The following activities are designed to stimulate a current events discussion. Generative in nature, these questions can be a launching point for additional assignments or research projects. Teachers are encouraged to adapt these activities to meet the contextual needs of their classroom. In some cases, reading the article with students may be appropriate, coupled with reviewing the information sheet to further explore the concepts and contexts being discussed. From here, teachers can select from the questions provided below. The activity is structured to introduce students to the issues, then allow them to explore and apply their learnings. Students are encouraged to further reflect on the issues.

Core Skill Sets:
These icons identify the most relevant core skills students will develop using this resource. Learn more about the WE Learning Framework at www.WE.org/we-at-school/we-schools/learning-framework/.

BACKGROUND INFORMATION
• The vast majority of people surveyed have a positive view of scientists (79 percent), but a large gap exists between what scientists believe and what the majority of people believe (Pew Research Center)
  • 88 percent of scientists believe it’s safe to eat genetically modified food vs. 37 percent of adults
  • 89 percent of scientists are in favour of using animals in research vs. 47 percent of adults
  • 68 percent of scientists believe it’s safe to eat foods grown with pesticides vs. 28 percent of adults
  • 98 percent of scientists believe human evolved over time vs. 65 percent of adults
  • 87 percent of scientists believe climate change is mostly due to human activity vs. 50 percent of adults
• Whether people believe in evidence-supported ideas (such as the reality of climate change or the need for vaccines) has less to do with if they trust scientists or know science and more to do with cultural cognition. (The Atlantic)
• Recent studies show that people who are the most well informed on a subject also happen to be the most partisan (ideology and politics colour the way we interpret facts). (Vox)
• Recent cutbacks by the federal government in the United States threaten the quality of scientific research performed by the Environmental Protection Agency, National Institutes of Health and the Food and Drug Administration. (New York Times)
• In 2013, Canadian scientists protested in Ottawa, marching on Parliament Hill to demand that the federal government stop infringing on scientists’ research. (The Toronto Star)
• On Earth Day (April 22), American scientists will protest in Washington, demanding more evidence-based policy making. (Salon)

KEY TERMS
Cultural cognition—The phenomenon whereby people’s identities, politics and cultural values shape perceptions, attitudes, and interpretation and understanding of science.

Scientific consensus—Born from an overwhelming agreement between scientists of varying fields of study regarding a particular issue at hand, scientific consensus does not mean an issue has been settled, but it generally reflects an accepted starting point.

Scientific method—A procedure of hypothesis, observation, measurement and experimentation.
THEMES AND COURSE CONNECTIONS

• Themes: Environment, Global Issues, Health, Local Issues, Values and Ethics
• Course Connections: Science

MATERIALS

• Front board
• Paper and writing utensils
• Computer/tablet with internet access
• Books, magazines and newspapers referencing issues in science and technology

SPECIFIC EXPECTATIONS AND LEARNING GOALS

Students will:
• Develop an understanding of scientific literacy and how it impacts everyday life
• Recognize how scientific literacy helps to make informed decisions

DISCUSS

1. What is scientific curiosity? How is it similar to or different from scientific literacy?
2. Why are we often more influenced by the opinions of others rather than the facts?
3. Do you have to be a scientist to be scientifically literate?

DIVE DEEPER

Read students “The Lorax” by Dr. Seuss (or alternatively show the film or original cartoon). During and after reading, encourage students to think about the information that the Lorax was trying to share. Why didn’t anyone listen to him? What were the consequences? What might have happened if the others had stopped to consider the information the Lorax was sharing?

Tell students that the ability to ask questions and find information about scientific concepts and process is called *scientific literacy*. People who are scientifically literate can use this information to make important decisions such as what they believe in, who they will vote for or what they will buy. As a class, read the *Global Voices* article and discuss the questions from the Discuss section.

In small groups, ask students to brainstorm questions they have about the world around them. What are you curious about? What influences your curiosity? What do you want to find answers to?

Students will choose a science-or technology-related issue that interests them (for example: animal testing, nuclear energy, artificial intelligence, genetically modified foods) and examine the issue from both sides.

Using magazine and newspaper articles, online sources or other research materials, students will collect information about the issue and organize it into a T chart that represents both sides of the issue.

Remind students to be critical about the sources they are using and make sure that the information is trustworthy. Provide students with a list of reputable sources or discuss how to choose a credible source if students have not had previous research experience.

When students have finished their research, ask them to present both sides of the issue to the class and share whether the process informed or confirmed their opinion on the issue, or changed their opinion in some way.

RESOURCES