

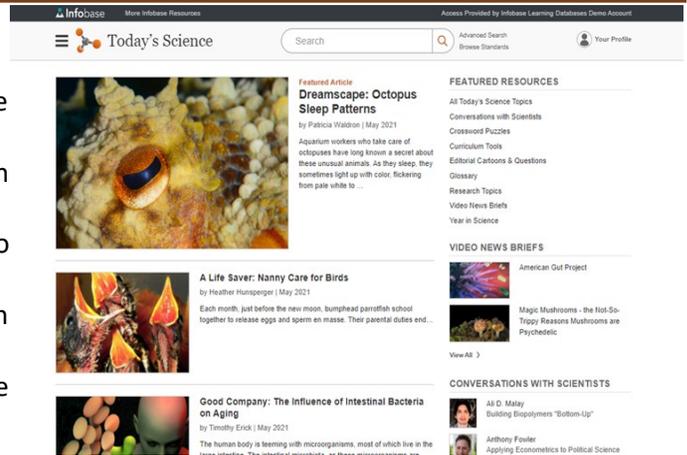


EDUCATOR'S GUIDE

Today's Science bridges the gap between the science taught in the classroom and the science students read and hear about in the news. Written especially for students, this award-winning database provides students with a wealth of content spanning important advances in biology, chemistry, environmental science, space, physics, and technology that will help them comprehend and analyze real-world science while increasing those ever-important critical thinking skills. In addition to informative articles, **Today's Science** also includes a variety of rich resources that will engage your students and encourage learning: videos, images and diagrams, experiments, biographies, conversations with scientists, editorial cartoons, and a pop-up glossary. With an extensive back file illustrating how one scientific advance leads to another, **Today's Science** is an excellent resource for supporting science instruction while reinforcing science educators' traditional emphasis on the scientific method.

Today's Science will help students to:

- ◆ relate what they learn in the science classroom to the outside world
- ◆ gain a deeper understanding of current science topics in the news
- ◆ appreciate the important and ongoing work scientists do each and every day
- ◆ utilize critical thinking skills to gather and discuss facts on a variety of science topics
- ◆ understand concepts, ideas, or processes through the use of videos, diagrams, and other visual media



Citation Information MLA APA Chicago Manual of Style

Erick, Timothy. "COVID-19: Up Close and Personal." Today's Science, Infobase, Apr. 2020. <https://tsf.infobaselearning.com/recordurl.aspx?vid=105446&ID=44306>. Accessed 17 Apr. 2020.

