



## INDEPENDENT STUDENT LEARNING AT HOME

### LESSON 5: Research

#### TODAY I WILL LEARN...

Inventors must do a lot of research as they learn more about the problem they want to solve and as they develop their unique solution. They must know why the problem is a problem, who is affected, and what solutions have already been tried. And then, once they have their new invention idea, they must research to see if a similar invention already exists. If it does, they have to innovate to make it better in some way.

Today, you will learn how to research your problem and solution idea by using different resources to determine if your idea is original and unique.

#### MATERIALS

##### Resources Provided by YIP:

- Video: Research - Guided Instructions
- Slide Deck: Research
- PDF: My Invention Research Worksheet (*copy also found in YIP Inventor's Journal*)
- PDF: YIP Suggested Research Websites
- Shopping websites: [www.amazon.com](http://www.amazon.com) and [www.target.com](http://www.target.com)

##### Materials from Home:

- Pens/pencils
- Notebook or other paper for writing and drawing
- YIP Inventor's Journal (or other logbook)

#### INVENTOR PLAN

*Note: We recommend that you spend at least 60 minutes doing research on your problem and your invention idea. You may divide your time into several research sessions. You may want to ask an adult to help you with your research.*

##### **Instruction: Research**

1. Watch Video: Research – Guided Instructions. Refer to Slide Deck if needed for review.
2. Use the example of the pencil from the video and slide deck and list 5 key words to describe the pencil. Use these words to begin an internet search.

3. Go to research sites such as [libraryspot.com](http://libraryspot.com) and [kids.yahoo.com](http://kids.yahoo.com). (See PDF: YIP Suggested Research Websites)
4. Type in the search bar, “Something **wooden** that has **lead** that is used to **write** and **erase**”.
5. Go through the search and look for important pieces of information.
6. Look at several different websites to compare information you find.

### **Activity: Research At Home**

1. Research your problem independently. Just as you did with the pencil in the example above.
2. Download the My Invention Research worksheet. Use this worksheet to guide you through your research.
3. Find 2 internet resources and 1 other resource (library, interview with a professional about the topic, a book from home, etc.).
4. Now, research at least one shopping website such as [www.amazon.com](http://www.amazon.com) or [www.target.com](http://www.target.com).
5. What items come up? How are these similar or different from your idea?
6. As you find information, be sure to record the following in your YIP Inventor Journal:
  - Website name and address
  - Names of experts who provided information in the information found
  - Facts about the problem and/or the solution idea
  - What similar ideas exist- how is student’s idea the same and how is it different

### **CHECK AND REFLECT**

1. List 2 internet resources and 1 other resource (library, interview with a professional about the topic, etc., a book from home, etc.) you used in your research process.