LESSON PLAN

Break the Fake: What's Real Online?

This lesson is part of *USE, UNDERSTAND & ENGAGE: A Digital Media Literacy Framework for Canadian Schools*: http://mediasmarts.ca/teacher-resources/digital-literacy-framework.

LEVEL: Grade 3 to 5

DURATION: 45 minutes plus time for the assessment/evaluation task

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This lesson plan is part of the Break the Fake *project. This lesson has been made possible in part by the Government of Canada and the Government of Ontario.*

Overview

In this lesson, students are introduced to the challenges of identifying what is real and what is fake online. After learning some simple steps to verify online information they create a poster that communicates the importance of questioning and double-checking online content.

Learning Outcomes

Students will:

- Learn simple steps for verifying online information
- Practice verifying online information
- Understand media literacy key concepts:
  - Media are constructions
  - Each medium is a unique aesthetic form
- Understand digital literacy key concepts:
  - Digital media are networked
  - Digital media are shareable and persistent
  - Interactions through digital media can have a real impact
  - Digital media experiences are shaped by the tools we use

Preparation and Materials

Prepare to show the videos *House Hippo 2.0*.

Ensure that students are able to access the Animals Quiz.

- If you prefer not to have students do the quiz, prepare to project the slideshow *Real or Fake?*

Arrange access to a digital projector or digital whiteboard for the *Is This for Real?* activity, or ensure that students have access to the internet

Ensure that students have access to the internet for the *Making a Custom Search Engine* assignment.

Prepare to distribute the student handout *Reliable Sources*.

Prepare to distribute the assignment sheet *Make a Custom Search Engine*

Review the teacher backgrounder *Custom Search Engines*

Procedure

HOUSE HIPPO 2.0

Begin by asking showing students the video *House Hippo 2.0*, then ask students:

Ask students:

- What do you already know about hippos?
- What might make you believe that house hippos are real? Why might you *want* to believe it?
- What might make you think house hippos are not real?
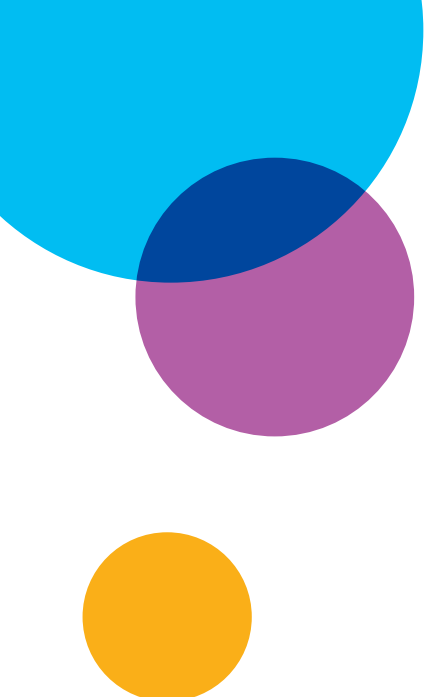- What were some things in the video that made you think house hippos might be real?

REAL OR FAKE?

Now have students complete the *Animals Quiz* or show them the *Real or Fake?* slideshow. (If you show them the slideshow, have them guess whether each image is real or fake, then read the notes for each slide:

> *Slide 2:* The sign warning about blackbirds is real; the one warning about squirrels is fake.

> *Slide 3:* The octopus is made of plastic; the animal on the right, a nudibranch, is real.

> *Slide 4:* Both photos are real. The top picture, of a weasel clinging to the back of a woodpecker, was taken by a nature photographer in England; the second is of an animal called the Malabar Ground Squirrel.

Slide 5: The top photo, of a "cyclops shark," is real (this is not a species of shark; sharks' eyes sometimes fuse into one while they're developing before being born); in the second photo the gorilla is real but the knitting needles and scarf were edited in.

