

Key Stage 1 – Starting Research – Theme Guide

Children develop understanding of researching using non-digital and digital sources, including the World Wide Web. They understand the need to check their research results. They present their research. They use charts, graphs and mind maps. They begin to respect copyright and ownership and know who to talk to if they are worried.

Learning objectives for the term
To know that information can come from many different sources, including digital and non-digital. *5
To understand that the World Wide Web holds huge amounts of information and each website has a unique name and address.
To understand that websites and other digital resources provide tools which we can use to locate information. *5
To understand that selecting appropriate keywords is essential in finding specific information. *5
To know that anyone can put information on the World Wide Web and that it may not be true. <i>Combine information from different sources.</i> *5
To understand that we can use digital resources to help us share the results of information research.
To understand that we organise ideas and information using mind maps.
To understand that we can organise objects according to their properties or characteristics.
To understand that they own the materials they create and that others should ask permission before using them. *5
On-going Learning Objectives
<i>To talk about the choices they made. Revisit and refine their work.</i>
<i>To log on to the school system and save, locate and edit work using their own space; understand how and when to print.</i>
<i>To use technology safely and increasingly respectfully. *5</i>
<i>To know how to respond if anything they access makes them feel uncomfortable or worried. *5</i>

Vocabulary – see Glossary for definitions (for terms in blue)	
<i>digital</i> , non-digital, website, <i>World Wide Web</i> , <i>hyperlink</i> , <i>hotspot</i> , <i>credit</i> , <i>pictogram</i> ,	keyword, organise, group or sort objects, table, mind map, Venn Diagram, Carroll Diagram, <i>bar chart</i>

Possible resources for this theme (further resources are suggested with the explanatory notes below. Note that these are examples and not formal recommendations.)	
<p>Generally available websites such as:</p> <ul style="list-style-type: none"> BBC CBeebies: www.bbc.co.uk/cbeebies Dorling Kindersley FindOut: www.dkfindout.com Your own school website <p>Writing tools:</p> <ul style="list-style-type: none"> 2Write (as part of 2Simple Purple Mash) Microsoft Word Google Docs (as part of G-Suite for Education) Clicker 7 JIT5 Write (as part of J2E) 	<p>Graphing tools:</p> <ul style="list-style-type: none"> RM Starting Graph 2Count or 2Graph (as part of 2Simple Purple Mash) JIT5 Chart (as part of J2E) Smart Notebook <p>Mind Mapping tools:</p> <ul style="list-style-type: none"> Popplet Lite (iPad app) 2Connect (as part of 2Simple Purple Mash)

Please note that with any online platform it is essential that you review the privacy policy and terms and conditions of the service. The school is responsible for the protection of data it holds and compliance with current data protection legislation. Always assess both the data protection and safety of the service you are considering using, and ensure any necessary permissions are in place before using with pupils.

Primary Computing Scheme online materials that are referenced in this guide can be accessed from:

<http://www.hertsforlearning.co.uk/user/login>

You will need to be logged into your school account and have a current subscription to the Primary Computing Scheme to gain access. The materials can be accessed from the *My Resources* link at the top/right of the screen, once you are logged in.

Key learning objectives

(some objectives might be used for more than one lesson)

To know that information can come from many different sources, including digital and non-digital. 

- How can we find out about things? Who can we ask? Where can we go? Explore varied sources and consider how we use them to find information.
- Talk about the differences for example between finding a book in the school library and locating a useful website.
- Compare reading information in books and from websites.
- Carry out their own research using digital and traditional resources. E.g. use the school library to find out about a specific topic and also use a website (note the website should be specified and not a full www search at this stage.)
- Consider using websites from the BBC, Dorling Kindersley, Infant Encyclopedia, your own school website etc.
- Share and compare their experiences of finding information in and out of school. Discuss the pros and cons of finding information in these different ways.

To understand that the World Wide Web holds huge amounts of information and each website has a unique name and address.

- Talk about the WWW and all the millions of websites. Where are the websites stored? Are they all on your computer or in your school or home?
- At this stage we are still using specified websites and not open searches. Use website addresses, shortcuts and/or favourites to access specific sites.
- Talk about website addresses. Where can we see them? What do they look like? How do they start and end?
- Review some common website address suffixes, for example **.co.uk .sch.uk .com** etc. What do we think some of the endings might mean (e.g. your school website might end with **.sch.uk** – what do we think this means?)
- See the accompanying Powerpoint file [*Learning about website addresses*] – this file may need adapting to suite KS1.
- Consider creating a folder in the shared area with shortcuts to specific websites, for easier access.
- Explore some of these sites. How easy are they to use, navigate, find the information we want, etc? How might they change or improve the website to make it easier to use or more to their liking?
- Do they have a favourite website? Why do they like it? Share their opinions of sites explored.

To understand that websites and other digital resources provide tools which we can use to locate information. 

