



1

About this unit

Software: Google, Bing, Google Sites/wiki tool in the school's learning platform/WordPress

Apps: Google Search app, Google Sites via browser

Hardware: Desktop or laptop computers/tablets

Outcome: Website offering advice on all aspects of safe and responsible use

Identify a range of ways to report concerns about content

How to report concerns

By Sadie and Rachel

There are lots of ways that you can report to a teacher if you are worried about something you have seen on a website or if someone strange contacts you.

If you spot something bad on a website then this is one way you might deal with the problem:



UNIT SUMMARY

In this unit, the pupils work together to create a website explaining e-safety and responsible online behaviour.

CURRICULUM LINKS

Computing PoS

- 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.

Suggested subject links

- English:** There is scope for pupils to apply their skills in summarising text, as well as their knowledge of spelling, grammar and punctuation.
- History:** Children could make use of skills in conducting an enquiry and in considering the authority and potential bias of source documents.

TRANSLATING THE COMPUTING PoS

- In creating their website, pupils exploit the opportunities the *internet* and the web offer for *collaboration*.
- In researching their pages, pupils use *search technologies*, and become more expert in doing so *effectively*. They also learn about the algorithms search engines use to *select and rank results*. In considering the sources they use, and in reviewing one another's work, pupils become more *discerning in evaluating digital content*.
- Pupils use web-based *software* to *create* digital *content* for a purpose, in this case *collecting, analysing, evaluating and presenting information*.
- Pupils learn about *acceptable behaviour* when using collaborative tools, and recognise how to use shared systems *safely and responsibly*.

LEARNING EXPECTATIONS

This unit will enable the children to:

- develop their research skills to decide what information is appropriate
- understand some elements of how search engines select and rank results
- question the plausibility and quality of information
- develop and refine their ideas and text collaboratively
- develop their understanding of e-safety and responsible use of technology.

The assessment guidance on page 50 will help you to decide whether the children have met these expectations.

VARIATIONS TO TRY

- The pupils could develop an area of the school's learning platform.

2 Getting ready

THINGS TO DO

- Read the *Core steps* sections of *Running the task*.
- Watch the video on How the Page Rank algorithm works (20:30) (see *Useful links*) before running the activity in Step 2.
- Decide which software/tools are most accessible/appropriate for use with your class.
- Download your chosen software/tools (see *Useful links*) and spend some time familiarising yourself with them.
- Think about the individuals and groups you have in your class. Could you use any of the *Extensions* on pages 44–49 to extend your more able children? Could you use any of the suggestions in *Inclusion* (see below) to support children with specific needs, e.g. SEN or EAL? Have you considered

how a Teaching Assistant will support you and the children, if one is available?

- Ensure you have sufficient computers/laptops/tablets and other equipment booked in advance.
- Refer to the help or support section of your learning platform. See <http://sites.google.com/support/> for help with Google Sites.
- Arrange for any accounts to be created, if necessary.

THINGS YOU NEED

- Computers/laptops/tablets loaded with, or having access to, the software/tools you have chosen
- Internet access
- Digital cameras/video cameras
- Posters, reports, policy documents and newspaper clippings – as non-digital resources for the pupils' research



CD-ROM RESOURCES

- Unit poster – Looking at a web search
- Pupil self-assessment information



E-SAFETY

- E-safety content is embedded throughout *Switched on Computing*; this unit provides an opportunity for the pupils to reflect on what they have learned.
- Given the sensitive nature of some of the material, discuss this work with your senior leadership team (SLT) and brief parents and carers appropriately.
- Keep an eye on how the site evolves, intervening appropriately if difficulties arise.
- Strike a balance between allowing pupils to think through e-safety for themselves and steering them towards safe and responsible behaviour.
- Cover aspects of e-safety, including appropriate conduct online, service terms and conditions, cyberbullying, illegal file sharing, and issues around access to online content.
- The responsible use of technology goes beyond e-safety, and might include such topics as 'green' computing, intellectual property, digital footprints and archiving transient data.
- Wider ethical and legal issues concerning the internet might also be explored.
- Ensure that pupils' use of online services is in accordance with school policy and that any necessary parental permission has been obtained.

their mother tongue. For advice on using Google Translate and other translation sites, see page 11.

