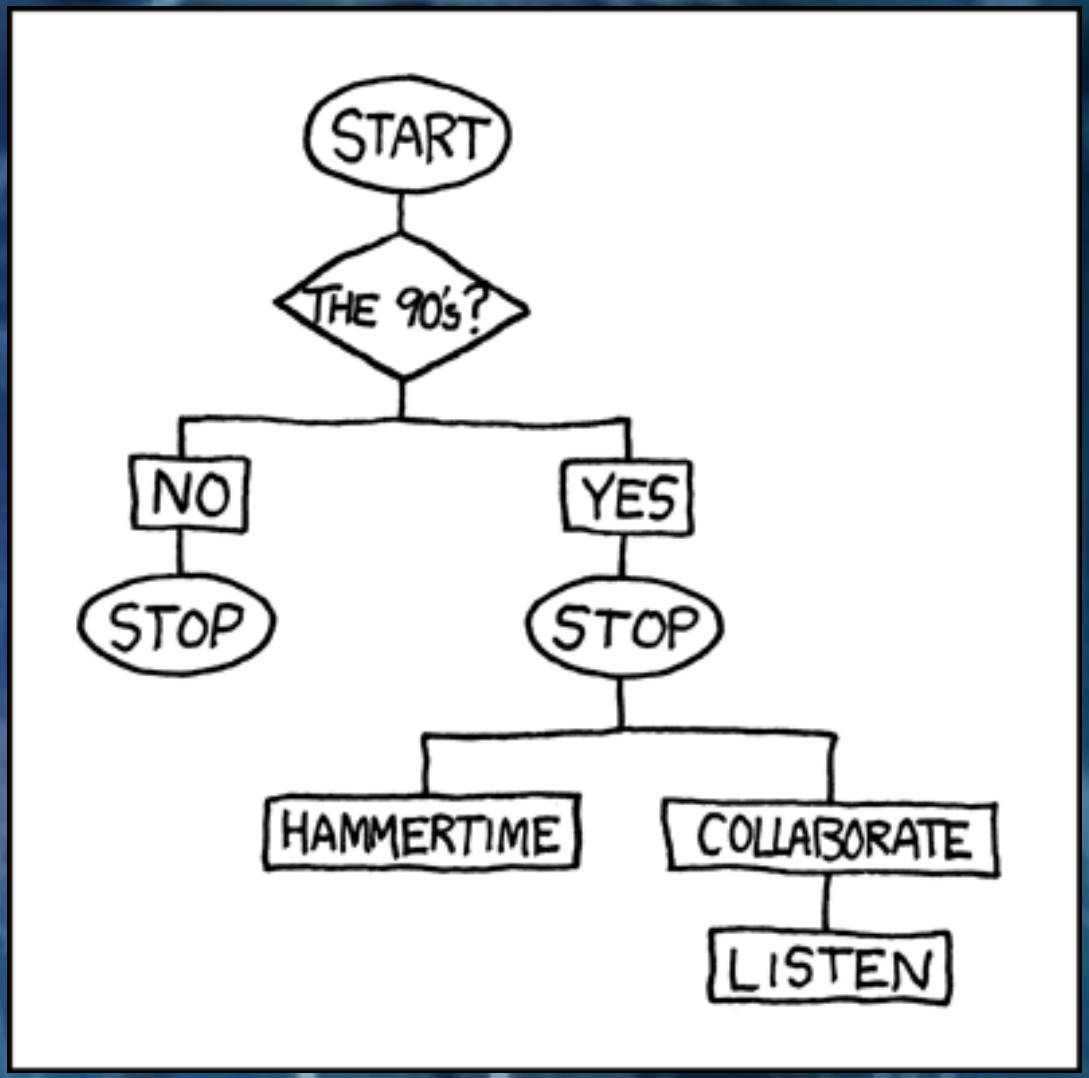




The Algo-rhythm



90s Music Algorithm



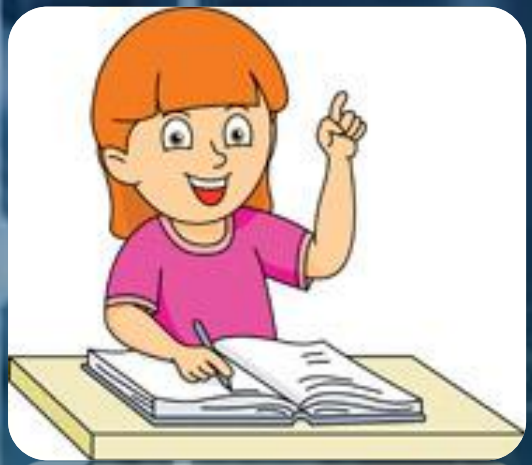
Algorithms in the Classroom

Start

Have you completed your Numeracy work?