Ask students:

- What clues told you that a picture is real or fake?
- Are there some pictures you were more sure about than others?
- If you weren't given the answers, how could you find out?
- How do you know if you can trust a source like a book, a website or a video?

RELIABLE SOURCES

Point out to students that while there are a number of different ways to find out if something like this is real or fake, the easiest is often going to be turning to a source that you already know is reliable.
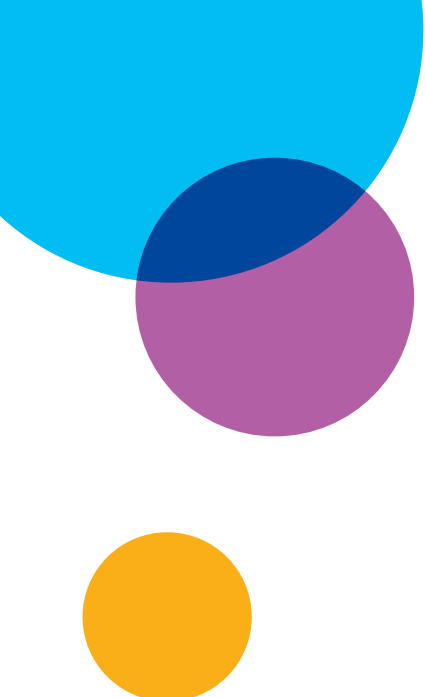
Ask students to name some examples of reliable sources. If they have trouble thinking of examples, you can prompt them with some of these:

- Parents or guardians
- Teachers
- Librarians
- Doctors
- Encyclopedias
- Museums

Now ask students: What do those sources have in common? Give students a few minutes discuss, then distribute the handout *Reliable Sources*.

Go through the handout with the class and explain that reliable sources have three things in common:

Expertise. First, a reliable source *knows* about the topic. People can be experts on different things because of what they've learned, things they've done or experienced, where they live, and so on.

Using the handout, have students write down three different examples of topics and who would be an expert on them. (You can give students a few minutes to do this on their own, have them work in pairs, or do as a whole class.) Then have them write down something *they* are an expert on.

Take up the examples. Make sure the following points come up:

• Being an expert is not just about learning or having a title. If your father makes pizza every week, they are probably an expert at making pizza!

• Being an expert is also *specific*. You may know a lot about the Pokémon cartoon but not as much about the card game. In the same way, scientists and doctors are not experts on everything in science or medicine, just their specific fields.

• If students have trouble thinking of things they are experts in, point out that they are experts on their own lives and themselves. Nobody knows more about that than they do!

Process. Next, explain that trusted sources have a *process* for getting good facts and making sure they are correct.

Read the examples in the handout and ask them if they can think of any other examples of how people make sure their facts are correct.

Then ask them if they can think of any sources of information that *don't* have a process for making sure their facts, or where they're not sure if they have good facts. Make sure the following examples come up:

• YouTubers

• Influencers

• Random people on the internet

You can also point out that even in reliable news sources, opinion articles – where someone is telling you what they think, instead of reporting what happened – don't get fact-checked the way news articles do.

Motivation. Finally, explain that reliable sources have a *reason* to give you accurate information.

Go through the examples, then explain to students that many businesses have *slogans* – short phrases that tell you what they're selling. Read the three newspaper slogans to the students, then ask:

- Which of the three is promising to give you accurate information? (#3, *The New York Times*)

- Which is promising that it will be fun? (#2, *The Mail on Sunday*)

- Which is saying that it's on your side? (#1, the *Wairapa Times-Age*).

Point out that while not all sources are as open about what they are selling, you can usually tell by asking if reliability is a big part of why people watch, read or buy them.

Return to the list of trusted sources from earlier, and ask students if there are any other they would like to add to the list following the discussion.

IS THIS FOR REAL?

Have imagine that somebody told them there was a frog called a "glass frog" that had:

- see-through skin

- eyes like Kermit the Frog's

- and a visible heart and stomach.

