

Unlocking Answers

Keys to Great Research

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Grade Level	6th – 10th Grade	**Time Frame**	120
Subject	English/Language Arts	**Duration**	2
Course	Any Secondary Course		

Essential Question

How can we make sure we use and share reliable information? In what ways can a piece of writing be clear and purposeful for the reader?

Summary

Knowing the best way to navigate search engines and find trustworthy sources can be tricky for learners of any age. This lesson will provide experiences for students to strengthen their searching and knowledge-building skills. It can be used as a drop-in lesson in any content area that is about to start a research project as a refresher or to set expectations. Additionally, each stage of the lesson can be used as a standalone mini-lesson to target student needs.

Snapshot

Engage

Students play a hashtag game to gain an understanding of the importance of keywords and how to formulate keyword searches.

Explore

Students sort source cards into the categories trustworthy, not trustworthy, and unsure and discuss how to determine if a source is one that should be used for research.

Explain

Students play a version of To Tell the Truth to practice paraphrasing to avoid plagiarism.

Extend

Students learn the value of creating citations by playing a searching game using library or classroom resources.

Evaluate

Students work independently or in groups to create a code of conduct for doing research and sharing findings.

Standards

Oklahoma Academic Standards: English Language Arts (Grade 6)

6.6.R.2: Record and organize information from various primary and secondary sources.
6.6.W.1: Formulate and refine a viable research question.

Attachments

- Lesson Slides—Unlocking Answers.pptx
- Research-Keys-to-Success—Unlocking Answers - Spanish.docx
- Research-Keys-to-Success—Unlocking Answers.docx
- Website-Cards—Unlocking Answers.pdf

Materials

- Lesson Slides (attached)
- Website cards (attached; 1 per group)
- Notecards
- Research Keys to Success handout (attached; 1 per student)
- Nonfiction books (to quote for the To Tell the Truth Game and to cite in the Citation Game)

20 minutes

Engage

Teacher's Note

The following lesson has been designed to be taught in its entirety or to be used as mini lessons based on student need. Feel free to just use the activity that your students need a refresher on or teach the entire lesson from beginning to end.

Share **slides 2-4** as needed to open the lesson.

Teacher's Note

If you are using this lesson with the lessons Let Us Start the Lettuce Club (or Not) and Take Those Basics and Shift Them Around to teach students about the writing process, use **slide 5** to talk about the roadmap to writing. Discuss how research happens throughout the writing process and that the work they will do in this lesson helps them find the answers they need.

Begin by talking as a class about the purpose of hashtags in social media. What are the characteristics of a hashtag?

Sample Student Responses

They are used so you can see all the posts on one topic. They are short and to the point.

Have students make two circles, an inner and an outer circle, with the inside facing the outside. Tell them you are going to give them a topic to discuss, but they can only talk in hashtags. They can only use 3 hashtags at a time and the hashtags must be brief.

Display **slide 6** with prompt 1: *The principal has decided to hire one fast food place to provide all of the food in the cafeteria for the year. In 3 hashtags share which place he should pick and why?*

Sample Student Responses

Students might say something like #McDonalds, #Nuggets, #UnlimitedSauce. What they say isn't as important as if they are able to keep it brief and still share a message. Listen for students who try to turn their hashtag into a complete sentence. Remind them that hashtags rarely have more than a word or two in them. Ask after the first round if they were able to understand what their partner was trying to share and talk about how they could improve.

Have the outer circle rotate 3 steps to the left.

Move to **slide 7** with prompt 2: *Your streaming service is glitching and only one movie is showing up this month. In 3 hashtags what movie would you want it to be and why?*

Have the inner circle rotate 3 steps to the left.

Next show **slide 8** with prompt 3: *You are stranded on a deserted island. One tool floats by close enough for you to grab. In three hashtags what tool would you want it to be and why?*

Stop to discuss or continue this pattern with prompts of your own.

After the game has ended, have students return to their seats and talk about what was difficult about talking only in three hashtags.

