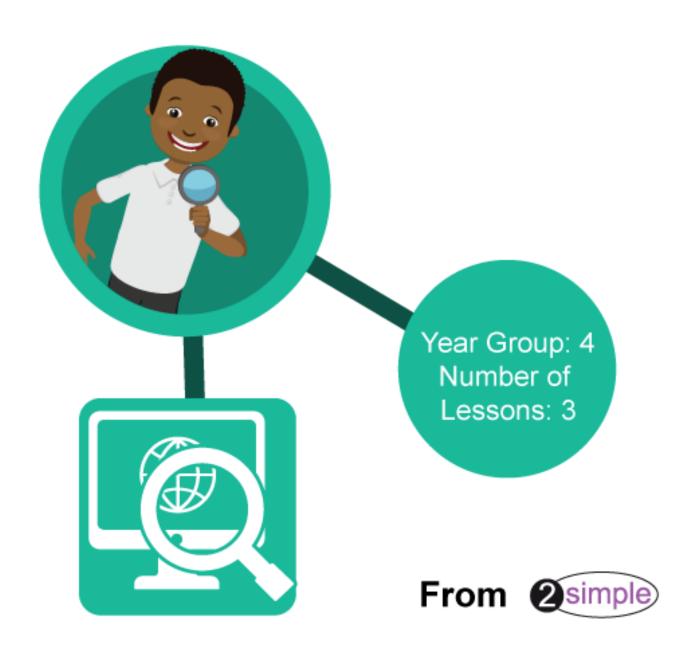


Computing Scheme of Work

Unit 4.7 – Effective Searching





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Introduction

This unit builds upon the skills and knowledge developed in Year 2 in Unit 2.5 – Effective Searching. The lesson makes use of the Google search engine but could be adapted to be used with an alternative.

These lessons are based upon Basic Search Lesson Plans produced by Google, which can be found at https://sites.google.com/site/gwebsearcheducation/lessonplans.

Medium-term Plan

Lesson	Aims	Success Criteria
<u>1</u>	To locate information on the search results page.	Children can structure search queries to locate specific information.
2	To use search effectively to find out information.	 Children have used search to answer a series of questions. Children have written search questions for a friend to solve.
<u>3</u>	To assess whether an information source is true and reliable.	Children can analyse the contents of a web page for clues about the credibility of the information.





Lesson 1 – Finding Information on Google

Aims

• To locate information on the search results page.

Success criteria

• Children can structure search queries to locate specific information.

Resources

Unless otherwise stated, all resources can be found on the <u>main unit 4.7 page</u>. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you don't lose this page.

- Internet Recap Quiz
- Finding Answers Slideshow
- <u>Lesson 1, Worksheet 1 Finding Information with Google</u>. This is at the end of this document; each child will need a copy.

Activities

- 1. Share the learning objectives and success criteria with the class.
- 2. Recap the learning from the work studied in Year 2 Unit 2.5 Effective Searching. The Internet Recap Quiz can be completed if needed.
- 3. Explain that there is much to be learned beyond simply typing search terms into the Google search box. We can answer much more than simple search queries.
- 4. Explain that some of the information we can find using Google includes weather forecasts, postcodes, answers to calculations, spellings, definitions and sports results.
- 5. For the next activity, the children will need access to a computer or tablet and to be able to see the accompanying presentation. As you show the children the different kinds of ways to search for the information, they can write their results down.
- 6. Open the Finding Answers slideshow and hand out Worksheet 1 Finding Information with Google.
- 7. The children should answer the search questions on the sheet as you go through the presentation.
- 8. The children can enter the search queries in the search bar at the top of the Google screen:

Q

Or they enter them in the search box on the Google home screen:









Lesson 2 – Use Search Effectively to Answer Questions

Aims

• To use search effectively to find out information.

Success criteria

- Children have used search to answer a series of questions.
- Children have written search questions for a friend to solve.

Resources

• <u>Lesson 2 – Worksheet 1 – Search Quiz</u>. This is at the end of this document; each child will need a copy.

Activities

Share the learning objectives with the children. Recap the learning from the last lesson.

Explain that this lesson the children will be using effective search to answer questions.

Present the children with Lesson 2 – Worksheet 1 – Search Quiz.

Remind the children that when they search, they do not have to write full sentences but can use key words. For example, rather than typing 'how old is the footballer Wayne Rooney?' they can just type 'Wayne Rooney age'.

Similarly, explain that it is not necessary to use capital letters and punctuation.

The children should complete the quiz.

As an extension, they can write five questions for their classmates to answer.

It is recommended that the children use www.google.co.uk.







Lesson 3 – To Assess whether an Information Source is Reliable

Aims

To assess whether an information source is true and reliable.

Success criteria

• Children can analyse the contents of a web page for clues about the credibility of the information.

Resources

Various spoof websites:

http://zapatopi.net/treeoctopus/ http://allaboutexplorers.com/

Activities

- 1. Share the learning objectives with the children. Recap the learning from the last lesson.
- 2. Ask the children how they know if something is true. Answers could be written on the whiteboard or you could create a 2Connect (https://www.purplemash.com/#app/tools/2Connect).
- 3. Stress to the children that just because something is on the internet it does not mean it is true. Consider how can we check information on the internet is true?
- 4. Give the children the activity. Look at the range of websites. Are these true or made up? How do the children know?
- 5. Bring the children together to discuss their answers.
- 6. Something for fun. This is an optional fun activity that you could introduce to show that search engines aren't always for searching!