YES

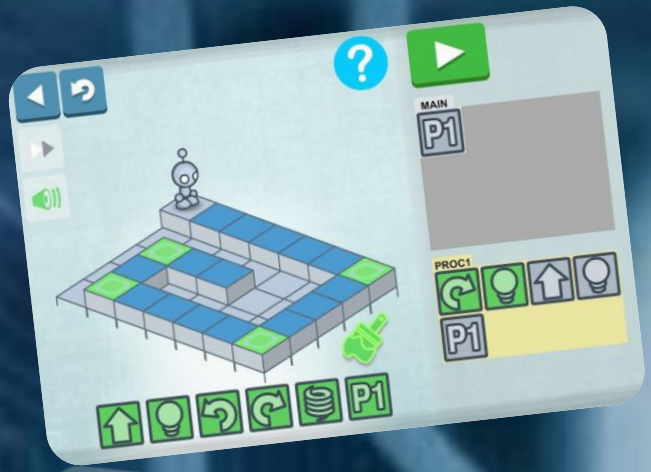
Go out for playtime



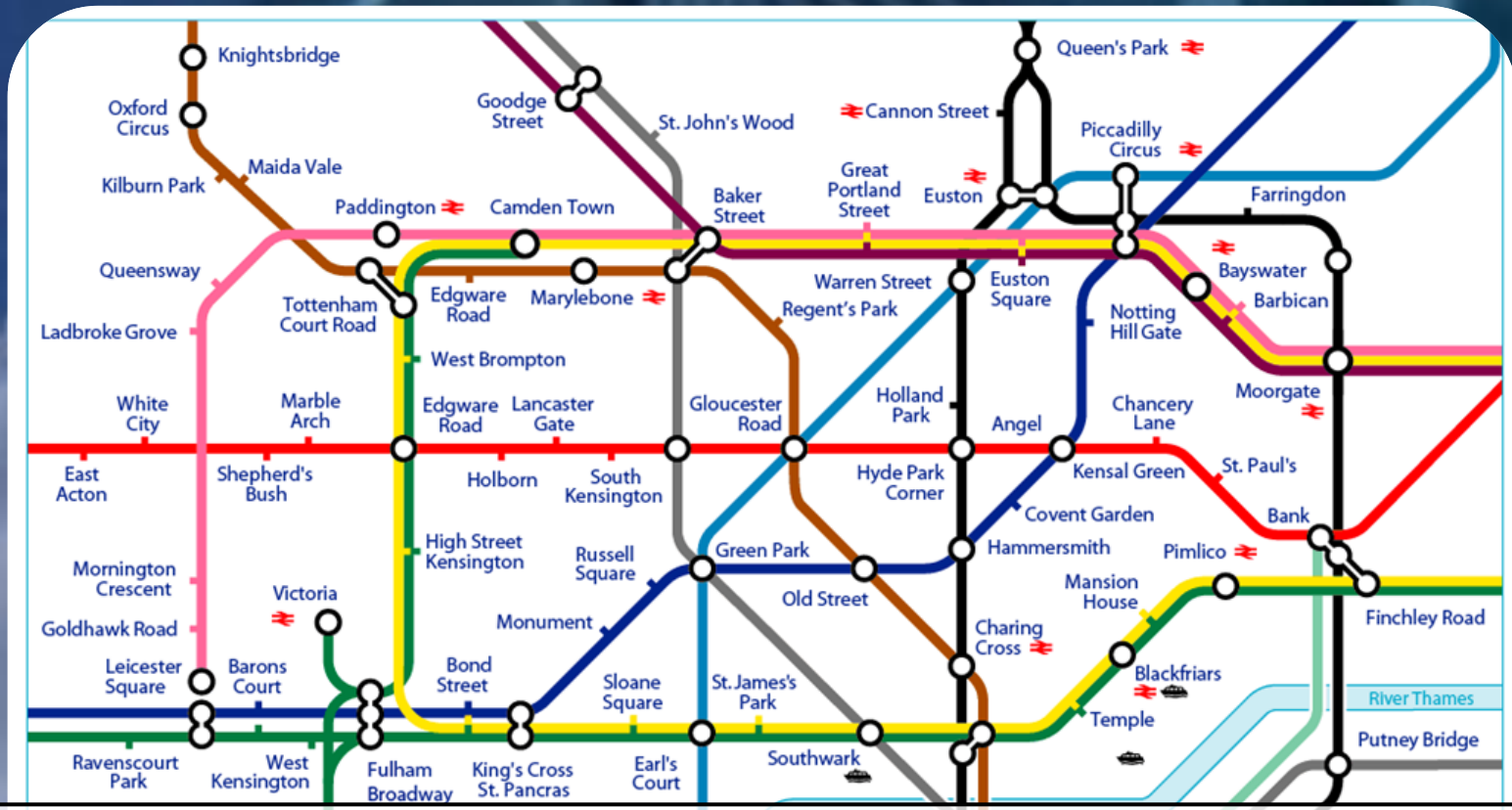
NO

Stay in and finish your work

Maps and Algorithms



Underground Algorithms



Algorithm: A **PRECISE** step-by-step guide to achieving a specific goal

Underground Algorithms

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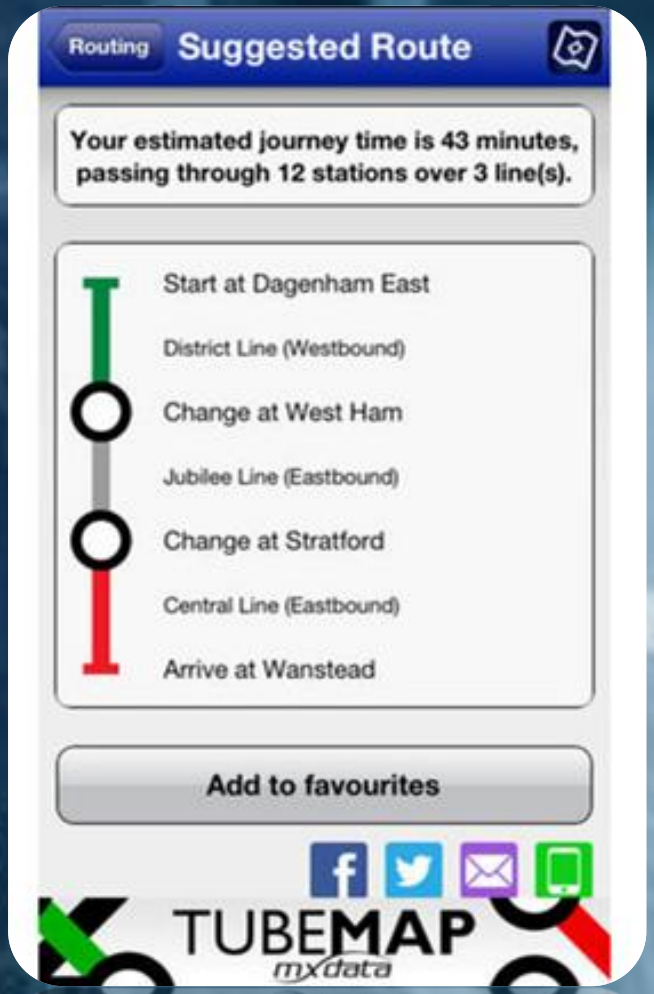


- Pick 2 cards. Plan a PRECISE route between your chosen stations *(what lines/colour? North or southbound? How many stops?)*
- Compare your route with a partner and then check accuracy and timings use **TubeMap** app.

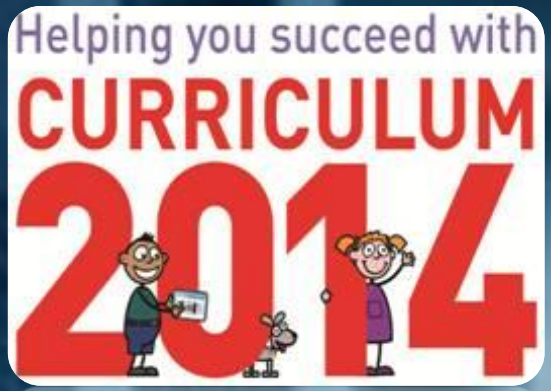
- Verbal instructions – Give your partner a starting point on the Underground map. Have a second point in mind. Can you give **PRECISE** instructions to that point? Did your partner arrive at the correct destination?

Computer Programming

Coding

+

Computational Thinking



PRECISE Instructions

How to draw Tribob algorithm

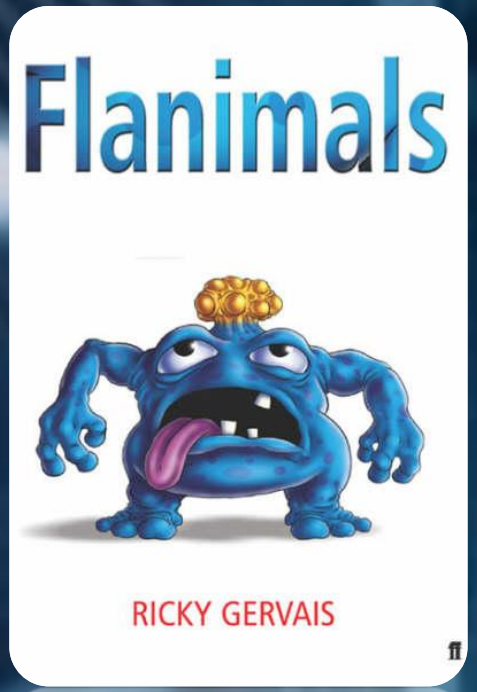
draw a triangle for the body

add 3 tiny eyes

add three wings with stripes

add three tiny legs at the bottom

add a tail



Death by Scratch!!!

Computer Programming

- This is a gradual process that will take 2 to 3 years to introduce for both pupils and staff . . . ***you can't go straight to the more formal languages without first having learnt the basics!*** Time in staff meetings will need to be allocated each year for developing computer programming skills.

- Long term children need to **be exposed to more than one programming language**.

- Not only is using only one language boring, but it also restricts their computing knowledge and understanding and limits how creative their programming outcomes can be.

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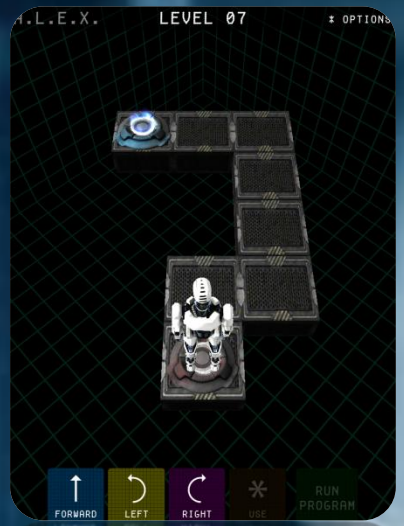
Algorithms & Programs



Algorithm – *A **precise** step-by-step guide to achieving a specific goal.*

Program – *An algorithm written in a language that a computer can understand.*

Digital Literacy Lessons

- Digital Literacy lessons should be **a time when children are properly taught how to use software and apps effectively .**
- OFSTED reported that too many 'ICT' lessons were no more than a History or Science lesson where the computer was simply being used as a tool. The focus was not on the ICT element of the lesson and there was little to no teaching of Computing skills during the lesson.
- **Keep the focus on the subject being taught**, is it a Literacy lesson, or is it a Computing lesson?

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L.I. To create a multimedia e-book

❶ Open *Book Creator* and tap  

❷ Create an e-book:

Good

✓ Type in text boxes 

✓ Add photos 

Great

✓ Change the text and background style:

✓ Try out different layouts

Super

✓ Record a narration

✓ Create a consistent design

Core Skills Lessons

- Don't be afraid to deliver one-off **'Core Skills'** lessons over the *year (we'd do it in Literacy or Numeracy)*. Children may need to be taught/reminded of fundamental key skills, such as:
- **word processing (digital input)** - including formatting the appearance of text and using cut/copy/paste to edit it
- **searching skills –** just like using a pencil or a paintbrush, it is important that children are taught the skills of how to search the Internet effectively
- **digital communication** - to ensure that they can all login to all appropriate school websites and can share information effectively (including social media)
- **e-safety** - to ensure that they are aware of how to stay safe online *(at an age appropriate level)*

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Independent Learning Lessons

- Once children have acquired the necessary skills, they should be given the opportunity to work independently during lesson time to develop their capability: at their own pace and in areas that they are interested in. Inspire children to use technology in creative ways *(not just use it for consuming content).*
- Tasks can be centred around current class topics, with children picking an activity that interests them *(e.g. produce a video, create a multimedia e-book, create a photo collage etc).*
- In KS1 and lower KS2 pupils may pick their activity from a given list, but by upper KS2 pupils should be making much more independent choices.
- These independent learning lessons should take place regularly throughout the year *(at least termly)* and will often require more than one *lesson (e.g. if creating a multimedia e-book).*

Computing Timetable

Autumn (1)	Autumn (2)	Spring (1)	Spring (2)	Summer (1)	Summer (2)
E-Safety and Core Skills Individual programming lessons	Digital Literacy & ICT ***Provide opportunity for independent learning lessons**	**Computer Science**	Digital Literacy & ICT ***Provide opportunity for independent learning lessons**	Digital Literacy & ICT Individual programming lessons	Digital Literacy & ICT ***Provide opportunity for independent learning lessons**

