About This Lesson
In this lesson, students will learn how to evaluate online resources for reliability. First, they'll explore how to determine a site’s accuracy, relevance, bias, and reliability by comparing and contrasting online sources. Then, they'll put their information literacy skills to the test as they search for the truth, with supporting online evidence, about various topics.

Learning Objectives:
By the end of this activity, students will
- Understand the importance of thinking critically about online resources;
- Identify the characteristics of reliable and unreliable sources of online information;
- Locate and evaluate online sources for accuracy, relevancy, bias, and reliability.

Driving Question
How do I know what information to trust online?

Future-Ready Skills
Evaluating, Research Skills, Critical Thinking

Lesson Breakdown

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
<th>Description</th>
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<tbody>
<tr>
<td>Activity 1 - Pick a Side: Fact or Opinion</td>
<td>5-10 minutes</td>
<td>In this activity students will use their best judgement to determine if a statement is fact or opinion, and learn how to distinguish the difference.</td>
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<tr>
<td>Activity 2 - Source or Scam?</td>
<td>20-25 minutes</td>
<td>In this activity, students learn what makes an online resource trustworthy, and work with a partner to evaluate 2 online sources.</td>
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<tr>
<td>Activity 3 - Welcome to CCB News: The Truth is Out There!</td>
<td>20-30 minutes</td>
<td>In this activity, students play the role of a journalism intern who has to research 3 possible leads for tonight’s newscast. Students will use their source evaluation skills to support their ideas.</td>
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<tr>
<td>Exit Activity - Information Literacy Exit Slip</td>
<td>5-10 minutes</td>
<td>Students complete an exit ticket, reflecting on what they learned about evaluating online resources for accuracy, bias, relevancy, and reliability.</td>
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Materials Required:
- Source or Scam? presentation
- Source or Scam? graphic organizer
- Welcome to CCB News: The Truth is Out There! worksheet
- Paper
- Pencils, colored pencils, or markers
- Computers (tablets, phones) with Internet access

ASCA Standards:
B-LS 1. Demonstrate critical-thinking skills to make informed decisions
B-LS 5. Apply media and technology skills
B-LS 6. Set high standards of quality
B-LS 9. Gather evidence and consider multiple perspectives to make informed decisions
Inquiry Prompts:
- What’s the difference between fact and opinion?
- As a student, when do you need to use facts?
- As a student, when do you need to use opinions?

Instructions
Can students recognize the difference between fact and opinion? In this activity students will use their best judgement to determine if a statement is fact or opinion, and learn how to distinguish the difference.

1. One one side of the room, post a piece of paper with FACT written on it. On the opposite side, post an OPINION sign.

2. Explain to students that you’re going to make a series of statements. Ask students to move to one side of the room if they think the statement is a fact, and the other side if they believe the statement is opinion.

3. Some sample statements (you can also use your own):
   - The first day of school is the best day of the year.
   - Iron Man has cooler technology than Batman.
   - Harry Potter was written by J.K. Rowling
   - Students have too much / too little homework
   - February is the shortest month of the year
   - Jupiter is the largest planet in our solar system

4. Explain to students that facts can be proven, while opinions can be agreed or disagreed with.

Message for students: Knowing how to distinguish what’s fact and opinion (or even untrue) online will help you with research papers, debates, and other school projects. How can knowing the difference between fact and opinion help you outside of school?

Artifacts
None for this activity.
Inquiry Prompts:
- Is it mostly facts or opinions online?
- What's a good source of factual information?
- How does bias affect a message?
- Why would someone put unreliable information online?

Instructions
In this activity, students work with a partner to evaluate 2 online sources. (Depending on how much time you have, you can limit this activity to 1 unreliable site. You may source your own site for this activity, or check out some hoax sites collected by the Iowa State University Library.)

1. Review the Source or Scam? presentation with your students. The presentation can be printed for your students to reference as it is a series of questions they can use to evaluate online sources for reliability, accuracy, relevance, and bias.

2. Have partners apply the criteria to 2 websites (one more reliable than the other). We suggest:
   - The Burmese Mountain Dog Club of America
   - American Kennel Club

3. Ask students to capture their analyses in the Source of Scam? graphic organizer. In each section, they can record the evidence that the site is accurate/inaccurate, relevant/irrelevant, unbiased/biased, and reliable/unreliable. Encourage them to verify information with other, trustworthy sources before they accept what they read.

