



Essential Question: What are keywords, and how do you choose them and use them?

Learning Overview and Objectives

Overview: Students understand that keyword searching is an effective way to locate information on the Internet. They learn how to select keywords to produce the best search results.

First, students learn to identify their research goals and choose the best keywords to achieve those goals. Then they apply their knowledge by using their keywords in a search. Students examine their search results and observe how a good choice of keywords can get them the information they want.

objectives

Students will:

- Understand the function of keywords and keyword searches
- Learn a step-by-step procedure for selecting suitable keywords
- Apply their chosen keywords to find the information they are looking for on the Internet

Materials and Preparation

Estimated time: 45 minutes

Materials

- **Choose Your Keywords Student Handout** or blank paper
- Paper and pencils

Preparation

- Copy the **Choose Your Keywords Student Handout**, one for every two students, or review the handout and be prepared to guide your students through the steps
- Preview the search sites listed in Teach 2 and select the one you want to use

Parent Resources

- Send parents the **Smart Searching for Elementary Students Parent Tip Sheet**

Key Vocabulary

- **Search:** To look for information on the Internet
- **Keywords:** The words you use to search for information about a topic

teaching plans

Introduce

WRITE the words *cat* and *tiger* on the chalkboard or chart paper.

ASK students to pretend they are thinking about getting a new pet. *Which one of these animals would make a good pet?*

ASK *Can you name some reasons why a cat would make a good pet? Would a tiger make a good pet? Why or why not?*



Sample responses:

- *Cats are friendly and like to live with people.*
- *Cats are small enough to live in the house.*
- *You can buy food for cats.*
- *Tigers are wild and not meant to live with people.*
- *Tigers are big and need room to roam.*
- *Tigers eat other animals.*

ASK *What things would you need to know about an animal before you got one as a pet?* (Encourage students to respond in the form of questions.)

Sample responses:

- *Are they friendly?*
- *Where do they usually live?*
- *How big are they?*
- *What do they eat?*
- *What do you need to do to take care of them?*

ASK *Where would you go to find answers to these questions?* (Students may say they would ask parents, teachers, a vet, or a friend who has that kind of pet; or they may talk about books and magazines. Many of them might suggest searching the Internet.)

INTRODUCE the Key Vocabulary word **search**. Explain to students that just as they would search for information in a variety of places, they can also search on the Internet.

Teach 1: Choose Your Keywords

ARRANGE students in pairs.

DISTRIBUTE the **Choose Your Keywords Student Handout**, one for each pair of students. If you prefer, you can distribute plain paper and guide students verbally through the directions on the handout, or write them on the board.

EXPLAIN to students that to perform a search on the Internet, they need **keywords**. The computer uses these words to find websites that have the information they want. For this reason, choosing the right keywords is very important.

DEFINE the Key Vocabulary word **keywords**. Divide the compound word **keywords**, breaking it into its two parts. Explain that the first part, **key**, has more than one meaning. In this case, it means “very important.” Encourage them to deduce that keywords are the most important words they can use to conduct a search.

READ the following scenario aloud, and ask students to imagine it is happening to them:

You think guinea pigs are cute. You hope you can talk your family into letting you get one—or maybe even two! To do this, you need the facts. You want to find out if they make good pets, so you can then convince your parents to allow you to get one.

GUIDE student pairs through the steps on the **Choose Your Keywords Student Handout**. First, have students come up with a relevant question they would ask about having a guinea pig as a pet. Examples include:

- *How do you care for a guinea pig?*
- *What do guinea pigs eat?*
- *Is a guinea pig a good pet?*

Have student pairs share their questions and keywords with the class. Point out that their keywords might be the same, or different, depending on the question they are asking.



INVITE students to discuss what they would do next with their keywords. (Students should grasp that the keywords will be used to search the Internet, and that they will enter the words into computers to find the information they're looking for.)

Teach 2: Use Your Keywords

SELECT one of the following kids' search sites:

- **Ask Kids:** www.askkids.com
- **Kid Rex:** www.kidrex.org
- **Yahoo! Kids:** www.kids.yahoo.com
- **Google SafeSearch for Kids:** www.safesearchkids.com/google-for-kids.html

ASK *Have you ever done a search online before?* (Have students share what they have searched and explain how they did it.)