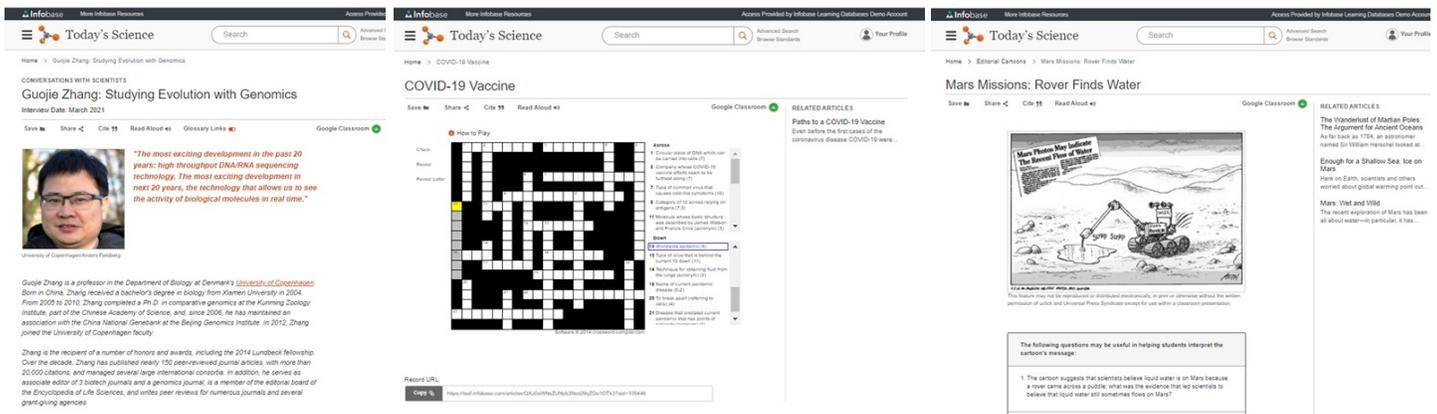


Feature Highlights

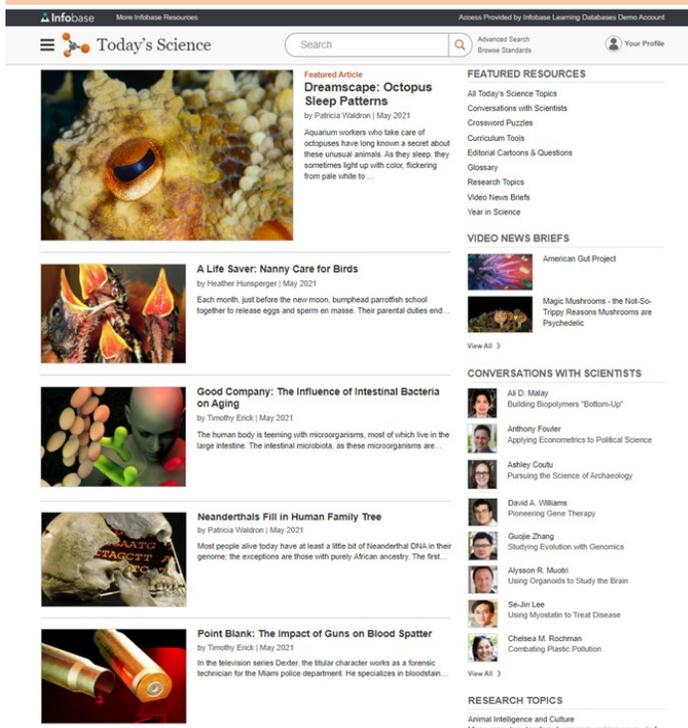
1. Dynamic citations in MLA, CMS, and APA formats
2. Authentication options such as library bar code, IP address, and Referring URL
3. A variety of integration options and partners, including Schoology, Canvas, Brightspace (formerly D2L), Follett One Search, and others
4. Google Tools for K-12 Educators: Share to Google Classroom; Google Translate (100+ languages)
5. Search by standards: state/provincial/international, National STEM Standards, Next Generation Science Standards, and AP standards to find correlating articles

A Wealth of Content Designed to Encourage Students' Scientific Curiosity

1. **5,400+ Informative Articles** Covering a Dozen Main Topics and 200+ Subtopics, All Fully Hyperlinked
2. **720 Conversations with Scientists** Offering a Direct Window into the Lives of Scientists and the Work They Do
3. **40 Curated Research Topics** with Links to Related Articles to Use as a Starting Point for Research.
4. **365+ Inside Science Video News Briefs** From AIP Present Scientific Topics in the Form of Short, Engaging Videos
5. **300 Interactive Crossword Puzzles** Help Increase Comprehension & Vocabulary and Reinforce Scientific Concepts
6. **Thousands of Editorial Cartoons** Illustrate Scientific Principles and Engage Students in Critical Thinking
7. **8,000+ Embedded Pop-up Glossary Definitions** for Defining Scientific Concepts and Enhancing Vocabulary
8. **Thought-Provoking Discussion Questions** Accompany Every Article and Every Editorial Cartoon



Robust Home Page



The *Today's Science* Homepage offers quick and easy access to all of the best and most useful content, providing both educators and student researchers with an enjoyable user experience.

- All Today's Science Topics
- Conversations with Scientists
- Crossword Puzzles
- Curriculum Tools
- Editorial Cartoons & Questions
- Glossary
- Research Topics
- Video News Briefs
- Year in Science

Engage Students with Easily Accessible Multimedia and Interactive Content

Use Videos to Enhance the Learning Experience

Today's Science includes hundreds of video news briefs to help reinforce visual learning, stimulate interest, and provide convenient overviews and discussion starters. All videos include full-text, searchable transcripts that are conveniently displayed directly below the video player. Each video also includes a dedicated record URL for online sharing, closed captions in English, and full citations in MLA and CMS for students who might be using these videos as part of a research project or for project-based learning.



Pollution and the Scent of a Flower



Magic Mushrooms - the Not-So-Trippy Reasons Mushrooms are Psychedelic



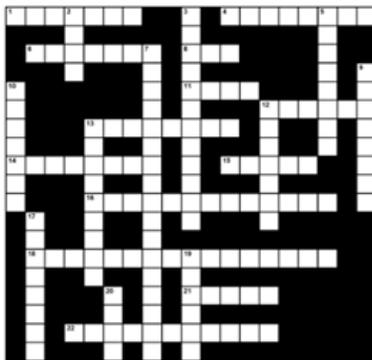
Wild Turkeys vs. Domestic Turkeys



American Gut Project

COVID-19 Up Close

Print Download Share Save Interactive Crossword



ACROSS

1. Health problem of excessive weight (7)
4. Protein secreted by immune system; associated with 3 down (8)
6. These are found in the organ (in the upper torso) that handles oxygen exchange (3,4)
8. Common disease that causes discomfort and sometimes worse.