Sample Student Responses

It can be hard to narrow down what to say or get your meaning across. You have to keep things simple, but still need some detail and specificity. Be creative with the words you choose!

Share that this is how they need to think when they are searching with keywords. Asking Google a question makes Google have to cut unnecessary words to determine your keywords for itself. It can get things wrong, and also doesn't generate synonyms that could help you to find other great resources.

Teacher's Note

Review synonyms and their purpose as needed. Share that synonyms help with finding different results because it tells the search engine to look for other terms.

Watch the Searching for Sources on **slide 9** and talk as a class about what was noticed. Which things do they already do when researching? Which things were new to them?

Embedded video
https://youtube.com/watch?v=E1hNgZGDFwc

Have students think about something they are researching or have researched lately. Call on volunteers to share out with the group what their 'hashtag-style' keywords could be for finding information on those topics.

20 minutes

Explore

Teacher's Note

Prior to the lesson, cut apart the Website Cards and shuffle them for groups.

Display **slide 10** which has a quote from Abraham Lincoln about trusting the internet. Ask students if the quote is trustworthy. Students should be able to point out that the internet didn't exist when Abraham Lincoln was alive, which is key in knowing this is false information. Explain that usually knowing whether information is trustworthy or not is much more difficult. It can be hard to know which sources to trust when doing research. Websites can look trustworthy, but not be. How can we know which sources are the best to use?

Watch the video on **slide 11** and discuss what students felt were the most important tips in the video. When have they found it confusing as to whether or not to trust a website?

Embedded video

https://youtube.com/watch?v=NKm8-TR0rQw

Show **slide 12** and explain that students will be working in groups to complete a Card Sort. Explain that they will use the information they see on the card to sort the websites into three groups: *trustworthy*, *not trustworthy*, or *unsure*. Place students into groups of 3-4. Hand out sets of the **Website Cards**. Check in on groups as they discuss and encourage them to use information they see in the cards to make their decision.

Card Sort Key

The cards on page 2 of the Website Cards are from fake websites with false information. Pages 3 and 4 are all sites with factual information from reputable sources though the information on the sites on page 3 may cause students to question if the information is accurate and cause them to put those sites in the *unsure* pile. Groups should sort them in this way:

Untrustworthy: Tree Octopus and A to Z Explorers (both sites have contradictions and statements that couldn't be true)

Trustworthy: Titanic LOC and World Wildlife Federation Polar Bears (Both sites have trustworthy site categories with .gov and .org)

Unsure: WWI truce and Darwin worms (Both seem like they are from reputable sources, but the content seems like it could be fictional)

Teacher's Note

Consider laminating the cards for reuse, students could use dry erase markers on the card to highlight or underline the clues that they used to make their decisions.

Optional Discussion

Is Wikipedia trustworthy? The answer may surprise you. Wikipedia is more trustworthy than it has been given credit for, but the real value of Wikipedia is in the sources list. Because Wikipedia has areas that can be accessed by anyone, it is not considered a quality source by itself, but look at the end of the Wikipedia page and the links to sources there are often the kind of reliable resources we use in research reports. Give students time to explore Wikipedia using a list of content relevant subjects. Which sources do you find in the source lists that are trustworthy? Did you find any that are not?

30 minutes

Explain

Teacher's Note: To Tell the Truth

Many students may not have heard of To Tell the Truth before. For context of what the original game was about, start the lesson by sharing the clip from To Tell the Truth on **slide 13** from the 1960s version of the game. Start at the 1:50 mark to skip the introduction and show the actual game.

Embedded video
https://youtube.com/watch?v=MGzCe9PQGyg?t=110

Explain that students will be playing a version of To Tell the Truth.

Go over the directions on **slide 14**. Have students select a nonfiction book or hand each student a nonfiction book. Pass out a notecard to each student. Give them time to explore the book and record one quote from the book on a notecard. Underneath the quote have them rephrase the information in the quote in their own words.