- The inclusion of video and audio recordings within the site might make the project more accessible.



USEFUL LINKS

Software and tools

- Google Sites: <https://sites.google.com>.
- Google Apps for Education: www.google.com/enterprise/apps/education.
- WordPress: wordpress.org.

Online tutorials

- Introduction to Google Sites: www.google.com/edu/training/tools/sites/level1.html.
- Using Google: www.google.com/insidesearch/searcheducation.
- How Search works: www.google.com/insidesearch/howsearchworks/thestory and www.youtube.com/watch?v=BNHR6IQJGZsh.

Information and ideas

- Byron Review: [http://webarchive.nationalarchives.gov.uk/20100202100434/http://dcsf.gov.uk/byronreview/pdfs/A Summary for Children and Young People FINAL.pdf](http://webarchive.nationalarchives.gov.uk/20100202100434/http://dcsf.gov.uk/byronreview/pdfs/A%20Summary%20for%20Children%20and%20Young%20People%20FINAL.pdf).
- How the Page Rank algorithm works (20:30): <http://www.youtube.com/watch?v=4eBsP14O5L0&feature=youtu.be&t=20m30s>.
- CEOP: www.thinkuknow.co.uk.
- Know IT All: <http://www.childnet.com/resources/kia>.
- Digizen: www.digizen.org.
- BeatBullying: <http://cybermentors.org.uk>.
- Ofsted's guidance on inspecting e-safety – in zip archive at: www.ofsted.gov.uk/resources/briefings-and-information-for-use-during-inspections-of-maintained-schools-and-academies.



INCLUSION

- Children whose first language is not English might wish to explore online e-safety resources written in

3 Running the task – We are web developers

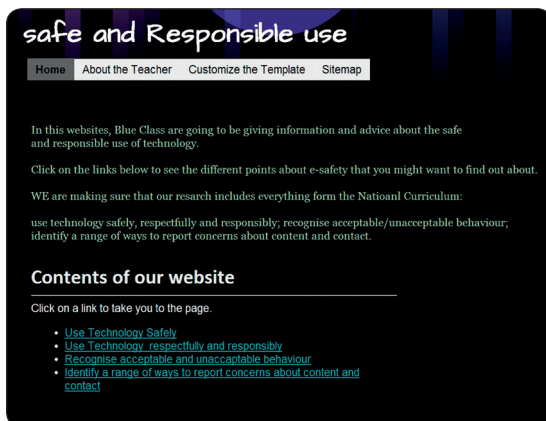
Software: Google, Bing, Google Sites/wiki tool in the school's learning platform/WordPress **Apps:** Google Search app, Google Sites via browser

Hardware: Desktop or laptop computers/tablets **Outcome:** Website offering advice on all aspects of safe and responsible use

Core steps

Step 1: Planning the website

POSSIBLE OUTCOME FOR THIS STEP:



- Share the *Learning expectations* for the unit (see page 42) and explain the success criteria.
- Tell pupils they are going to create a website offering advice on all aspects of safe and responsible use. Explain that the site should cover the National Curriculum requirements, and review these. Brainstorm ideas for the structure and content of the site.
- Agree the target audience for the site.
- Allow the pupils to 'sign up' to write sections of the site, either individually or in groups.
- Demonstrate how the website software works, showing the pupils how to view revision history and how to see who made which changes to a page.
- Agree guidelines on how to create a shared website. Talk about consistency of style and presentation, agreeing what to do about proofreading changes, adding content to pages created by others, and making substantive changes to others' content. Emphasise that you are trusting them to work responsibly, and they are trusting one another with their work.
- Depending on the software used, invite the class to agree on a design template or colour scheme for the site.
- Ask the pupils to make a start on their pages, writing from their own understanding of the topic, and keeping in mind the chosen audience.

Extensions

SCHOOL

- One or more pupils may wish to take responsibility for recording the agreed guidelines as a page on the website, and for ensuring that these are followed by their classmates.