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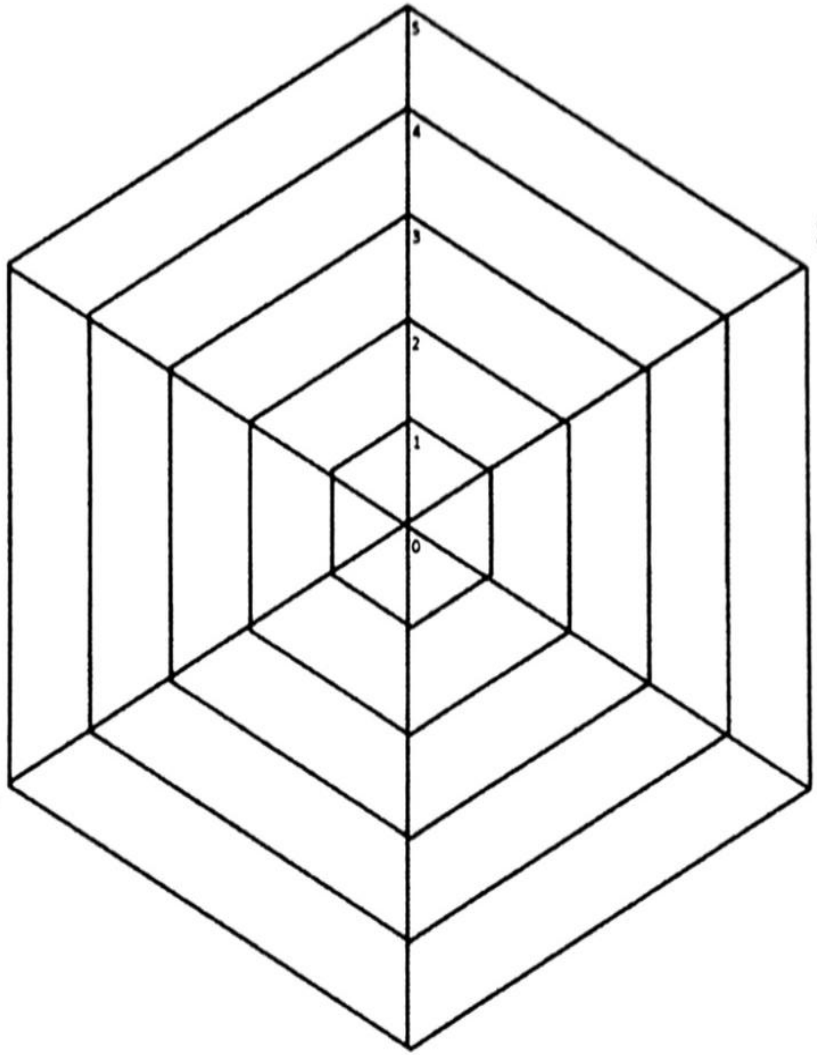
CURRICULUM 2014

Naace
Learning in a connected world



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Name:

Primary Computing - Skills Assessment

	Digital Literacy & ICT	Computer Science	E-Safety
Step 1	Understands that people interact with computers. Uses software with guidance from an adult to create digital content. Recognises that digital content can be represented in many forms. Talks about their work and makes changes to improve it. Knows common uses of information technology beyond the classroom. Can save their work using appropriate file and folder names.	Understands what an algorithm is and is able to express simple algorithms symbolically (arrow cards etc). Demonstrates care and precision to avoid errors when following an algorithm. Program a physical device (e.g. Roamer, Bee-Bot etc). Understands that programs execute by following **precise** instructions. Executes, checks and changes programs. Understands that computers have no intelligence and that computers can do nothing unless a program is executed. Recognises that all software on digital devices is programmed.	Obtains content from the world wide web using a web browser. Understands the importance of communicating safely and respectfully online, and the need for keeping personal information private. Knows what to do when concerned about content or being contacted.
Step 2	Uses technology with increasing independence to create digital content. Shows an awareness for the quality of digital content produced. Uses a variety of software to manipulate and present digital content. Shares their experiences of technology in school and beyond the classroom. Talks about their work and makes improvements to solutions based on feedback received. Recognises different types of data (e.g. text, number). Can use a range of input and output devices (keyboard, mouse, touchscreen, microphone, screen, printout, video, audio etc).	Understands that algorithms are implemented on digital devices as programs. Designs simple algorithms using loops and selection (e.g. 'if' statements). Uses logical reasoning to predict outcomes. Detects and corrects errors (**debugging**) in algorithms. Uses mathematical operators, 'if' statements and loops within programs. Uses logical reasoning to predict the behaviour of programs. Detects and corrects errors in programs (**debugging**). Understands how programs instruct the computer what to do.	Navigates the web and can carry out simple web searches to collect digital content. Demonstrates use of computers safely and responsibly, knowing a range of ways to report unacceptable content and contact when online.
Step 3	Collects, organises and presents data and information in digital content. Creates digital content to achieve a given goal through combining software packages to communicate with a wider audience. Makes appropriate improvements to solutions based on feedback received, and can comment on the success of the solution. Understands the difference between data and information. Knows why sorting data in a table can improve searching for information. Can use filters or single criteria searches for information. Knows that computers collect data from various input devices. Understands the difference between hardware and software and their roles within a computer system.	Designs algorithms that use repetition and two-way selection (e.g. 'if', 'then' and 'else'). Uses diagrams to express solutions. Uses logical reasoning to predict outputs, showing an awareness of the inputs. Creates programs that implement algorithms to achieve given goals. Declares and assigns variables. Uses a 'loop' (e.g. 'until') and a sequence of selection statements in programs, including an 'if', 'then' and 'else' statement.	Understands the difference between the internet and the world wide web (a service that uses the internet). Shows an awareness of, and can use a range of internet services. Recognises what is acceptable and unacceptable behaviour when using technologies and online services.
Step 4	Makes judgements about digital content when evaluating it for a given audience. Recognises the audience when designing and creating digital content. Understands the potential of information technology for collaboration when computers are networked. Uses criteria to evaluate the quality of solutions, can identify improvements making some refinements to the solution, and future solutions. Understands why and when computers are used. Understands the main functions of the operating system. Knows the difference between physical, wireless and mobile networks. Performs more complex searches for information (e.g. 'NOT', 'OR', 'NOT'). Analyses and evaluates data and information, and recognises that poor quality data leads to unreliable results, and	Shows and awareness of tasks best completed by humans or computers. Designs solutions by decomposing a problem and creates a sub-solution for each of these parts. Recognises that different solutions exist for the same problem. Understands the difference between and appropriately uses 'if', 'then' and 'else' statements. Uses a variable and relational operators (=, <, >) within a loop to govern termination. Designs, writes and debugs modular programs (programs divided into sub parts) using procedures. Combines a group of instructions into a single named unit (procedural abstraction).	Understands how to effectively use search engines, and knows how search results are ranked. Selects, combines and uses internet services. Demonstrates responsible use of technologies and online services, and knows a range of ways to report concerns.

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Computer Networks

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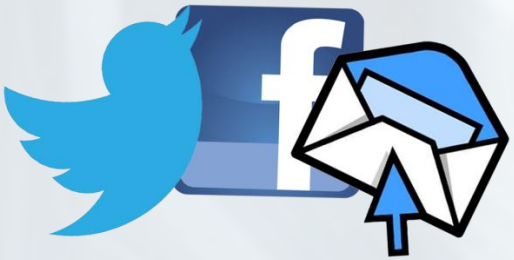

Mr Bailey is a visionary for how ICT can be used creatively to motivate, stimulate and raise standards.
Nick Anderson (Headteacher, Bede Community Primary School)

KS2 Objectives – The Tricky Bits!

Key stage 2

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
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- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

