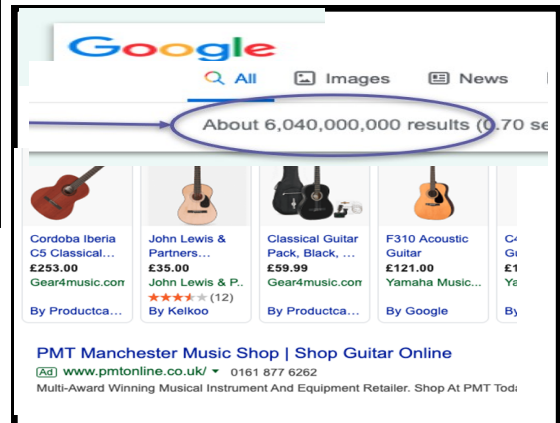# Computing 5.1 Systems and Searching Yr 5/6 Cycle B Autumn 1

Computing Systems and Networks

Core Learning Recognise: that a system is a set of interconnected parts which work together; inputs, processes, and outputs in large IT systems.

Procedural Knowledge (Skills)

Describe the input an the Output of a search engine
Demonstrate that different search terms produce different results.
Evaluate the results of search terms.

Propositional Knowledge (Concepts)

Describe: the role of a particular IT system in their lives
Relate that search engines are examples of large IT systems.

Explain:
-that computers can be connected together to form IT systems;
why search engines create indices, and that they are different for each search engine;
-that ranking orders search results to make them more useful;
-how ranking is determined by rules, and that different search engines use different rules;
-why the order of results is important and to whom;
-how search engines make money by selling targeted advertising space;
-the role of web crawlers in creating an index;
-how search results are selected.

Stages:

- **Understand systems**
- **Computer systems and us**
- **Searching the web**
- **Selecting search results**
- **Know how search results are ranked**
- **Understand how are searches influences**

Generic vocabulary: Connection, digital, index, input, process, ordering, output, search, system and WWW.

Key Topic vocabulary:
Algorithm: a process or set of rules to be followed in calculations/problem-solving operation, especially by a computer.
Bot : a program on the internet or another network that can interact with systems or users.
Content Creator: act of producing and sharing information .
Internet: is a network, or system, that connects millions of computers worldwide.
Rank/Ranking: the search engine ranking of a website, or URL, refers to its spot on the search engine results page.
Refine: make minor changes so as to improve or clarify a method.
Search engine: a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user. Used especially for finding particular sites on the World Wide
Search engine optimisation (SEO) : a process of improving your website to increase its visibility.
Selection: the action or fact of carefully choosing the mot suitable .

Sources of support

- Teach it unit plans and Learning Graphs https://teachcomputing.org/curriculum/key-stage-2
- Refer back to Prior Teach it units 3.1 and 4.1 if required

Web Crawler: sometimes called a spider or spiderbot and often shortened to crawler, is an Internet bot that
systematically browses the WWW.