HOME

- Provide the pupils with a letter about the project to share with their parents or carers. Encourage the pupils to discuss their understanding of e-safety with their parents or carers, and to ask them what sort of information would be useful on the site they're creating.

Step 2: Learning how Search works

RESOURCES

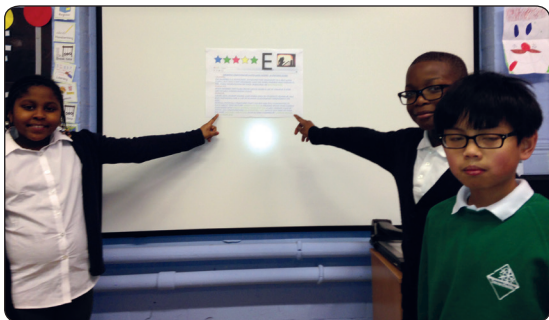


- Unit poster reverse – Looking at a web search



- How Search Works video: www.youtube.com/watch?v=BNHR6IQJZsh
- More on how Search works: www.google.com/insidesearch/searcheducation/
- www.google.com/insidesearch/howsearchworks/thestory/
- How the Page Rank algorithm works (20:30): <http://youtu.be/4eBsP14O5L0?t=20m30s>
- Doug Aberdeen's simulation of the Page Rank algorithm: www.computingschool.org.uk/data/uploads/conf2011/real-life.pdf

POSSIBLE OUTCOME FOR THIS STEP:



- Ask the pupils which search engines they normally use to find material on the web. If most (or all) pupils use Google, ask them if they're aware of alternatives, and demonstrate Bing and DuckDuckGo.
- Demonstrate some tools that make a Google search more effective, such as the location, time and reading level search tools (click Search tools at the top of the Google results listing). You may wish to refer to the unit poster at this point.
- Ask the pupils what they know about how Google works. If appropriate, play the How Search Works video (see *Resources*).
- Explain that Google's software automatically follows links on web pages, and when it finds a new or updated page it adds this to its copy of the web (this is what Google uses to search, rather than the web pages themselves). Explain that when you search for keywords, Google uses this copy like an index to produce a list of all the pages on which those words occur.
- Ask the pupils how they think Google orders these pages in the search results. Explain that the main algorithm Google uses is called 'Page Rank'. Page Rank sorts the pages that have been found according to the number and quality (i.e. the Page Rank) of pages that link to them. For example, Wikipedia normally comes top of search lists, because lots of other high-quality websites link to it.
- Introduce the pupils to Doug Aberdeen's simulation (see *Resources*). Place the alphabet cards (A–J) around the classroom and give each pupil a die so they can act as Google's 'web crawlers', visiting pages according to links on pages chosen at random. After running the simulation a few times, the pupils should find most of them settle on cards E and J, as these have the highest number of links from other popular cards. (These pages would appear at the top of a search result.)

SCHOOL

- Some pupils could write an explanation, in their own words, of how Search works for the collaborative website, adding appropriate links to resources.

HOME

- Encourage the pupils to add advice on how to use search safely and effectively to the collaborative website.

Core steps

Step 3: Curating website content

POSSIBLE OUTCOME FOR THIS STEP:

Edit HTML

HTML

Preview

```

<div style="display:block;text-align:left"><font color="#ff0000"
</font></div>
<div style="display:block;text-align:left"><font color="#b6d7a8"
websites, Blue Class are going to be giving information and advi
<div style="display:block;text-align:left"><font color="#b6d7a8"
use of technology.&nbsp;  </font></div>
<div style="display:block;text-align:left"><font color="#b6d7a8"
</font></div>
<div style="display:block;text-align:left"><font color="#b6d7a8"
links below to see the different points about e-safety that you
</div>
<div style="display:block;text-align:left"><font color="#b6d7a8"
</font></div>
<div style="display:block;text-align:left"><font color="#b6d7a8"
sure that our research includes everything form the Natioani Curv