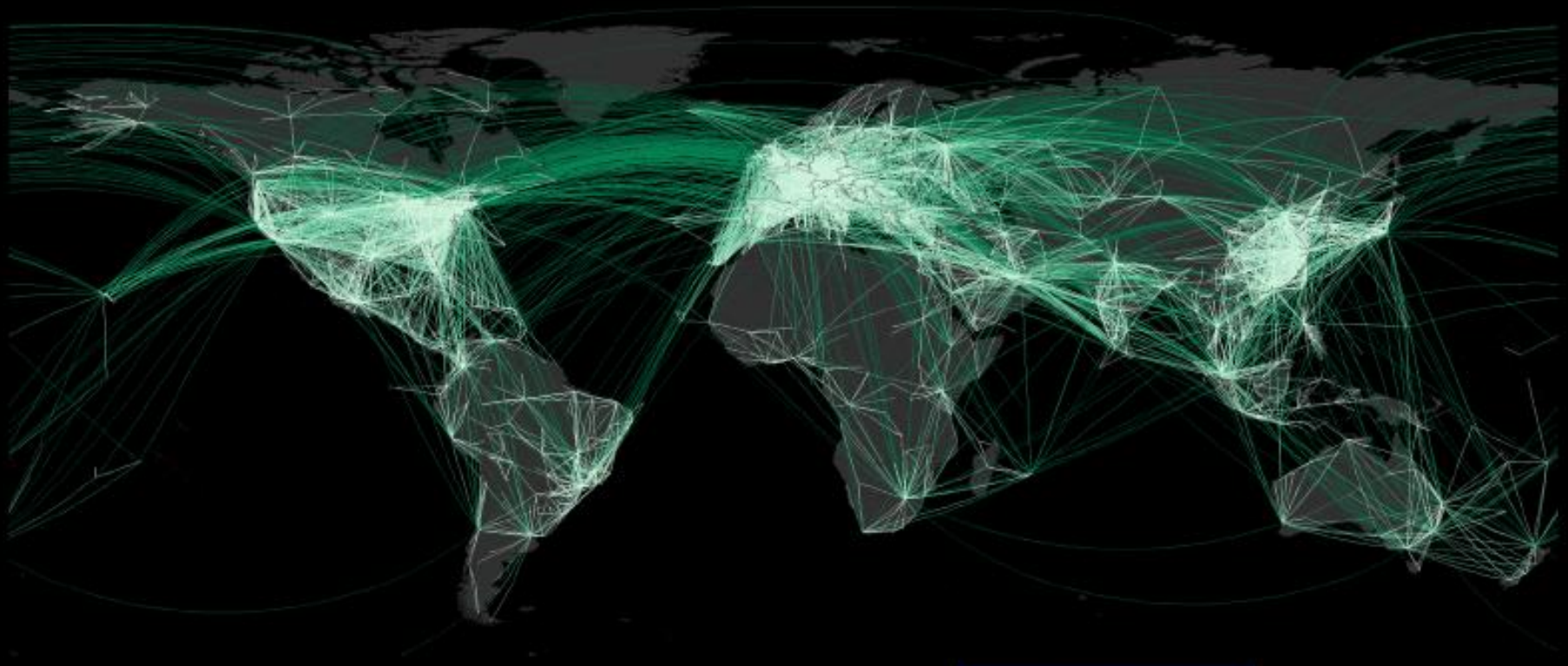
Computer Networks

- Understand computer networks including the **internet**.
- How they provide multiple services such as the **world wide web**.
- The opportunities they offer for communication and collaboration.

twitter

skype

An INTernational NETwork of computers connected together so they can share information with each other.



copper cable

optical fibre

What services does the Internet offer?

World Wide Web

A huge collection of websites with facts on, viewed in a browser

Electronic Mail

Lets you send messages to other users

Broadcasting

Audio and video can be watched and listened to online.

BBC iPlayer

Social Networking

Communicating with others who have similar interests

twitter

Internet and World Wide Web

Internet

- *Global network of networks joining computers together and allowing them to communicate.*

World Wide Web

- ***<u>One</u>** of the services that uses the Internet to share information. Web pages can be viewed on browsers and are connected via hyperlinks.*

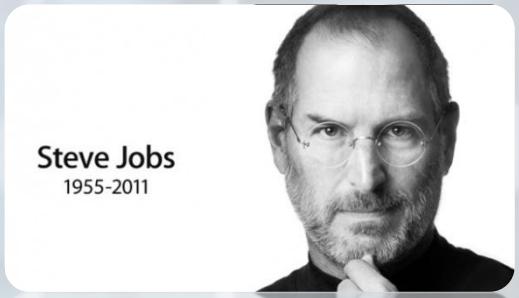
Computer Networks

- Understand computer networks including the **internet**.
- How they provide multiple services such as the **world wide web**.
- The opportunities they offer for communication and collaboration.

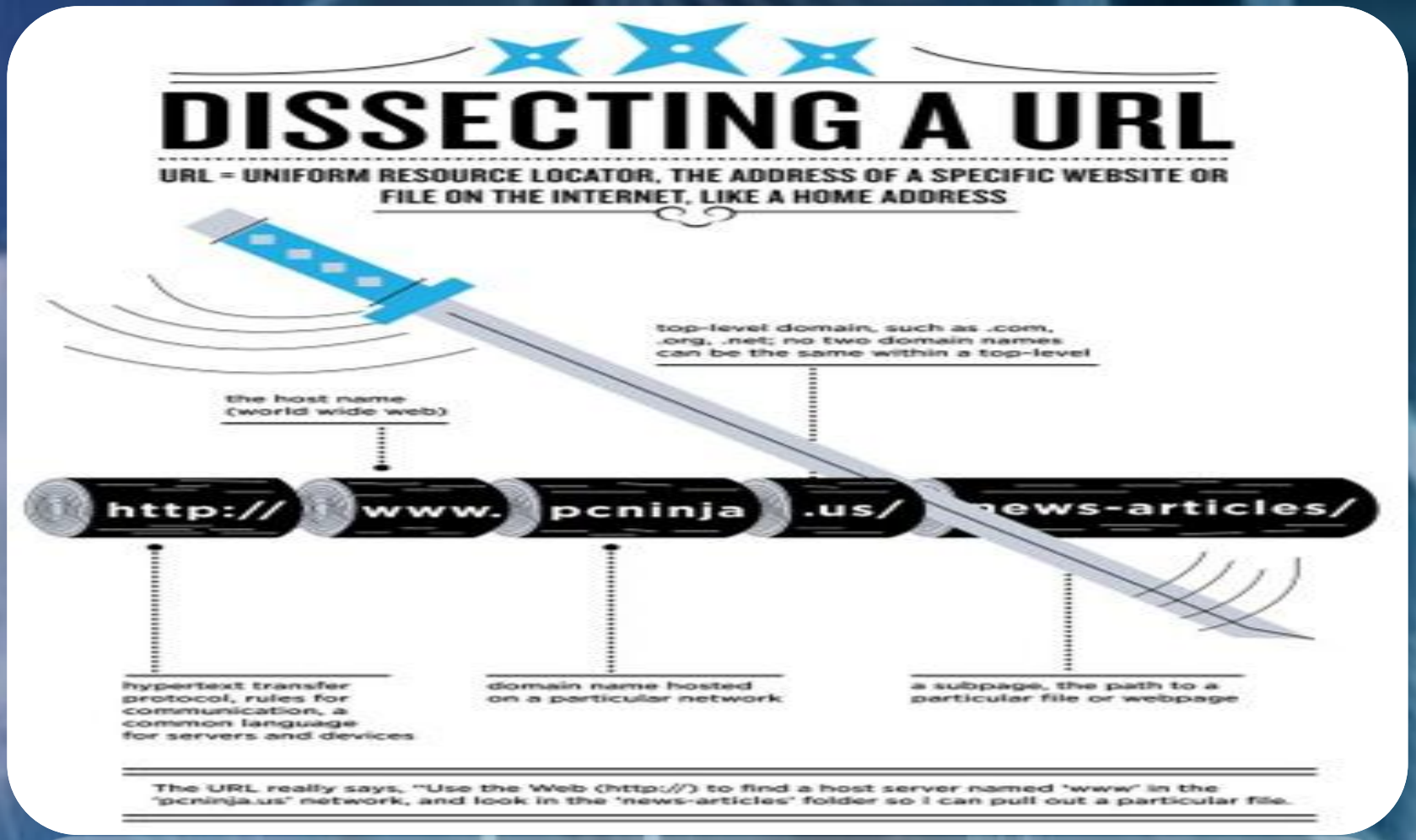
Study people who have had a significant impact on the world of Computing (Tim Berners Lee, Steve Jobs, Bill Gates etc).

***Bring Computing into your Literacy lessons** . . . . kids love this!*

Don't bring Literacy into your Computing lessons . . . . they're not so keen on this!



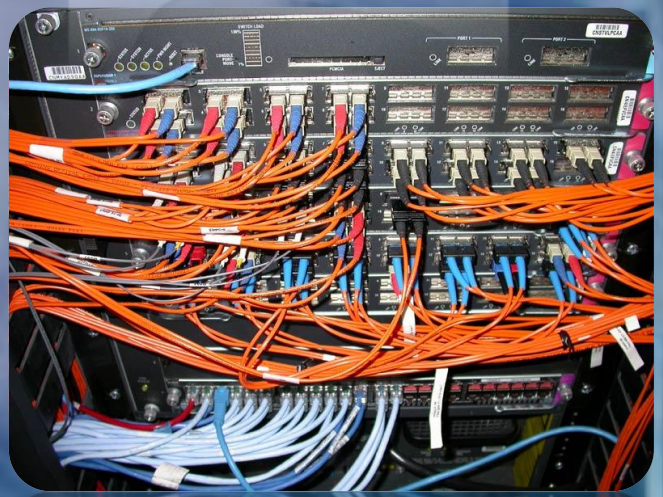
How The Internet Works



A Uniform Resource Locator (URL)