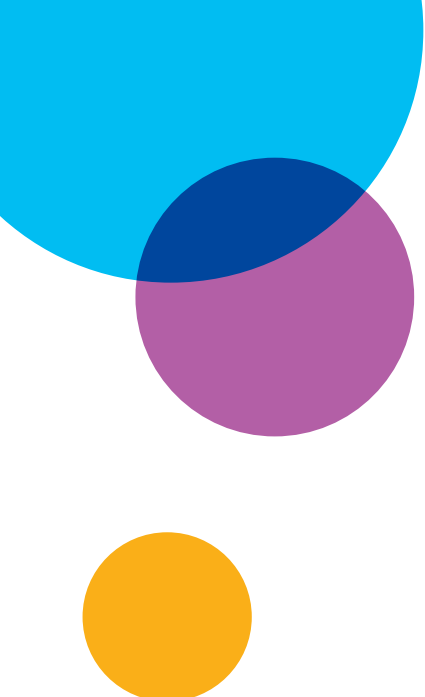How would they find out if that was for real?

After students have discussed the question for a few minutes, open a search engine such as Google on the data project or digital whiteboard and search for *glass frog*. Scroll the results slowly enough for students to look at them.

Ask: How many of these seem like trusted expert sources? How can they tell?

Now open the MediaSmarts [Trusted Source search](#) and search for *glass frog*. Scroll the results slowly enough for students to look at them.

> With older students, you may wish to have them do these searches on their own. If you do, you may choose to have some students use the general Google search and have other use the Trusted Source search and then compare the experience.

Ask: How do these compare to the first set of search results? Which seemed like it would be easier to find a reliable answer to your question?

Click on one of the results and read through the article to confirm that glass frogs are actually real.

CUSTOM SEARCH ENGINES

Explain to students that the Trusted Source Search is a *custom search engine*: it uses Google, but only searches a limited number of sites.

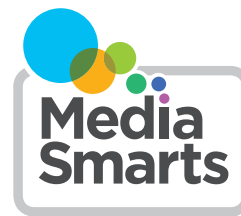Ask students: Why might it be helpful to only search *some* websites?

Explain that if you already know about some reliable sources on a subject you're interested in – like dinosaurs, Disney, Pokémon, or the Titanic – you can save a lot of time by making a custom search engine that only searches them.

ASSESSMENT/EVALUATION TASK: MAKE A CUSTOM SEARCH ENGINE

Distribute the assignment sheet *Make a Custom Search Engine* and go through it with the class.

You can choose to let each student pick a topic, have students work in groups, or have the whole class work together to find reliable sources on a topic related to other parts of the curriculum. If you choose either of the latter two options, you can make a shared list of reliable sources by compiling students' suggestions.

Note that if students need Google accounts to actually make their own search engines, and accounts created by schools boards are generally not authorized to make them. If you want to make actual search engines you will most likely need to make or use your own Google account. See the backgrounder *Custom Search Engines* for information on how to do this.

BREAK THE FAKE: WHAT'S REAL ONLINE?

Reliable Sources

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The Internet has plenty of places to find information, but not all are created equal.

You can ask a parent or teacher, do a search, or check Wikipedia to find out if something is a *trusted, expert source*.

Here are three questions to ask:

1.   Do they **know** about the topic?

An **expert source** is a person or group with special knowledge on a topic. Doctors and scientists are expert sources. So are museums and science magazines.

People can be experts in things they have done or places they have lived. You are an expert on your life and yourself. A vet would be an expert on dogs, but you might be an expert on your dog.

Being an expert in one thing doesn't make you an expert in everything! You wouldn't ask a dentist to fix a broken arm. Make sure they know what they're talking about.

Write down some examples of different topics and who you would ask about them.

To learn about _____, I would

ask _____.

To learn about _____, I would

ask _____.

To learn about _____, I would

ask _____.

What is something *you* are an expert on?