```

- Ask the pupils to conduct their own research into the area of wiki content they are working on, perhaps using mind-mapping software or pencil and paper to keep notes, or they might type directly into their web page template.
- You may wish to set up a custom search engine (see www.google.co.uk/cse/), which allows pupils to search across a limited number of sites that you specify yourself.
- Encourage pupils to evaluate the content that they view for accuracy, potential bias and quality. Talk about strategies the pupils already use to do this, and suggest some others, such as comparing information on one site with that on another, or checking that information is recent, relevant to the UK and published by a reputable organisation or individual. Encourage pupils to think about who made a web page, and why.
- Model how to insert a hyperlink to other websites within their page, stressing the importance of citing the sources of information they use.
- Model how to embed images and media from other websites on their page, again emphasising the importance of citing the source. Remind pupils of the importance of respecting copyright.
- Give the pupils time to build their pages. They should attempt to summarise or combine the information they have gathered, perhaps presenting multiple perspectives and their own experience before drawing a conclusion, or offering advice as a few bullet points.
- Depending on the software used, an HTML view mode may be available, allowing the pupils to revisit HTML editing from *Unit 4.4 – We are HTML editors*, and make use of HTML to embed media as necessary.

Extensions

SCHOOL

- Bookmark-sharing tools may be available within the school's learning platform or via Diigo (www.diigo.com), which would allow easy access to relevant websites.

HOME

- The pupils could explore e-safety stories in a range of media, perhaps comparing coverage in the websites of both tabloid and broadsheet newspapers.

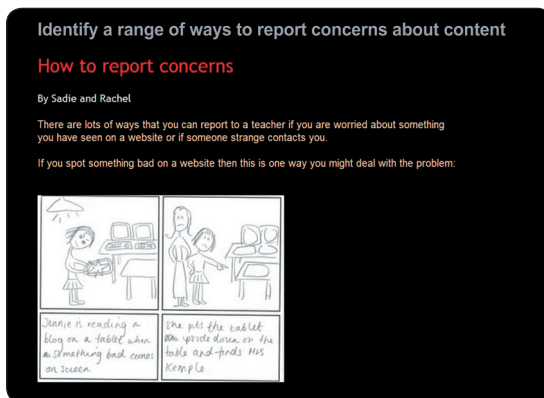
Step 4: Adding media to the website

RESOURCES



- <http://pixlr.com>
- Google Forms (<https://docs.google.com/forms/>)
- Comic Life (<http://comiclife.com>)
- Ofcom report (<http://stakeholders.ofcom.org.uk/binaries/research/media-literacy/october-2013/research07Oct2013.pdf>)

POSSIBLE OUTCOME FOR THIS STEP:



- Invite pupils to think of ways in which they might improve the presentation of their page by adding additional, original content of their own, perhaps by interviewing their classmates and including quotations from their interviews.
- The pupils may wish to create original artwork to illustrate their page. They could do this by using software such as Comic Life (see *Resources*), or by working with digital photographs in Pixlr.com. Encourage them to think of the most effective way to illustrate the content of their page.
- Pupils might like to add audio or video content to their page, such as relevant anecdotes by themselves or their peers, or 'vox pop' interviews with others. They can use Audacity® or Microsoft Windows Movie Maker® to improve the quality of these elements. Depending on the platform used, this can be uploaded directly, or embedded from another page. Remind pupils that they will need to obtain appropriate permission for recording and use of this media. This unit would provide an opportunity for pupils to consider why such permission is seen as so important.
- Some pupils may wish to go further and produce short embedded screencasts, perhaps showing their visitors how to use Search safely, or recording a presentation on the topic.
- The pupils might even wish to conduct their own surveys of their classmates to explore their attitudes to, or experience of, the topic their page is about. They could use Google Forms as a data collection tool. They could compare their results with large scale surveys, such as Ofcom's report (see *Resources*).
- Pupils might create a glossary section where they define the vocabulary of e-safety in their own words. They could add information about pronunciation and links to dictionary sites.

SCHOOL

- Some pupils could include interactive elements on their web page, such as an embedded game written in Scratch or 2Do It Yourself. This will depend on whether the website software they are using supports this functionality.

