

# Strategic Searching

## Essential Question

*What steps can help you find what you're looking for when you search online?*

**Estimated time:** 45 minutes

## Standards Alignment –

**Common Core:** RI.6-8.1, RI.6-8.4, RI.6-8.10, W.6-8.4, W.6-8.7, W.6-8.10, SL.6-8.1.a-d, SL.6-8.4, SL.6-8.6, L.6-7.3a, L.6-8.6

**NETS•S:** 3a-d, 4b, 4c, 6b

## Lesson Overview

Students learn that to conduct effective and efficient online searches, they must use a variety of searching strategies rather than relying on a single source. They learn a five-step method for planning and carrying out an online search. Students then apply what they have learned to a scenario in which they pretend they are employees in a workplace, searching for information for their job.

## Learning Objectives

*Students will be able to ...*

- understand the importance of using a variety of search strategies.
- master new strategies for effective and efficient online searches.
- learn to create and execute a five-step plan for conducting an online search.

## Key Vocabulary –

**effective:** achieving a desired goal or result

**efficient:** doing something in a way that saves you time and energy

**strategy:** a course of action designed to help you reach a specific goal or result

## Materials and Preparation

- Copy or download the **Tips for Strategic Searching Student Handout**, one for each student.
- Copy or download the **Make a Search Plan Student Handout**, one for every three to four students.
- Prepare computer access for student groups to do online research.

## Family Resources

- Send home the **Strategic Searching Family Tip Sheet (Middle & High School)**.

**Note:** This lesson emphasizes informal online searching, rather than academic research specifically for school. In their everyday lives, students search or surf for information online. This lesson helps students think critically about their online searches so they are effective and produce relevant results. Much of what students learn can be applied to their schoolwork as well. In this lesson, we encourage you to use search engines that students typically use on their own, such as Google, Yahoo!, and Bing.

## introduction

### Warm-up (10 minutes)

#### ASK:

*How do you find something online?  
What kinds of things do you search for?*

Encourage students to provide examples of searches related to their personal interests, as well as to their schoolwork. The point is to remind students that they spend a fair amount of time searching online for a variety of purposes, both in school and in their personal lives.

**DEFINE** the Key Vocabulary terms **effective** and **efficient**.

**EXPLAIN** to students that an effective online search is one that yields the precise results they are looking for. An efficient search does so without a lot of wasted time or energy – for example, having to scroll through a lot of search results that don't relate to their desired topic.

**DEFINE** the Key Vocabulary term **strategy**, and point out to students that search strategies can help them search effectively and efficiently.

**CREATE** a KWL (Know|Want|Learn) chart with three columns on the chalkboard or chart paper, or project it from your computer screen. Explain to students that they will use these columns to track what they know, and what they want to know, about strategic searching.

#### ASK:

*What are some strategies you have used to search for information online?*

Guide students to think specifically about searching for information more than sorting or evaluating the information. Write responses in the first column.

*What do you need to know to make your searches more effective and efficient?*

Encourage students to think about problems they encounter when searching and would like to solve. Write responses in the second column.

Sample responses:

What search strategies do I KNOW?	What do I WANT to know about strategic searching?	What did I LEARN about strategic searching?
Use quotes around words or phrases you want to find Use specific words Check out multiple search results – don't just use Wikipedia!	How to keep from getting a lot of results I don't need What to do when a search term can mean two different things How to search for two different things at once	

**TELL** students that you will be leaving the final column blank for now, but you'll return to it later in the lesson. Explain that they are going to learn about search strategies, some of which may answer questions in the "What do I WANT to know about strategic searching?" column.

## teach 1

### Searching Strategies (10 minutes)

**DISTRIBUTE** the **Tips for Strategic Searching Student Handout**, one per student.

**INVITE** different students to read aloud each search strategy on the handout, along with the example provided. Then encourage them to come up with their own examples for each of the strategies.

**DEMONSTRATE** some of the examples. If possible, project your computer screen so that students can see the search results. If time and resources permit, you may also choose to have students conduct the searches, working in small groups on their own computers.

## teach 2

### Plan and Perform a Search (15 minutes)

**ASK:**

*Why do you think it might be important to have a plan when you search online?*

Students should conclude that having a search plan might help them apply the searching strategies they learned, and therefore conduct more effective and efficient searches. In other words, a plan can help them quickly find the exact results they are looking for.

**WRITE** the following steps on the board or chart paper, or project it from your computer screen. This mnemonic device lays out the five steps in a search plan, and the steps spell out SEARCH. Share the explanation of what each step means.

**SELECT research questions and search tools.**

(Explain to students that they should have one or more questions that get to the core of what they want to find out in their search. They should also choose search engines and tools that are most relevant to what they are looking for.)

**EXTRACT keywords and terms.**

(Students should understand that they can find effective keywords by highlighting the key terms from their research questions.)

**APPLY search strategies.**

(Students should apply some of the search strategies they learned – for example, adding quotation marks or a minus sign, or specifying what type of information they need.)

**RUN your search.**

(Students should run a search on the terms they have chosen and review the results. Remind students that they should check out multiple sources.)

**CHART your search.**

(Student can avoid repeating work they have already done by jotting down what they've searched for and where they've searched for it.)

**EXPLAIN** to students that they will have the opportunity to practice this five-step search plan in the following group activity.

**DISTRIBUTE** the **Make a Search Plan Student Handout**.

**INVITE** a volunteer to read the directions aloud. (Students will be asked to imagine that their boss has asked them to find a location in a particular city for the annual company picnic. The location needs to meet a number of criteria, as described in the handout.)

**DIVIDE** students into groups of three or four.

**INSTRUCT** students to complete the search plan, listing responses to each step as instructed on the handout. Encourage groups to include all members in the planning process, and give them five minutes to complete their plans.

**ARRANGE** student groups at computers to conduct their online searches.

**TELL** students that they have ten minutes to come up with a place for their company to have its picnic. Set a timer or have a bell that signals when time is up.

**INVITE** each group to name the place it chose, and share which keywords, strategies, and search tools it used in its search.

**ASK:**

*What are three ways you got to this choice?*

For instance, maybe students found people’s opinions of the park through blogs. Perhaps they saw a video of the park and could confirm what it looks like. Maybe they searched for .gov park websites and compared what each park had to offer.

## closing

### Wrap-up (10 minutes)

Have students go back to the KWL chart from the lesson introduction and invite them to share what they’ve learned about how to make their searches more effective and efficient. Add their responses to the third column of the chart. (Students should be able to name several search strategies, as well as understand how to make and carry out a search plan.)

You also can use these questions to assess your students’ understanding of the lesson objectives. You may want to ask students to reflect in writing on one of the questions, using a journal or an online blog/wiki.

*What are two search strategies you learned about that you plan to use in the future?*

Refer to the **Tips for Strategic Searching Student Handout**.

*What are the five steps of a search plan?*

Students should recall the following five steps:

- SELECT** research questions
- EXTRACT** keywords and terms
- APPLY** search strategies
- RUN** your search
- CHART** your search

*Why is it important to have a search plan?*

Students should realize that thinking through their search before they begin should lead to a more effective and efficient search.

## **Extension Activity**

Assign students to work in groups to play “A Google a Day” ([www.agoogleaday.com](http://www.agoogleaday.com)), an online search game in which one tries to find the answer to a complex search question from a myriad of topics. Points go down the longer one takes! Encourage students to use their five-step search plans.

## **At-Home Activity**

Encourage students to play “A Google a Day” ([www.agoogleaday.com](http://www.agoogleaday.com)) daily with family members. In addition, families together can learn more about how to conduct an advanced search under Google’s Tips and Tricks link.