Call a student to come up to the front, or call up groups of three to have a similar look to the original game. The student reads one of the sentences on the notecard (either the rephrasing or the direct quote). After reading the sentence they can either say "*That came from the book*." or "*I wrote that myself*." The class votes or calls out if they think the student is telling the truth or not. Then the student reveals if they told the truth about the sentence they read.

You can repeat this game with new quotes as time allows. Afterwards, discuss whether rewording has to mean making a sentence sound simple or plain. Emphasize that it does not, and share examples of quotes that were made more interesting by re-wording. Remind students that quotation marks can be used if the author really said something best, and to make sure and always give credit to the person who wrote it because in research we always *Tell the Truth*.

25 minutes

Extend

Students have thought about what it takes to do quality research, so they can now test their skills in creating citations others can use.

Teacher's Note

This is a great opportunity to collaborate with the school librarian and use library resources.

Go over with the class the citation expectations for your course (APA, MLA, etc.). If you aren't doing the lesson in a library, create a mock library in your room with books sorted as they would be in a library (by subject and then alphabetical for nonfiction). Ask students to pick a book, write a citation for the book on an index card in their best handwriting (following the selected format), and then re-shelve the book exactly where they found it. Next, collect and shuffle the cards and hand them back out. Have students read the citation they were given quietly to themselves and then see if they can now use the information to find the book.

Teacher's Note

If you are doing this activity in a classroom as opposed to a library, you may need to call students in small groups or one at a time to use their cards to find the book depending on the amount of space you have.

The cards can be shuffled again for new rounds, or you can have students create new citations.

Discuss what parts of the citation helped in locating the book. Note that things like publication year and publisher are important when there is more than one copy of a work. Sometimes science changes and authors have to update their books, so it is important to know if you have the correct edition. Emphasize that being able to find the books, articles and websites used for a report is the point of citation. Researchers want to make sure others can find the work used to write their report. It lets readers check to see if the work is trustworthy, or if they want to learn more about the topic, know where to go for more information.

Remind students that when we research, it may feel like jumping through hoops to find accurate and trustworthy sources and write citations, but it has a purpose. Even in a simple report for class, we want to practice the skills that set everyone up for future success.

25 minutes

Evaluate

Have students consider all that they have learned so far about keywords, quality sources, plagiarism, and citations. Have students (in small groups or individually) create a 4-part code of conduct for research. Every student needs their own copy of the **Research Keys to Success** handout. Show **slide 15** to go over what students should include:

1. Keyword Searching: What is important to remember when using a search engine?
2. Finding Sources: How can you determine if a source is reliable?
3. Plagiarism: Why is it important to not plagiarize and how can plagiarism be avoided?
4. Citing Sources: Why should sources be cited and what is the proper format to cite?

For each section they can add narrative writing or bullet points based on what they have learned about these topics. Assess for student understanding in these areas and use misunderstandings to drive future conversations. Have students keep this code of conduct where they can reference it in the future and use it when having writing conferences during the drafting and publishing process.

Resources

- K20 Center. (n.d.). Card Sort. Strategies. https://learn.k20center.ou.edu/strategy/147
- K20 Center. (n.d.) Let Us Start the Lettuce Club (or Not). Lessons. https://learn.k20center.ou.edu/lesson/1737
- K20 Center. (2022, February 4). Searching for Sources [video]. Youtube. https://youtu.be/E1hNgZGDFwc
- K20 Center. (2022, February 22). Searching for Sources Part 2 (Selecting Sources) [video]. Youtube. https://youtu.be/NKm8-TR0rQw
- K20 Center. (n.d.) "Take Those Basics and Shift Them Around." Lessons. https://learn.k20center.ou.edu/lesson/1827
- To Tell the Truth (CBS). (2017, July 17). To Tell the Truth - Berry Gordy, Jr., creator of Motown; Orson Bean's father! (Jul 5, 1965) [video]. Youtube. https://www.youtube.com/watch?v=MGzCe9PQGyg&t=110s