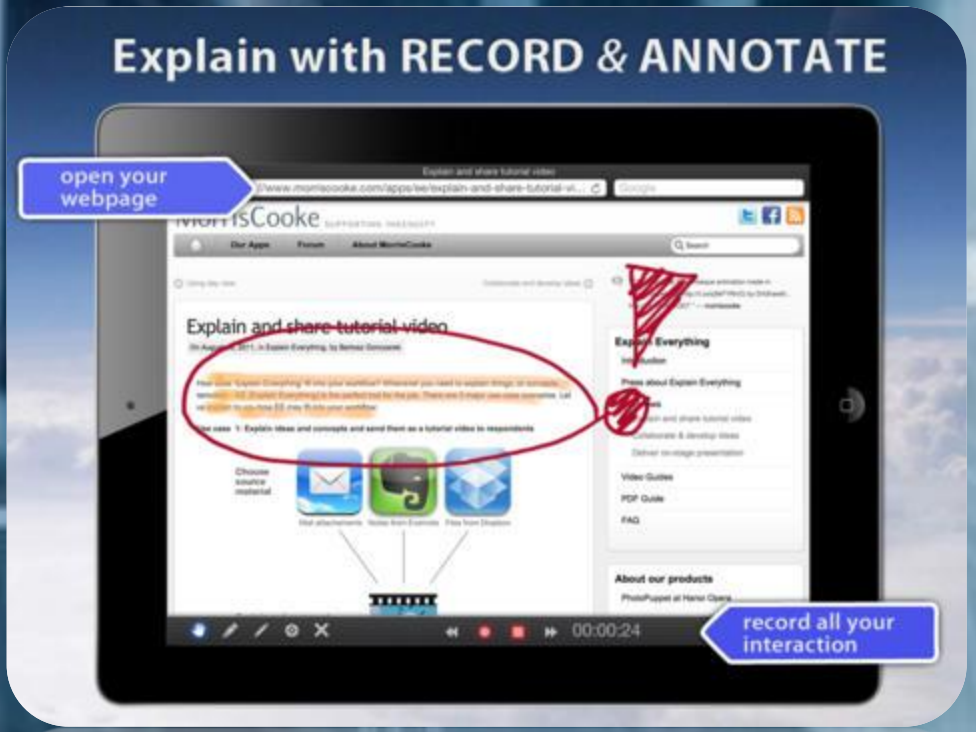
A unique address of a website on the Internet

How The Internet Works



How The Internet Works

'Explain a Website' app by Morris Cooke is a great way for pupils to dissect a URL.



Can You Trust It???

- Be discerning in **evaluating digital content**.

Help Save The ENDANGERED

PACIFIC NORTHWEST TREE OCTOPUS

From EXTINCTION!

About | FAQs | Sightings | Media | Activities | Links

THE PACIFIC NORTHWEST TREE OCTOPUS

The Pacific Northwest tree octopus (*Octopus paxarbolis*) can be found in the **temperate rainforests** of the Olympic Peninsula on the west coast of North America. Their habitat lies on the Eastern side of the Olympic mountain range, adjacent to Hood Canal. These solitary cephalopods reach an average size (measured from arm-tip to mantle-tip,) of 30-33 cm. Unlike most other cephalopods, tree octopuses are amphibious, spending only their early life and the period of their mating season in their ancestral aquatic environment. Because of the moistness of the rainforests and specialized skin adaptations, they are able to keep from becoming desiccated for prolonged periods of time, but given the chance they would prefer resting in pooled water.

Rare photo of the elusive tree octopus

An intelligent and inquisitive being (it has the largest brain-to-body ratio for any mollusk), the tree octopus explores its arboreal world by both touch and sight. Adaptations its ancestors originally evolved in the three dimensional environment of the sea have been put to good use in the spatially complex maze of the **coniferous Olympic rainforests**. The challenges and richness of this environment (and the intimate way in which it interacts with it,) may account for the tree octopus's advanced behavioral development. (Some evolutionary theorists suppose that "arboreal adaptation" is what laid the

CEPHALONEWS

2014-07-28 Social Octopus Species Shatters Beliefs About Ocean Dwellers (NatGeo)

Most octopuses are loners, but larger Pacific striped octopuses display surprising social behaviors -- living in groups of possibly up to 40, laying multiple egg clutches, and mating face-to-face and sucker-to-sucker.

2014-05-15 Scientists

Searching the Internet

- Use search technologies **effectively**.
- Appreciate how results are selected and **ranked**.
- Be discerning in **evaluating digital content**.

Animate 2 Educate

BRINGING THE CURRICULUM TO LIFE

Martin Bailey *(Director – Animate 2 Educate Ltd)*

e-mail: martinbailey@animate2educate.co.uk

Facebook: facebook.com/animate2educate

Twitter: @animate2educate

Teaching E-Safety

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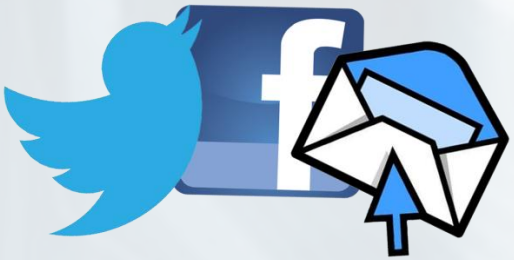


Mr Bailey is a visionary for how ICT can be used creatively to motivate, stimulate and raise standards.
Nick Anderson (Headteacher, Bede Community Primary School)

eSafety

- **<u>Filtering is not the answer</u>**. We need to teach our children what to do when they find something offensive.

E-Safety in the Curriculum

Ofsted emphasise the need to have in place a comprehensive e-safety curriculum that is delivered across the school.

The three main lessons to teach are:

- **the importance of creating strong passwords and keeping them**
- **the advantages of joining only age-appropriate websites**
- **how to safely respond to online hazards** *like: receiving spam messages, being a victim of cyber-bullying, getting viruses and being asked to share personal information with strangers*

By sharing e-safety rules, regularly teaching e-safety lessons and making them aware of the *CEOP* website, children can develop a good attitude to communicating online and acquire a safe and responsible set of online behaviours.

E-Safety in the Curriculum

Key Stage 1

Pupils should be taught to:

- *Use technology safely and respectfully, **keeping personal information private**, identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.*

Key Stage 2

Pupils should be taught to:

- *Use technology, safely, respectfully and responsibly; **recognise acceptable/unacceptable behaviour**; identify a **range** of ways to report concerns about content and contact.*

essential e-safety

2014 National Curriculum

Outstanding E-Safety Provision

E-Safety is about ensuring that children can understand the risks associated with communicating online and can describe some safe and responsible strategies/rules to follow to help minimise or respond to them.

Ofsted **detail what they consider to be outstanding e-safety provision in primary schools. Some important things that they mention include the need to:**

- *provide all staff with e-safety training*
- *ensure families can access e-safety education/advice*
- *use a variety of 'locked down' and 'managed systems'*
- *have procedures in place for reporting e-safety issues*
- *have a rigorous e-safety policy (including an acceptable usage policy)*
- *have suitable Internet filtering*
- ***display e-safety rules and ensure that children can recall them***

Promote Internet Safety in Every Classroom from only £39.99

Our new Set of 10 Internet SMART Posters is a great way of educating your pupils about staying safe online and promoting an Internet safe environment in your school.

In Ofsted's Inspecting e-Safety document, they identify that schools should **"*clearly display e-safety rules and ensure that children recall them*"**.

The poster includes all of the Internet SMART rules in a clear and concise format that will help promote a uniform Internet safety message across your school.

Email **craig@daydreameducation.co.uk** for more information **(quote Animate2Educate)**


The Big Pancake
The Elves and the Shoemaker
The Sly Fox and the Little Red Hen
The Three Billy-goats Gruff
Beaky the Greedy Duck
Rapunzel
Chicken Licken
Snow White and the Seven Dwarfs
Cinderella
The Wise Robin

ESafety

E-Safety


AT&T
11:23 AM
100%
Edit
Messages
Hey babe! Here's your first clue: Look at the Nappa Valley wine map. What winery is at B10?
Madonna Estate
Good! Next clue: What's my favorite band?
Radiohead
Open the front door and look on the porch. What's waiting for you?
Flowers
You won!
Send