Searching Easter Eggs

First, see if children can search to find out what an Easter egg is in a computer program:

An Easter egg is an intentional inside joke, a hidden message or a secret feature of an interactive work (often a computer program, video game or DVD menu screen). The name is used to evoke the idea of a traditional Easter egg hunt.

Ask them to search for the following terms; they should get some surprising results! 'Askew', 'do a barrel roll', 'elgoog' then go into the first result, 'zerg rush' (can they defeat the Os?), 'atari breakout' then click on 'Images', 'super mario bros' then click on the flashing question mark to the right-hand side (make sure your speakers are on), 'google pacman'.

Can children find any more to amaze the class with? Many programs have Easter eggs within them.







Name:	Date:	

Use Google to search for information to answer these questions.

7.	What is the forecast for the weather in London?	
8.	What is the forecast for the weather in New York?	
9.	What time is it in Sydney?	
10.	What was the last result for Manchester City?	
11.	Find the name and address of a restaurant near to where you live.	
12.	What is the postcode of the Prime Minister's house?	
13.	What is 6307 x 234?	
14.	Convert 6 feet 5 inches into centimetres.	
15.	Is 'misarable' spelt correctly?	
16.	Is 'cematary' spelt correctly?	
17.	What is a dictionary definition of 'happy'?	
18.	What is a dictionary definition of 'galaxy'?	
19.	How many people live in the United Kingdom?	
20.	How many people live in Manchester?	



Name	Date	

Search Quiz: Use a search engine to find the answers to these questions.

1.	3456 + 78091 = ?	
2.	700000 / 89 = ?	
3.	What is 33% of 34,567?	
4.	How many centimetres are in 5 miles?	
5.	How many minutes are in 40 years?	
6.	What's the equivalent of £20 in rupees?	
7.	For what town is the postcode SK used?	
8.	What is the meaning of 'universe'?	
9.	Is 'seperated' spelt correctly?	
10.	What's the population of Birmingham in England?	
11.	How old is Sergio Aguero?	
12.	When is Prince William's birthday?	
13.	What's the predicted weather for London tomorrow?	
14.	What time is it in Beijing, China?	
15.	What time is it in Johannesburg, South Africa?	

Purple Mash Computing Scheme of Work Unit 4.7 – Effective Searching Lesson 2, Worksheet 1 – Search Quiz



17.	How many people live in the United States?	
18.	Correct the spelling of 'Misisippi'.	
19.	Find a Chinese restaurant near to your school.	
20.	What will the weather be like three days from now in New York?	
Extens	sion: Write five questions of your own.	
1.		
2.		
3.		
4.		
5.		

What is the score of the last game played

by the England football team?

16.



Assessment Guidance

The unit overview for year 4 contains details of national curricula mapped to the Purple Mash Units. The following information is an exemplar of what a child at an expected level would be able to demonstrate when completing this unit with additional exemplars to demonstrate how this would vary for a child with emerging or exceeding achievements.

exceeding achi	Assessment Guidance
Emerging	Children have some awareness that search engines can provide helpful information to support our daily lives such as: Weather forecasts, postcodes, answer calculations, provide definitions and sport results (Unit 4.7 Lesson 1 & 2). They can search for intended information with some degree of accuracy demonstrated in the results returned.
	Children demonstrate a developing understanding of online safety both through their actions when working online and their ability to contribute their ideas to discussion of spam email (lesson 1), malware (lesson 2) and plagiarism (lesson 3).
Expected	Children can use search engines to provide helpful information to support their learning (Unit 4.7 Lesson 1 & 2). They can search for intended information with a degree of accuracy and thus know that key words can be more effective than sentences when searching.
	Children demonstrate their understanding of online safety both through their actions when working online and their ability to contribute their ideas to discussion of spam email (lesson 1), malware (lesson 2) and plagiarism (lesson 3). Their Top Tips for Online safety document shows an understanding of specific issues. They view themselves as having an active role in ensuring their own online safety and their screen time study (lesson 4) demonstrates that they can reflect on their own activity.
	Most children will be able to locate information from the internet via a search engine using effective techniques such as truncating a question into just key words or concise phrases. They will be aware of the lack of need to use capital letters or punctuation when using this search technique (Unit 4.7. Lesson 2 Points 4 & 5).
	Most children will be able to analyse the contents of a web page for obvious clues about the credibility of the information. They will be able to work in small groups to decide collectively if a website has questionable credibility (Unit 4.7, Lesson 3).
Exceeding	Children can use search engines effectively to find intended information (Unit 4.7 Lesson 1 & 2) and are fully aware of the benefits of using key words. They are able to interpret search questions and decide upon how to re-phrase them so that they return the most suitable results in a search engine.
	Children demonstrate their understanding of online safety both through their actions when working online and their ability to contribute their ideas to discussion of spam email (lesson 1), malware (lesson 2) and plagiarism (lesson 3). They make connections between the positive possibilities that technology provides e.g. collaboration and sharing and the possible downsides of this such as malware and phishing. They actively and intuitively, use this knowledge to support their own online activities safely. Their screen time study (lesson 4) demonstrates this understanding