ARRANGE students in small groups and distribute one sheet of blank paper to each group. Groups should include a mix of students who have and have not searched before.

INVITE students to think of an animal they might like to have as a pet, and then tell them to write it on their paper.

INSTRUCT students to brainstorm questions they would want to know about the pet they have chosen—for example, what it eats, where it lives, or how big it gets. Have them write their questions at the top of their sheets of paper.

DIRECT students to select one question they want to explore. Have them look at their question, and then circle the **keywords** within the question. Those are the words they will use to search for information. Have them write their keywords below the question.

INVITE each group to share their questions and keywords. Have the class comment on how the group's keywords will or will not be the most useful words for searching. Allow the groups to make adjustments to their keywords if necessary.

GUIDE students through the following steps, which they should perform within their groups around shared computers. If possible, project the screen image so that the whole class can follow each search.

1. *Go to your search site (this will vary based on which one you selected).*
2. *Click in the text box next to the Search button. Then type the keywords you have selected.*
3. *Check your spelling and correct it if necessary.*
4. *Click the Search button. You should see a page called "Search Results," or a list of results somewhere on the page.*
5. *ASK What do you think this page is for?* (Guide students to understand that this page shows the results of their search, which are websites that have information about their keywords.)
6. *Look at the list of websites. Which ones do you think might have the answer to your question?*
7. *Click on the site you chose. Look for pictures and information about your pet that help answer the question.*



EXPLAIN that if the first website they look at does not have what they need, try another. There are millions of websites on the Internet!

INVITE a volunteer from each group to share with the class what they have learned about their pets.

Wrap Up and Assess

You can use these questions to assess your students' understanding of the lesson objectives.

ASK *Why is it important to choose the right **keywords**?* (Students should understand that effective keywords produce good search results. To find the information they want, they need to choose their keywords carefully.)

ASK *What steps can help you choose the best **keywords** for your searches?* (Students should recall how to formulate a question, and then choose the most important words from their question to use as keywords.)



Extension Activity

Explain to students that there are many websites where they can do searches using **keywords**. Have students take the same keywords they used for their searches in Teach 2, but select a different search site to use. Encourage students to note any similarities or differences in the search results from their previous search. Explain to them that there are millions of websites on the Internet and that different searches may bring up different sites, or put them in a different order.



Homework

Invite students to choose a favorite wild animal. Ask them to draw a picture of their animal on a sheet of paper and write the name of the animal at the top. Students can then work with a family member to think of something they would like to know about that animal—for example, *What do giant pandas eat?* or *Where do giraffes live?* With their family member's help, they should write down their question, then come up with keywords they would use to search for an answer.

If students have computers at home, they may go online with their family member and perform their searches. Students may also bring their questions to class and take turns performing searches on a computer at school. After they have written down the answers to their questions, create a display in a school hallway or on a classroom bulletin board, hanging up students' sheets under the heading "Animal Facts: Keyword Searches."

Alignment with Standards – National Educational Technology Standards for Students® 2007

(Source: International Society for Technology in Education, 2007)

3. Research and Information Fluency

- plan strategies to guide inquiry
- locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- process data and report results

**4. Critical Thinking, Problem Solving, and Decision Making**

- a. identify and define authentic problems and significant questions for investigation
- b. plan and manage activities to develop a solution or complete a project
- c. collect and analyze data to identify solutions and/or make informed decisions

6. Technology Operations and Concepts

- a. understand and use technology systems

Common Sense Media is an independent, nonprofit resource that helps families and educators teach kids how to be safe and smart in today's 24/7 media world. Go to www.commonsensemedia.org for thousands of reviews and expert advice.

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

Do guinea pigs make good pets? You can search websites to find out.

To search, you need keywords. Here is how to choose keywords.

**1. What do you want to find out? Write a question.**

**2. Circle the important words in your question.
Write them below. These are your keywords.**

Use Common Sense!

Try more than one keyword to get better search results.