EMAIL

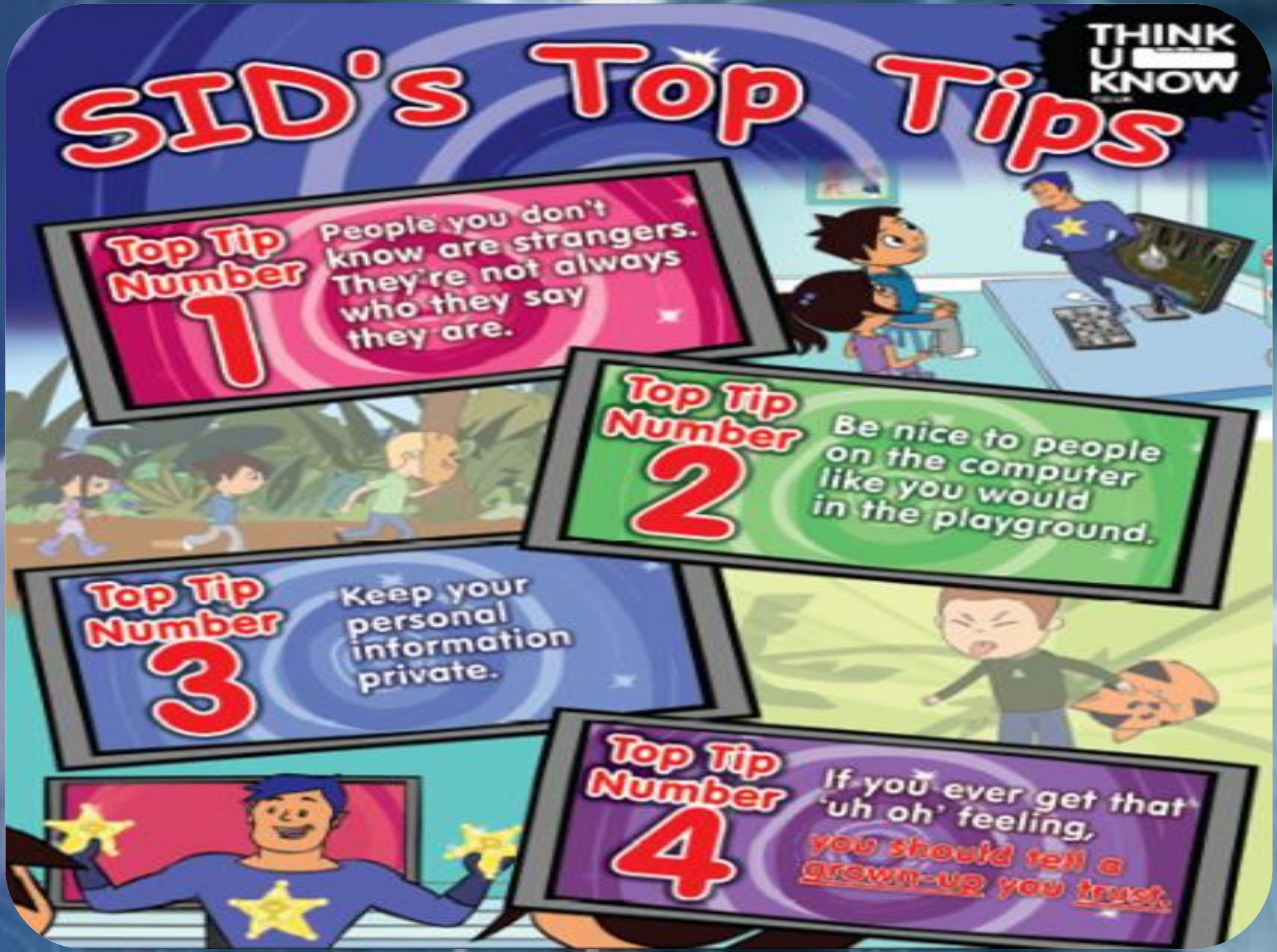

ESafety
skype™

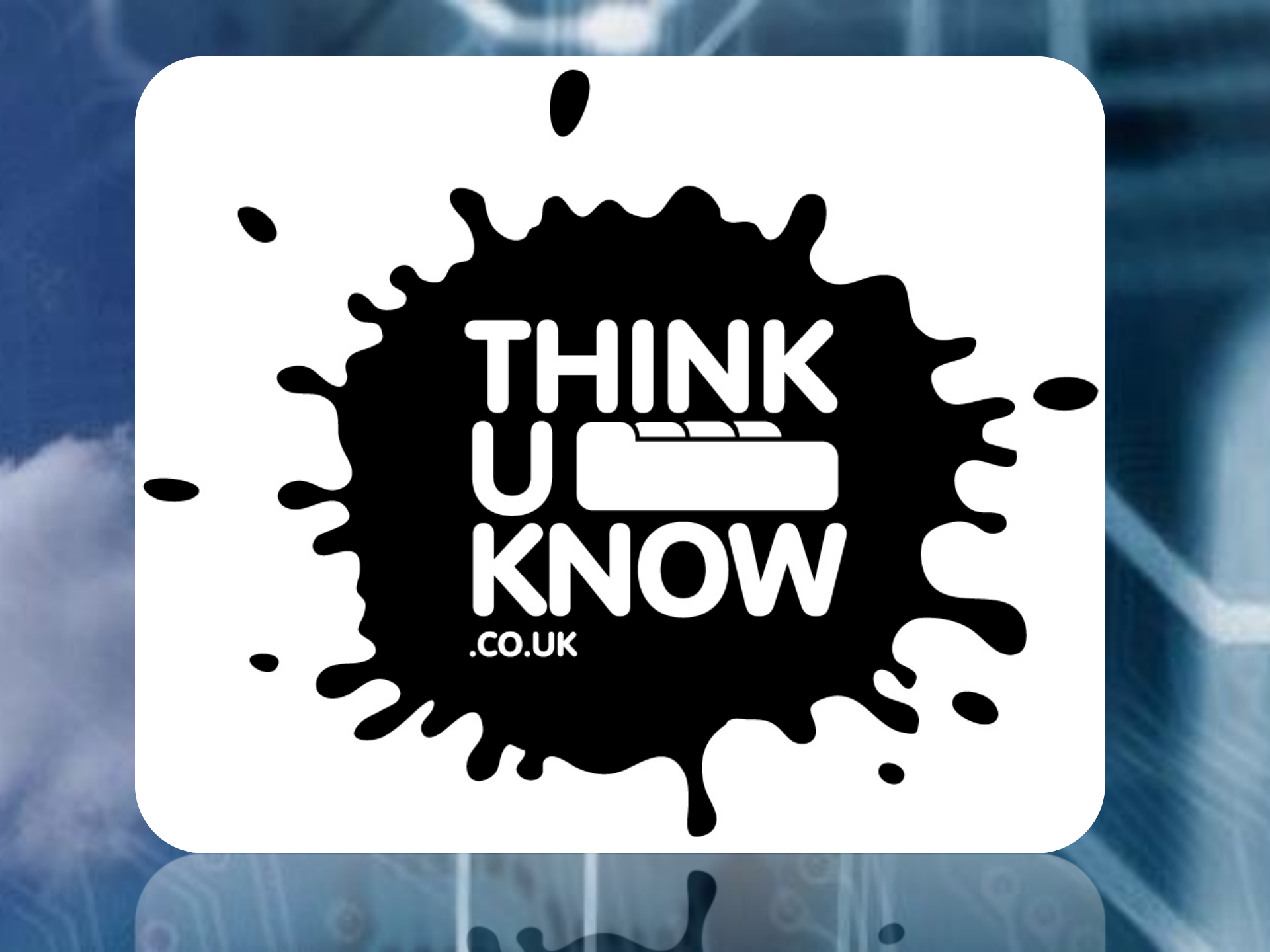
E-Safety

2014 National Curriculum

CEOP

Helping you succeed with CURRICULUM 2014


SID's Top Tips
THINK U KNOW
Top Tip Number 1
People you don't know are strangers. They're not always who they say they are.
Top Tip Number 2
Be nice to people on the computer like you would in the playground.
Top Tip Number 3
Keep your personal information private.
Top Tip Number 4
If you ever get that 'uh oh' feeling, you should tell a grown-up you trust.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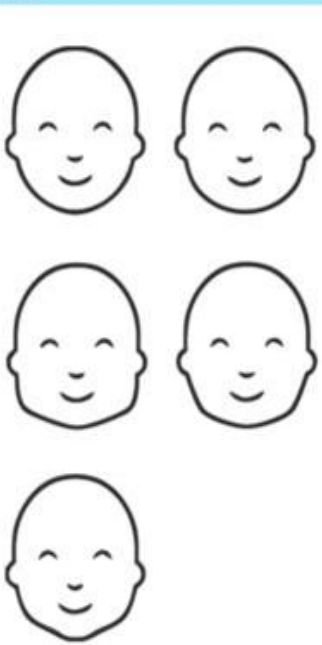
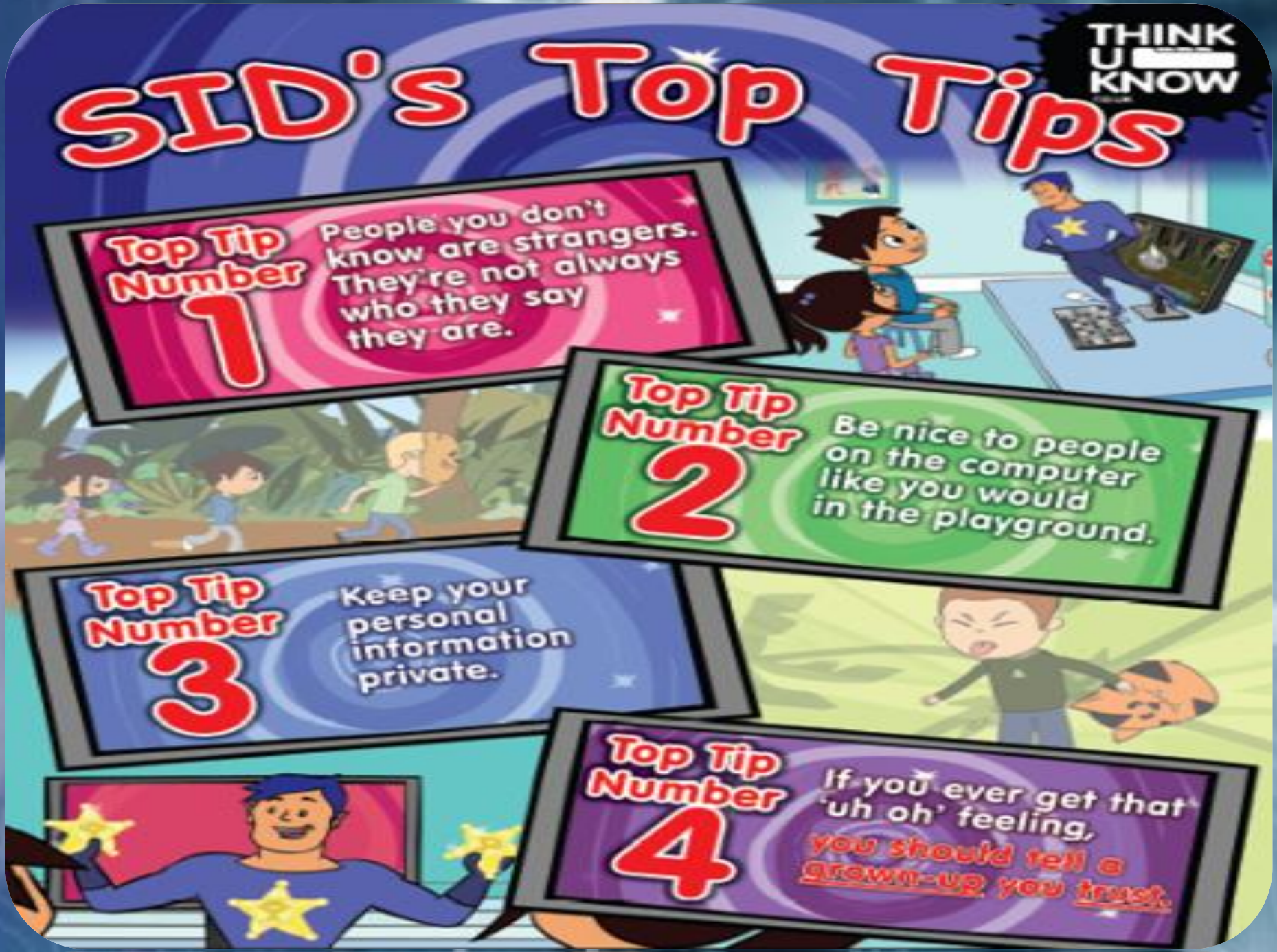
Avatar Creator




