

RESEARCH USING THE *YIF GAZETTE*

Objective: Students learn how to effectively use the *YIF Gazette* to search for inventions similar to their own. This exercise will teach students search engine skills and help them complete the items on the Official YIF Entry Form related to research for similar inventions.

Materials: Handout: *Learning to Use the YIF Gazette*
Paper, pencil, computer with Internet access

Vocabulary: Internet search, search engine, Google, Yahoo, Bing, data, patent, database, key words



Background Information:

Engage students in a discussion about searching for things on the Internet. Demonstrate with a Google search for “invention.” Ask students if they have ever thought about how a computer searches for things. Does it really think? Is it like a mechanical brain? How does a computer “know” what it knows? (Information is stored there.)

Lead the discussion to the fact that computers are only as smart as people make them. All information in computers is there because humans put it there. Humans store information on computers and use it for lots of things. Ask students to brainstorm some of those uses.

Explain that when we search for data on the computer we often use tools called “search engines” like Google, Yahoo or Bing. When the search for “invention” was done, the computer was “looking for” any data that included the word “invention.”

When a computer does a search, it is looking for a “match.” This idea will be very important in completing this lesson. In order to find the information you are looking for, you give the computer key words to search for and find the best matches. Pretend you want to find information about how to take care of your new Dalmatian puppy. Using Google, do a search for the following key words, one at a time: pet, dog, puppy, and Dalmatian.

PET	DOG	PUPPY	DALMATIAN
What did you find for pet? Dog? Puppy? Dalmatian?			
How did the results differ from one another for these key words?			
What happens when words are more general like pet? Specific like Dalmatian?			
What other key words could you try to take care of your new pet?			

Activity: Using the *YIF Gazette* to Research Your Invention Idea

You have an invention idea. Before you begin to build your invention, you must determine whether something like it already exists. If you discover that your idea is not new, you may either choose another invention idea or make improvements on the existing invention.

Some inventors want to prove that their invention idea is new so that they can “own” the idea and patent it. Then nobody else can use that exact idea for a period of time. The patent protects their idea. To prove that their idea is unique, they must search a special list of inventions to see if anyone has had a similar idea in the past.

Young Inventors can do a simulated patent search with the *YIF Gazette*. You can search a database of descriptions for about 600 inventions that were exhibited at past Young Inventors Fairs. Do this to see if any of those inventions are similar to your idea.

Students use computers at this point and go to the *YIF Gazette*.

1. Enter <http://www.successbeyond.org>
2. Click on Young Inventors Program on the bars on the right of the screen
3. On the YIF home page, click on “YIF Gazette” from the list at the top

Give students the *Learning to Use the YIF Gazette*. Go through the Step 1 example together. Before students complete the rest of the exercise, go through the following “search tips” with them. Post these for all students to see as they work.

Search Ideas:

- Sometimes the shortest forms of words get a good result (stick instead of sticky, invent instead of invention. Sometimes phrases like “glow in the dark” get exactly the results you want. Just remember that the longer the key word (or phrase), the more letters the computer has to match.
- Try synonyms and similar words (“star” and “constellation;” “alphabet,” “letter,” and “ABC”).
- Try words in the name of the invention if they are relevant.
- Try words that describe the invention.
- Try words for related objects (“wall” and “ceiling”).
- Try choosing more specific words (“shirt” and “sleeve” instead of “clothes”).

LEARNING TO USE THE YIF GAZETTE

EXAMPLE 1

Directions for Example 1: Do this as a class. Read about the invention *ABCs in the Night* (in box 1 below). Practice using the *YIF Gazette* by trying searches with the key words one at a time. Search results will be a list of names and inventions. Click on the names to get the descriptions. Repeat until you find both similar inventions in the last column. Read about those inventions in the third column. What similarities and differences from *ABCs in the Night* can you find?

Invention Name & Description	Key Words	Similar Inventions Found and Notes on Similarities and Differences
<p>1. <i>ABCs in the Night</i></p> <p>When I go to bed, I love looking at the glow-in-the-dark constellation stickers I have on my ceiling. My little brother is just starting to learn his ABCs, so I thought if he had glow-in-the-dark stickers on his ceiling, he might learn them faster. My invention is large glow-in-the-dark stickers of the alphabet for the ceiling or walls.</p>	<p>sticker dark wall ceiling star constellation glow alphabet letter ABC</p>	<p><i>Smart Wear</i>—Stickers you put on young children's clothes to help them recognize the front and back and dress themselves correctly. Stickers go on clothes, not ceiling. Stickers have animals on them, not the alphabet.</p> <p><i>Learning Cube for Preschooler</i>—A game for kids to learn elementary school subjects. The only similarity it has is that it's a learning tool. It doesn't stick on the wall or ceiling or even glow in the dark.</p> <p><i>Double Dark Deck</i>—A deck of cards with double the amount of letters and numbers so that left-handed people can see their cards easily when fanned in the opposite direction. The letters and numbers also glow in the dark, but they don't stick to the walls or ceiling.</p>

EXAMPLE 2

Directions for Example 2: Do this individually or in pairs. Again, read about the invention listed (*Pocket Sleeper*) and try some *YIF Gazette* searches with the key words. Notice that the search results include a "category" for found inventions. Knowing the category can help you decide which inventions on the list may be the best matches. Use the results of your search to fill the last column—list at least 3 inventions you found, describe them, and give similarities to the *Pocket Sleeper*.

Invention Name & Description	Key Words	Similar Inventions Found and Notes on Similarities and Differences
<p>2. <i>Pocket Sleeper</i></p> <p>When I go camping in the fall, it gets cold at night. In the middle of the night, sometimes I want extra socks, gloves, or a hat. The problem is I can never find them in a dark tent. So I invented a sleeping bag with big pockets sewn on the outside. That way, I can find my gloves and socks without freezing to find them or waking everyone else up with a flashlight!</p>	<p>Camp Tent Sleep Sleeping Bag Pocket Dark cold</p>	

LEARNING TO USE THE YIF GAZETTE

EXAMPLE 3

Directions for Example 3: Do this individually or in pairs. Read about *Write Right!* This time you have to think of the key words in the middle column on your own. Refer to the *Search Ideas* posted by your teacher. Use the results of your search to fill in the last column—list at least 3 inventions you found, describe them, and give similarities and differences to *Write Right!*

Invention Name & Description	Key Words	Similar Inventions Found and Notes on Similarities and Differences
<p>3. <i>Write Right!</i></p> <p>In my classroom, we have lots of math games, but not any that help us learn spelling, grammar, and punctuation. I invented a board game that will help us practice and review important writing skills.</p>		

EXAMPLE 4

Directions for Example 4: Place your invention idea and description in the first column and then complete the last two columns as you did for Example 3. Now you will be able to fill out the YIF Entry Form item describing your *YIF Gazette* research!

Invention Name & Description	Key Words	Similar Inventions Found and Notes on Similarities and Differences
<p>4. Your Invention Idea:</p>		