- Using specific websites, identify the different features which we commonly find.
- Include:
 - buttons and icons
 - search boxes
 - hyperlinks and hotspots
 - menus
- Explore these within specific appropriate digital resources, using them to locate information. What do these features do? How do they help us?
- Children record what they find.

To understand that selecting appropriate keywords is essential in finding specific information. 

- What are key words?
- Practice (away from the computers) writing questions and then identifying the key words (link to English.)
- Find the answer to a question using a non-digital resource. Can we see the key words we identified within the text that answers our question?
- Use the keywords to search within a specific, appropriate website to find the answers to questions (link to topics, other subjects.) How effective were our keywords? Did we find what we were looking for easily?

To know that anyone can put information on the World Wide Web and that it may not be true. *Combine information from different sources.* 

- Who makes web pages? Is information on the WWW always true?
- How can we find out if information online is true? (Compare with other websites, ask a grown up, check in a book etc.)
- Carry out a simple research activity so that children find information from a range of resources, both digital and non-digital, (specific websites, non-digital sources, interviewing people etc.) Use specific websites and not open searches.
- As a class, review and collate the information that children have gathered.

To understand that we can use digital resources to help us share the results of information research.

- With a learning partner/group, select and use technology (graphics, word processing, sound or film recording etc.) to record and present their research.
- Ideally the pupils will choose the way they want to record and present their findings, but try to provide a number of different options.
- These might include digital writing tools, presentation tools, iPad®/tablet microphone or video camera, portable recording devices, digital book making tools etc.
- Allow the pupils to share their findings, using their chosen digital method, with the class.

To understand that we organise ideas and information using mind maps.

- Begin with some ready-made mind-maps to introduce what they are and how they might be helpful (link to topics / other subjects.)
- Create simple mind maps to link and organise ideas and information. Start by creating mind-maps as a class before pupils make them independently.
- Discuss how these might be helpful.
- There are free mind-mapping apps available as well as commercially available tools. Examples include 2Simple 2Connect (online via Purple Mash) or Popplet Lite (free iPad® app.)

To understand that we can organise objects according to their properties or characteristics.

- Use simple tools including Venn and Carroll diagrams, tables, pictograms and bar charts to organise, group or sort objects.
- We want pupils to be able to experience and compare the different ways in which we can organise and present our findings.
- Carry out simple non-digital surveys within class or around the school and present the findings in different digital ways. E.g. pets survey, method of getting to school, football team supported (including none.)
- As a class, draw conclusions once the information gathered has been sorted and presented in different digital ways. E.g. we can conclude that most people in the class walk to school, because we can see the column for walking is the tallest in our pictogram.
- Pupils draw their own conclusions from provided pictograms, bar charts, Venn diagrams etc.

To understand that they own the materials they create and that others should ask permission before using them. 

- Discuss ownership of physical objects. Is it right to take someone else's property?
- Who owns the work that you do in class or for homework?
- What about online resources? Are these owned?
 - Who owns your school website? (Your school does.)
 - Who owns the CBeebies website? (The BBC does.)
- Discuss the fact that most online resources (e.g. images), just like physical objects, are owned and we should not take them and use them without permission.
- Talk about naming their work to show it is theirs, whether digital or not. If working in groups, children should add the names of all the group members to the work.
- If pupils have, for example, been to another class to carry out one of the surveys above, then they could add a 'thank you to...' the class when they present their findings.

On-going Learning Objectives
<i>To talk about the choices they made. Revisit and refine their work in the light of comments and suggestions from peers.</i>
<i>To log on to the school system and save, locate and edit work using their own space; understand how and when to print.</i>
<i>To use technology safely and increasingly respectfully. </i>
<i>To know how to respond if anything they access makes them feel uncomfortable or worried. </i>

Suggested independent task – any open-ended activity (2-3 sessions) enabling the children to demonstrate their computing capability around the knowledge and understanding provided in the term
<p>As a class, compose questions on a certain topic or area of learning.</p> <p>Independently:</p> <ul style="list-style-type: none"> > use suitable digital resource/s from a restricted range, employing different techniques to find the information. > use existing templates or simple software to organise the information they have found. > share with peers or others, explaining how they have organised what they have found. <p>Other considerations:</p> <p>Does the task provide for children to work at different levels? Is there support available for children to select if they wish? Are there opportunities for the children to review and develop their work? Is there an opportunity for the children to evaluate the finished task?</p>

<p>Choose a topic or theme that the children are familiar with so that they will be able to create meaningful questions. To find the information, children could, for example:</p> <ul style="list-style-type: none"> • Use simple sound recording devices to record the question/answer exchanges. • Create a simple electronic questionnaire using a writing tool, and ask others to add the answers. • Use tablet apps to record the answers from verbal question/answer exchanges. <p>Children then organise and present their findings as a graph, chart, mind map etc. and present this, explaining why and how they chose to present the information in this way.</p>