You wouldn't share
your toothbrush...
Don't share your
PASSWORD!

Select your color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S SAFE

Keep safe by being careful not to give out personal information – such as your full name, email address, phone number, home address, photos or school name – to people you are chatting with online.

M MEETING

Meeting someone you have only been in touch with online can be dangerous. Only do so with your parents' or carers' permission and even then only when they can be present.

A ACCEPTING

Accepting emails, IM messages, or opening files, pictures or texts from people you don't know or trust can lead to problems – they may contain viruses or nasty messages!

R RELIABLE

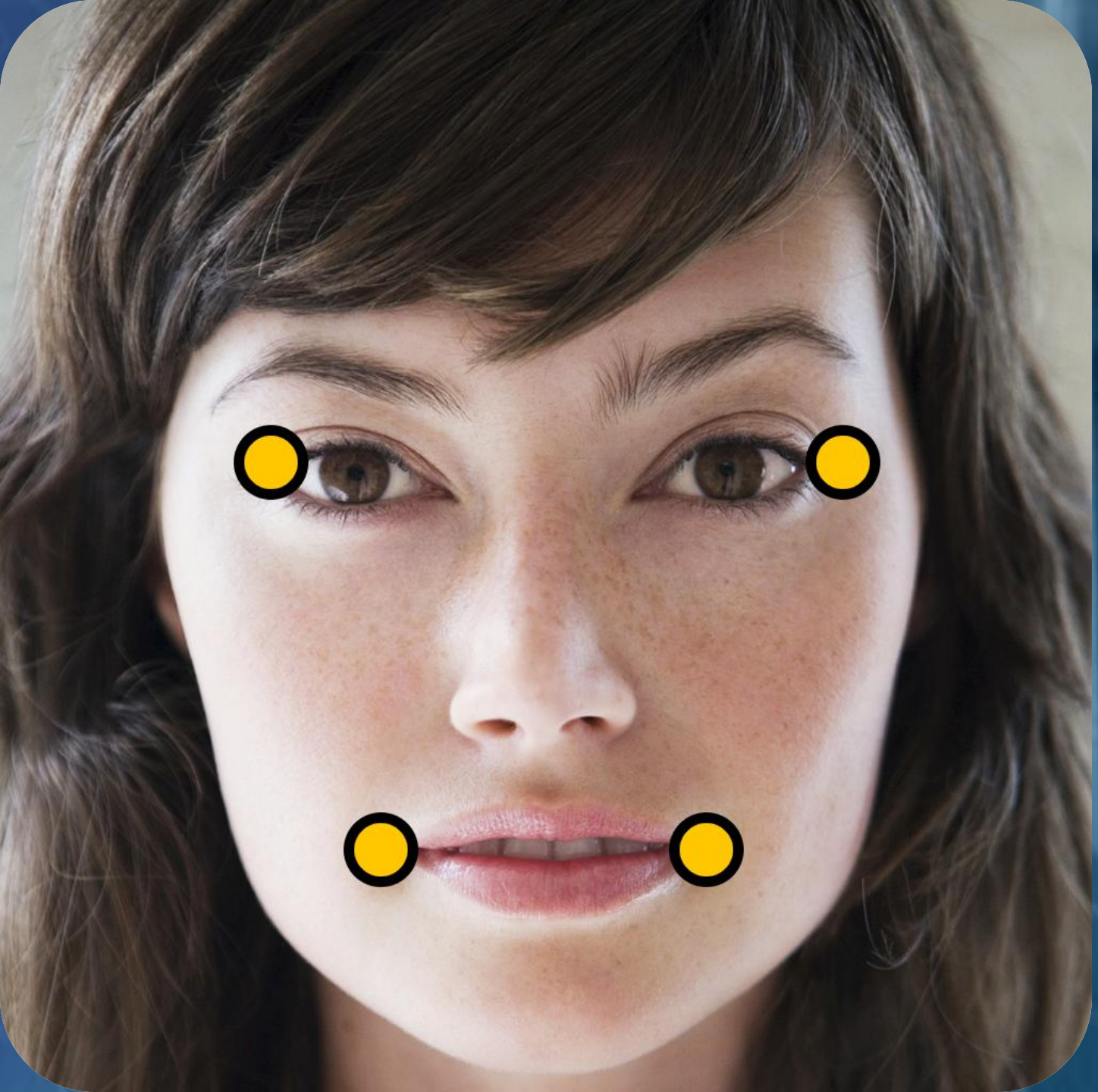
Information you find on the internet may not be true, or someone online may be lying about who they are.

T TELL

Tell your parent, carer or a trusted adult if someone or something makes you feel uncomfortable or worried, or if you or someone you know is being bullied online.

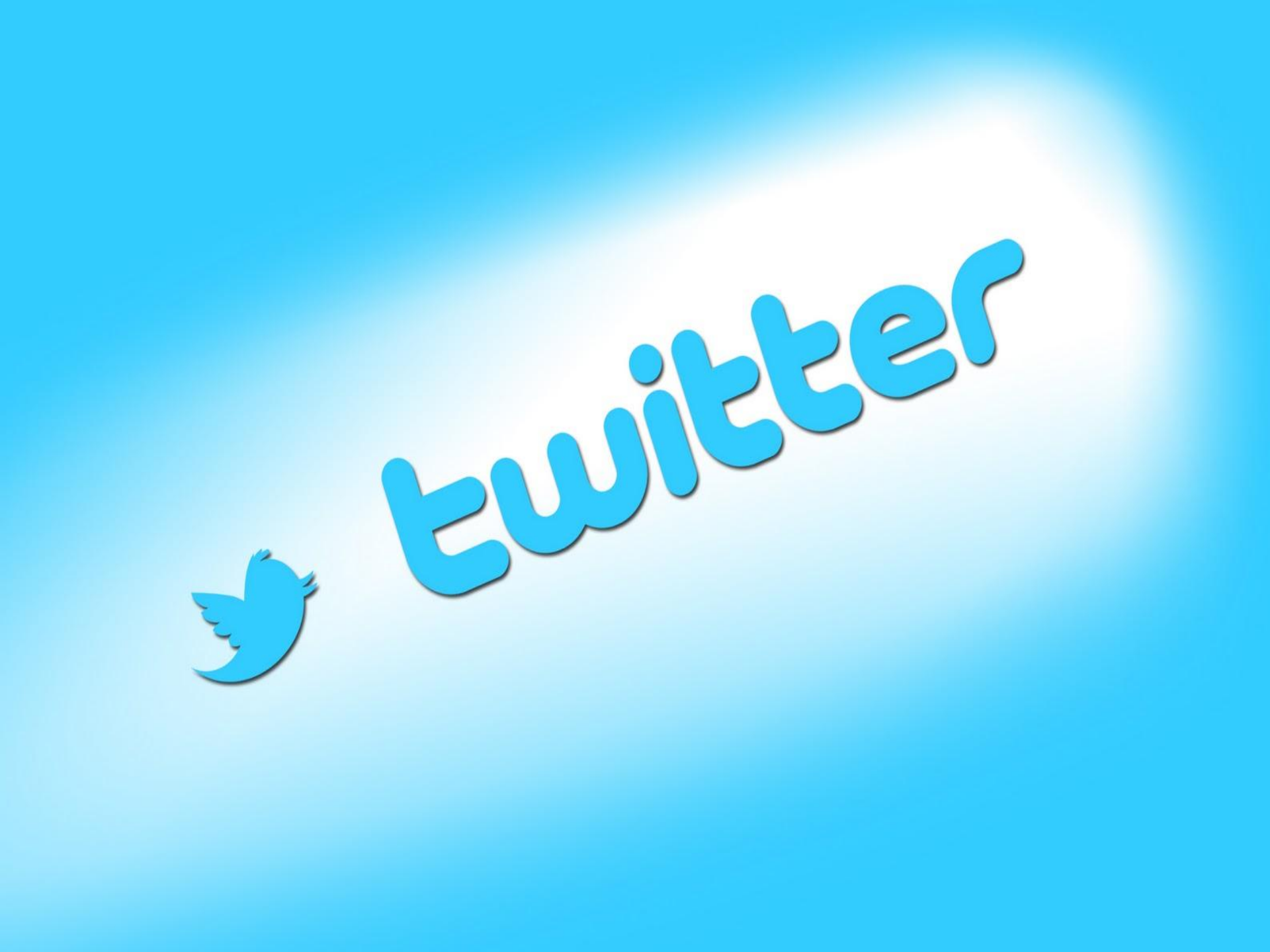
You can report online abuse to the police at www.thinkuknow.co.uk

