

**Name(s)****Class****Date****Directions**

How much do you know about search engines? Read about the three common ones below. After reading each description, be ready to describe what they do and how they compare to one another.

Do you know how a SEARCH ENGINE works?

Read the information below to learn more.

DEFINITION: *Search engines* use a computer program called a spider. A spider is sometimes called a webcrawler because it crawls around the Web, exploring webpages and their links and collecting information.

After the spider has collected the information, a second computer program indexes, or organizes in a list, all the information. Each search engine's spider and **index** organize **webpages** a little bit differently.

Search engines also have a third computer program. When you type **keywords** into the search engine, that program goes into the index to find **webpages** that match your keywords. It shows these matches on a **results page**.

The sites with the best matches are displayed first. Each search engine has a different way of identifying the best matches. This is why you will probably get different results from different search engines.

These three tasks are all done without any human involvement – so a huge number of sites are indexed quickly. The spider keeps crawling around, updating the index every time the information on a webpage changes. (Note: Review the Key Vocabulary word “index” with students. Make sure to go over both the noun and verb definitions.)

CHECK THEM OUT: The most popular search engines in 2010 are Google, Yahoo, Bing, and Ask. Maybe you have heard of these. Some search engines you might want to check out are Factmonster and Quintura.



Do you know how a DIRECTORY works?

Read the information below to learn more.

DEFINITION: In a *directory*, people, not computers, put the index together. Editors, the people who choose information to include from directories, evaluate websites and organize them into subject categories.

Because people have chosen them, the sites in directories may be of higher quality, and more *related* to the subject you are searching. However, the number of sites in a directory is usually much smaller than in a search engine's index.

Many people use the term “search engine” to describe either a search engine or directory. And some search sites offer both services.

CHECK THEM OUT: Some well-known directories are Yahoo Directory, Lycos, About, Open Directory Project (dmoz), and ipl2. Also, check out Yahoo and ipl2 because they have special directories for kids.

Do you know how a META-SEARCH ENGINE works?

Read the information below to learn more.

DEFINITION: A *meta-search engine* sends your keywords to several different search engines at the same time. It searches the search engines! The results from each search engine are organized and displayed on one page.

This type of service is useful when your topic is very *narrow*, or specific, and you want to search as many websites as possible.

CHECK THEM OUT: Popular meta-search engines for you to check out are Dogpile and MetaCrawler.

Use Common Sense!

- No one search engine, directory, or meta-search engine covers the entire Web.
- Don't get stuck using only one type of search engine. Try them all.
- Compare and contrast the results that you get to find their benefits and drawbacks.