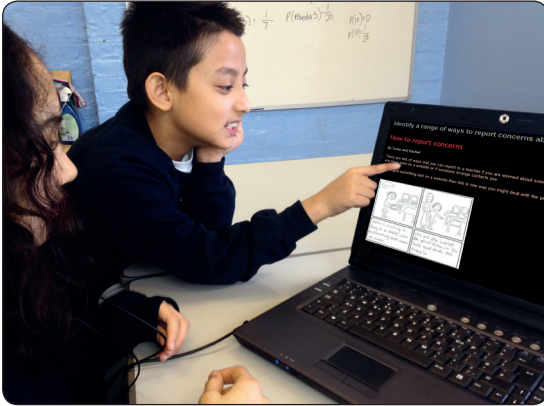
HOME

- Encourage the pupils to share their page(s) with their parents or carers, getting feedback on the content and making changes on the basis of this.

Core steps

Step 5: Reviewing and improving the website

POSSIBLE OUTCOME FOR THIS STEP:



- Remind pupils of the agreed rules for making changes to others' pages, such as only ever improving a page, asking before making substantive changes to content, and ensuring that both sides of an argument are presented.
- Ask the pupils to review one another's pages. Ask them to start by correcting any spelling or grammar mistakes. Also encourage them to check links. Where the source of material isn't given, ask the pupils to refer this back to the page's author. Encourage the pupils to be thorough in checking the ideas presented. Are they presented in a way that is appropriate for the target audience? Are they likely to be true? How confident can they be about the material they're presenting? Encourage the pupils to discuss any substantive changes with the page's original author.
- Encourage the pupils to add additional content to pages, adding in their own experiences, links to related content or additional media. Ask some pupils to contribute persuasive writing emphasising the importance of the topic.
- Pupils should provide each other with positive, constructive feedback, with specific suggestions about what to improve.
- Allow some time for this stage, so that pupils learn from one another about all the aspects of e-safety and responsible use of technology considered in this unit, and so that the collection of individual pages evolves into a collaborative site representing the shared understanding of the class.

Extensions

SCHOOL

- While it is important that all pupils review the pages created by their classmates, you may wish to make specific groups of pupils take responsibility for checking and correcting particular aspects of others' pages, such as checking facts, confirming sources and checking links.

HOME

- Encourage the pupils to continue to review other content on the site from home, perhaps alongside their parents or carers, discussing ideas for how the content might be improved.

Step 6: Publishing the website

RESOURCES



- Pupil self-assessment booklet

POSSIBLE OUTCOME FOR THIS STEP:

Comments from teachers and parents!

"I found this website incredibly helpful - what an amazing achievement for Class 5T! I wish I could have done something like this when I was younger!"

Mrs Sheppy

"This is an excellent place for children, staff and parents to go if they need advice on all things e-safety. Keep up the good work!"

Mr Bruce

"I learnt so much from reading your website pages, Class 5T! Well done. Such a clear and comprehensive guide for us all! Watch your spellings in the glossary."

Miss Peak

- Working together as a class, look back at the original purpose of the pupils' e-safety website and check that the site covers the National Curriculum requirements specified at the start of the project: *use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*
- Ask the class to review the layout, structure and navigation of the site. Any changes made at this stage should reflect the views of the class as a whole. Allow time for changes to be made.
- After reviewing the whole site yourself, invite a senior colleague to review it, providing feedback to pupils and, hopefully, giving approval for the site to be published to the intended audience.
- Provide the pupils with a list of the changes they need to make to the site following this review, including the reasons why these changes are needed, and give them time to work together to make them.
- You may wish to provide a discussion forum for feedback and ongoing discussion among parents or carers, or between children and their parents or carers. If so, ensure that school policies are followed.
- Some pupils could create an online survey to gather anonymous feedback on the site from its target audience.
- Invite feedback from the target audience, which the class should review in a plenary.
- Finally, the children should evaluate the success of their work.

SCHOOL

- If the software used allows it, some pupils could change the site's theme or CSS files to improve its presentation for the target audience.