THINK U KNOW .co.uk




twinkl


E-Safety


twitter


facebook

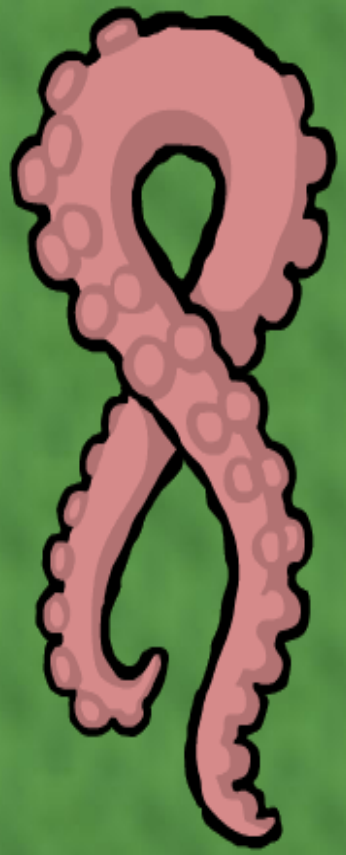

SPAM!

CLICK CEOP
Internet Safety

Worried about something you've seen online?

CLICK TO REPORT IT!

CEOP



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2014-05-15 Scientists

<h1>X-Ray Goggles</h1>

Remix and share web pages instantly

Activate X-Ray Goggles

See how Goggles work by swapping a image

1. Copy this image URL (highlight the text below, right-click, then copy the link)

   https://goggles.webmaker.org/img/goggles-remixed.png

   The URL you just copied links to a new image!

2. Next, activate the X-Ray Goggles by clicking the yellow button above.

3. With X-Ray Goggles now activated, mouse around the page.

Share your remix

When you're ready to share your remixed page, click the Publish button or press `P` on your keyboard. This makes your changes visible on the web for others to see.

Help

If you need help, make sure the X-Ray Goggles are activated, then press `H` on your keyboard.

ESC quit

← undo

→ redo

H help

P publish

You are on a <h1> (heading) element.

Oscars: Bailey wins Oscar for best actor!

Brit Martin Bailey takes acting honours for playing Stephen Hawking, as Michael Keaton's Birdman leads the way with four gongs.

04:59, UK,
Tuesday 24 February 2015

Top Stories

Oscars: Redmayne And Birdman Come Up Trumps

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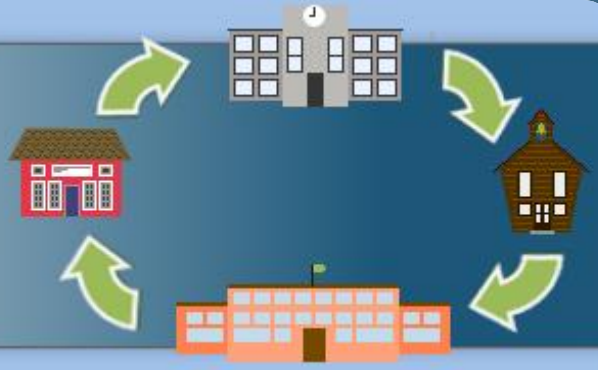
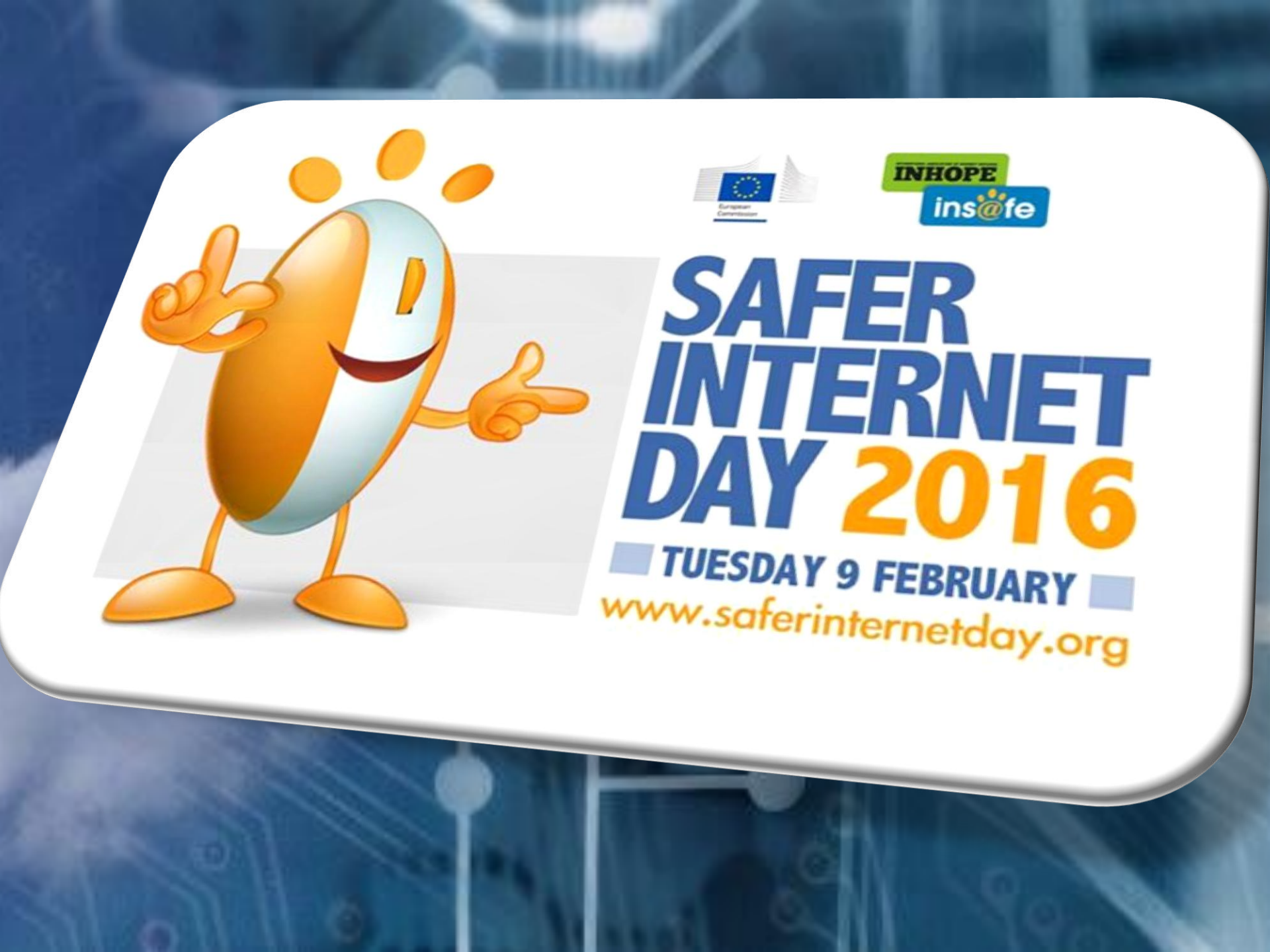
QuadBlogging

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Dream Team

The Ultimate Primary Computing XI

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Friday 5th June 2015

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(Newcastle)

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Featuring:

Miles Berry, Tim Rylands & Sarah Neild,

Dughall McCormick, Lee Parkinson, Steve Bunce,

Bob Harrison, Peter Rafferty, David Andrews,

Rachel Orr, Andrea Carr and Martin Bailey

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#TalkontheTyne
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a night of 'geet canny' teaching ideas
Thursday 4th June 2015
7:30pm - 11:00pm
Jury's Inn Hotel
Gateshead Quayside
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E-mail: info@animate2educate.co.uk
Web: www.animate2educate.co.uk

BRINGING THE CURRICULUM TO LIFE

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