



## How an Internet Search Works

### 1, Introduction

Ask the pupils if they lose something at home who do they ask first?

In many homes there is one parent who knows where lots of things are and the rest of the family rely on their knowledge. It is much quicker to rely on that persons stored knowledge before searching yourself.

Web searches are very similar. They don't really search the web. They search lists of searched and organised pages. **(More teacher Info on P2)**

The programs that do these searches are called spiders and they trawl the web following links and recording, listing and ranking (putting them in order of importance) web pages

### Resources

- Normal Primary Classroom
- Spider search sheets (1 between 2)
- Writing implements
- Optional You Tube Access

### 3, Deciding Which Location is Best

Ask pupils to decide which location is the **best**. It is important to use this word as it allows pupils to decide what criteria to use. Now go round and collect their reasons and list them. Draw out that a search engine like Google will ask 200 questions to help it determine how important web pages are. Many of the pupils criteria will be represented in those 200+ questions.

### 4, Simple searching formula

Explain that we need a method of ranking these in order. One way would be to give each criteria that they have brought up such as ease of access, newness etc a score out of 10. Give the remaining columns headers such as newness, ease of access etc. Pupils then rank these 1 being old, bad access and 10 being new, easy access etc. Add the scores up and rank the locations with highest score being top location. You could also make this in a spreadsheet. If you made this in a spreadsheet you could weight some criteria higher than others by doubling their score.

### Computing National Curriculum

use search technologies effectively, **appreciate how results are selected and ranked**, and be discerning in evaluating digital content

### 2, Main Activity

Explain that we are going to behave like Internet search spiders and trawl our classroom finding where key equipment is and ranking it by importance.

Give out the spider search sheets and sort pupils into pairs. Go over the sheet and explain how it works. They need to search for their item, record where they find it and the number of items they found in that location. Ignore the rank column because we can do that once we have finished. No items should be moved.

Some pupils will finish their spider search quicker than others. Find extra items in the class for them to index these can be fixed or not.

### Preparation

Check items on Spider Search Sheet are actually in your classroom



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### 5, Searching the Index

Pretend a child from a younger class is searching for that item. Does their ranked index help? You could also compare someone searching manually against someone using the ranked Index.

### Teacher Knowledge

The following sites are useful for extending your knowledge of how search engines work but if you are in a hurry the first video is easy to understand and encapsulates all the necessary information.

<http://youtu.be/BNHR6IQJGZs>

<http://computer.howstuffworks.com/internet/basics/search-engine.htm>

<http://websearch.about.com/od/enginesanddirectories/a/searchengine.htm>

<http://www.webopedia.com/DidYouKnow/Internet/HowWebSearchEnginesWork.asp>

[http://en.wikipedia.org/wiki/Web\\_search\\_engine](http://en.wikipedia.org/wiki/Web_search_engine)

<https://www.google.com/insidesearch/howsearchworks/thestory/>

Classroom Spider Search		Name
Scissors 		Melike
		Anna
Location	Number of Items	Rank
Middle of middle table	three in <del>box's</del> pots	1
TOP End of middle table in flower pencil case	1 in middle bit.	5
front table	two in <del>box's</del> pots	3
Teachers desk in Red Pot	1 in Red pot	5
Table near English display	three in <del>box's</del> pots	2
Table near science wall	2 in pots	4
Ben's pencil case on middle table.	1 in 'Bin weevil' pencil case	7
Maddie's pencil case	1	6