_____

_____

2.   Do they have a **process** for getting good facts?

A **trusted source** has ways to make sure they get facts right. Scientists do experiments. Reporters ask questions. People who write books talk to experts.

They also make sure to *correct* any mistakes they make.

3.   Do they have a **reason** to give you good facts?

Trusted sources also have reasons to make sure their facts are right:

•   If someone wants you to come to their house, they have a reason to give you accurate directions.

•   If a scientist makes mistakes, other scientists will do experiments that correct them.

•   If a book about dogs has lots of mistakes, people won't want to buy it.

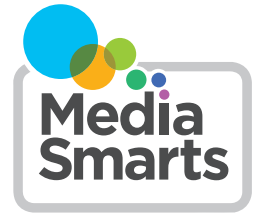For instance, news outlets have three different ways of appealing to audiences:

•   They can be *fun* and entertaining

•   They be accurate and give you lots of facts so that you feel *well-informed*, and

•   They can make you *root for your side*—whether that's a sports team, your country, who you are, and so on.

Take a look at these newspaper slogans. Which is telling you that it will give you *accurate information*? Which is just trying to be *fun*? Which is saying it's *on your side*?

1. "Your region. Your paper." (Wairapa Times-Age)

2. "A newspaper, not a snoozepaper." (The Mail on Sunday)

3. "All the news that's fit to print." (The New York Times)

Not all news sources are as open about what they are selling, but you can usually tell by asking yourself: *Would they lose money if people thought they weren't accurate?*

BREAK THE FAKE: WHAT'S REAL ONLINE?

Assignment Sheet: Make a Custom Search Engine

Write down the topic your custom search engine will be about.

Next, find five **reliable sources** that will help you learn more about that topic.

For each one, write down the name of the source, its web address, and why you feel it is a reliable source.

Topic:

NAME	WEB ADDRESS	WHY IS IT RELIABLE?

BREAK THE FAKE: WHAT'S REAL ONLINE?

Teacher Backgrounder: Custom Search Engines

One great shortcut to breaking the fake is making your own custom search engine. That's a search engine that only looks at a **limited number** of websites, like our Fact-Checking Search Engine (bit.ly/fact-search) and our Science Search Engine (bit.ly/science-search.) If you make a custom search engine that includes just sources you know and trust, you can make it a lot easier to find what you're looking for.

To make a custom search engine you will need to be logged in to a Google account. (If you don't already have one, go to accounts.google.com to sign up.) You don't have to be logged in to Google to use it. As well, anyone can use a custom search engine once it's been created, so a whole class can use search engines made with a single account.

Once you've logged in, go to cse.google.com, then scroll down to the bottom of the page and click Get Started. Now you'll see this:

To make your Custom Search Engine:

Give your search engine a name in the box labeled Name of the Search Engine. This name is just to help you remember it, so you can call it anything you like: Newspapers, Sports news, Video game sites, and so on.

Under Sites to Search, sites you want to include. Make sure to put in the web address (like mediasmarts.ca) instead of the name of the site.

As soon as you add one site, another box will appear below for you to add another.

When you've added as many sites as you want, scroll down to click I'm Not a Robot and then click Create.

You can always go back and add more sites to your search engine, so don't worry about getting them all right now.

Now you'll see this:

Click on Public URL to get the web address for your new search engine. These addresses are pretty long, so you may want to bookmark it (see bit.ly/browserbookmark to see how to do this) or copy it into a link shortener like bit.ly or tinyurl.com.

EDITING AND MAKING MORE CUSTOM SEARCH ENGINES

The next time you go to cse.google.com, you'll see a list of your custom search engines.

If you want to make a new one, click on Add. Then follow the same steps as you did for the first one.

If you want to delete a search engine you've made, select the box next to its name and click or tap Delete.

If you want to change one you've already made, click or tap on the name. This also lets you do things like turn on Safe Search and allow or forbid Image Search in your custom search engine.