Message for students: To get to the truth about something, it’s important to think critically, or to ask questions, about what you’re reading.

Artifacts
Students can upload their graphic organizers to Storyboard, where they can reflect on what they learned from the activity.
Information Literacy: Evaluating Online Resources

Question if the site is relevant

Ask yourself:

- How old is the site?
- Does the site specialize in the information you want?
- Does the site go in-depth on a topic?
- Does the site cover a bunch of unrelated topics?
- Is the information useful?
- Is the content high quality?
- Does the site offer new information that can’t be found in another source?
Question if the site is accurate

Ask yourself:

- Can I check if this information is true anywhere else?
- What sources are used by the author(s) of the site? (If you don’t know, is there a way to contact the site creators to find out?)
- When was the site last updated? (Again, can you contact someone to find out?)
- Are there a lot of spelling mistakes or dead links on the site?
- Is there any outdated or obviously wrong information on the site?
Question if the site is unbiased

Ask yourself:

- What’s the purpose of the site?
- Who created or sponsors the site?
- Can anyone add content to the site, or is it controlled?
- Who is the site’s target audience?
- Does the site try to present all sides of a story or issue?
- What opinions are expressed on the site?
- How objective is the tone of the author(s)?
- Does the information promote forms of bigotry like racism, sexism, ableism, classism, or homophobia?
Question if the site is reliable

Ask yourself:

- Does the site look like it was made by experts or people who don’t know what they’re doing?
- Are the authors of the site qualified to give info about the topic? Can you check their credentials?
- What is the site’s domain?
  - .edu - educational
  - .gov - government
  - .org - non-profit organization
  - .com - commercial
  - .biz - businesses
  - .info - used by anyone
  - .net - networks
- Is the site trying to sell you something?
- Do other reliable sites cite or link to the page?
Source or Scam?

Website: _____________________________________________________________

What makes you think this site is or isn’t: **Accurate**

What makes you think this site is or isn’t: **Relevant**

What makes you think this site is or isn’t: **Biased**

What makes you think this site is or isn’t: **Reliable**
Welcome to CCB News: The Truth is Out There!

Inquiry Prompts:
- Can a site have both reliable and unreliable information on it?
- What could happen when people believe unreliable sources of information?
- What would happen if someone didn’t use a reliable source of information at school? At their job?

Instructions
In this activity, students play the role of a journalism intern who is tasked with the job to research 3 possible leads for tonight’s newscast. Students will use their source evaluation skills to support their ideas.

1. Set the scene with your students: “You are no longer students in a classroom; you are journalism interns in a fast-paced newsroom. Tonight’s newscast is 5 minutes short and the team needs a story to air—fast! You’ve been given the job of researching 3 possible leads. Reputation is everything in this business, and airing false news will lose the show viewers and prime sponsors.”

2. Give students copies of the Welcome to CCB News: The Truth is Out There! evaluation worksheet.

3. Have students research each of the leads on the worksheet, locating and evaluating sources of information to suss out the most reliable story to go with. Prompt them to circle the story they want to go with.

4. If you have time, ask students to pitch their leads to you.

Message for students: Wikipedia is not considered a reliable source. Anyone can edit unprotected pages. It’s not cool to cite it in any kind of important research. While Wikipedia itself may not be reliable, you can always dig deeper and visit and evaluate the sources linked to a Wikipedia article.

Artifacts
Students can add the worksheets to Storyboard and reflect on why having credible sources of information is important.
Welcome to CCB News!

Welcome to your first day as a CCB intern. Get ready to flex your research muscles. Your job is to check out the following three leads and find the most reliable one for tonight's newscast. Don't get tricked! Examine your sources carefully.

<table>
<thead>
<tr>
<th>Story</th>
<th>Sources</th>
<th>Evaluate your sources</th>
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<tbody>
<tr>
<td>An animal story is always a hit with audiences. What better story than the fight to save the endangered Pacific Northwest tree octopus?</td>
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<tr>
<td>Signals from the start of the universe? Before TVs went digital, viewers could see leftover radiation emitted from the Big Bang in the static on their TVs.</td>
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<tr>
<td>Forget Jurassic Park - you might be on to a bigger story. Scientists have recently uncovered the perfectly preserved scene of the biggest battle between humans and dinosaurs yet!</td>
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<td></td>
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Name:

Information Literacy

3 things I learned today:

2 things i liked about this lesson:

1 question I still have:

Date:

xello

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