HOME

- Encourage the pupils to discuss the site and the processes they followed to create it with their parents or carers.

Assessment guidance

Use this page to assess the children's computing knowledge and skills. You may wish to use these statements in conjunction with the badges provided on the CD-ROM or community site and/or with your own school policy for assessing work.

ALL CHILDREN SHOULD BE ABLE TO:

- Review others' content
- Appreciate how Google selects web pages in search results
- Show awareness of other search engines
- Create or curate content to demonstrate knowledge of safe, respectful and responsible use of technology
- Create or curate content to demonstrate knowledge of how to report concerns

BADGE



COMPUTING PoS REFERENCE

- Evaluating information
- Appreciate how results are selected
- Use search technologies effectively
- Use technology safely, respectfully and responsibly
- Identify a range of ways to report concerns about content and contact

MOST CHILDREN WILL BE ABLE TO:

- Create or curate content to demonstrate knowledge of acceptable/unacceptable behaviour
- Correctly attribute third-party content on a shared site
- Evaluate web sources for quality and bias
- Correct spelling, punctuation and grammar errors in another's content
- Use tools to make web searches more efficient or effective



- Recognise acceptable/unacceptable behaviour
- Collecting and presenting information
- Be discerning in evaluating digital content
- Understand the opportunities networks offer for collaboration
- Use search technologies effectively

SOME CHILDREN WILL BE ABLE TO:

- Draw on multiple sources to present a summary
- Make constructive and substantive changes to others' content
- Appreciate how Google ranks web pages in search results



- Analysing information
- Understand the opportunities networks offer for collaboration
- Appreciate how results are ranked

PROGRESSION

The following units will allow your children to develop their knowledge and skills further.

- *Unit 5.5 – We are bloggers*
- *Unit 6.2 – We are project managers*

5

Classroom ideas

Practical suggestions to bring this unit alive!



DISPLAYS AND ACTIVITIES

- A number of vibrant, engaging e-safety posters are available from a range of sources. Pupils could review these, building on their work in this unit.
- Pupils could summarise their work in the unit by producing visually engaging posters of their key points, using desktop publishing software or traditional media.
- Some or all of the site pages might make an interesting display, although care may be needed to present this content effectively in another medium.



WEBLINKS

- Free courses on e-safety in schools from Naace: www.ictcpd4free.co.uk/course/view.php?id=23; and Vital: <http://labspace.open.ac.uk/course/view.php?id=8270>. The first site requires free registration.
- Web design resources: <http://webstyleguide.com/wsg3/index.html> and www.digital-web.com/articles/principles_of_design.
- Google's Data Centers: www.google.co.uk/about/datacenters.
- Google AdWords: <https://adwords.google.com>.



VISITS

- Representatives from the local police, local authority or other bodies concerned with e-safety might be willing to visit the school. With permission, pupils may be able to video parts of these presentations to include on their website.
- A web designer might be willing to visit the school to discuss their work, or the class might visit a web design studio.



BOOKS

- Byron, T. *Safer Children in a Digital World: The Report of the Byron Review*. (DCSF Publications, 2008)
- Levy, S. *In The Plex*. (Simon and Schuster, 2011)
- Richardson, W. *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for Classrooms*. (Corwin, 2010)
- Teeter, R. and Barksdale, K. *Google™ Sites and Chrome for Dummies®*. (John Wiley and Sons, 2009)
- Williams, R. and Tollett, J. *The Non-Designer's Web Book: An Easy Guide to Creating, Designing, and Posting Your Own Web Site*. (Peachpit Press, 2005)

6

Taking it further

When you've finished, you might want to extend the project in the following ways.

- The pupils could continue to add to their website as they learn about further aspects of e-safety and responsible use of technology.
- The pupils could develop further websites for other areas of the curriculum, including creating revision notes for curriculum topics.
- Provide further opportunities for pupils to review, correct and comment on one another's work.
- While subsequent classes would probably benefit most from creating a fresh site of their own, you may consider allowing them to continue to develop the site created by their predecessors.