Engaging Crossword Puzzles Reinforce Important Science Concepts

Today's Science includes hundreds of original, interactive crossword puzzles to help students learn and retain the key scientific terms and concepts used in *Today's Science's* news articles. Crossword puzzles are also available in a printable format and include answer keys. Topics include:

- * Alzheimer's Sensory Therapy
- * Antimatter and Gravity
- * Black Holes, White Holes
- * Caterpillar Locomotion
- * Climate Change Report
- * Curiosity Lands on Mars
- * Dark Matter and Mass Extinctions
- * Fingertip Regrowth
- * Global Warming
- * Higgs Boson Coupling
- * Mosquito Diseases
- * Newton's Law Revisited
- * Ocean Biodiversity
- * Packing Tape Physics
- * Secrets of the Genome
- * Stem Cell Shake-Up
- * Tomato Genetics
- * Zombie Spiders

Thought-Provoking Editorial Cartoons and Challenging Discussion Questions

Today's Science contains thousands of editorial cartoons chosen specifically to support and illustrate a number of important scientific principles, to engage students in critical thinking, and to provide ample opportunities for them to consider and respond to document-based questions (DBQs). Topics include:



The following questions may be useful in helping students interpret the cartoon's message:

1. In March 2010, a group of about 40 researchers combined to assess the evidence so far gathered on what killed the dinosaurs. Does the cartoonist agree with the conclusion of the study? Can you name some other events that might explain the demise of the dinosaurs? [See *Dinosaurs Done in by Asteroid After All*, March 2010].
2. To what other, far more recent catastrophe of a different kind is the cartoonist linking the mass extinction of the dinosaurs?
3. The dinosaurs were the dominant land animals for more than 160 million years. Who are the dominant land animals now? Can you think of things that might doom them — other than their size?
4. What attitude is the cartoonist conveying in this cartoon? What persuasive techniques does the cartoonist use to support his way of thinking? Could the cartoonist have used other techniques to make his point more effectively?

- Bioterrorism: Are We Prepared?
- Cell Phones: Mixed Signals
- COVID-19: A Global Pandemic
- Darwin Revisited: Beetlemania
- Extrasolar Planets: Intelligent Life?
- Global Warming: King Coal
- Gulf Oil Spill: Finding Nemo
- Hurricane Katrina: The Next Bright Idea
- Jeopardy!: Man and Machine
- Mars Missions: Rover Finds Water
- Obesity: Kids in Trouble
- Pluto: Dwarf Planet
- Stem Cells: Hope or Hype
- Television: Cable-Ready

Lesson and Project Ideas for Educators Using *Today's Science*, cont'd.

More Classroom-Based Lesson and Project Ideas

Science in the News This activity is designed to remind students that science isn't just something they learn about in the classroom but is also an ongoing process that touches so many of our lives in very real ways. Science is everywhere! Using *Today's Science*, the Internet, or a local or national newspaper, challenge students to search for something happening in the world that involves science. Some examples might be a new climate-related development, health crisis, the testing/approval of a new vaccine, or any number of other possible topics. Students should write a news article reporting on this event, with particular emphasis on the scientific information being presented. OPTIONAL: Students may choose to convert their article to a television news-type story and deliver it in front of the class, or make a video and share it with the class.

Game On! Who doesn't love playing games? This activity can be used as a review at the end of a lesson, or to prepare students for an upcoming quiz or test, or just as a fun, educational activity for whenever time allows. Using one or more articles from *Today's Science* that deal with a similar topic, along with a standard PowerPoint game template, choose a science-related subject area and create a Jeopardy-style game featuring a series of questions and answers, all of which should link back to information found in *Today's Science*. Divide the class into several teams and encourage students to work together with the other members of their team to answer the most questions. OPTIONAL: Award small prizes such as candy or a homework pass to the members of the team that answers the most questions correctly.

History	Natural Power in Science	Earth and Space Science	Global Warming	Chemistry 101
10	10	10	10	10
20	20	20	20	20
30	30	30	30	30
40	40	40	40	40
50	50	50	50	50

Interview with a Scientist Direct students to the “Conversations with Scientists” section of the homepage and have them click on “View All Conversations with Scientists.” Once there, ask each student to select one of the available conversations from a topic of interest, such as Astronomy and Space, Medicine and Health, Technology, etc. There are more than enough conversations available so that no two students should be choosing the same one. Students should read through their chosen conversation, paying particular attention to how their work has impacted our lives to this day. After gaining a thorough understanding of the work being done by their chosen scientist, students should propose some new questions that they might ask in a follow-up interview. OPTIONAL: Students could try reaching out their scientist and ask their questions for real, either via email or during a phone call or virtual meeting. Remind students that scientists are extremely busy and they may not receive a reply.

Draw My Life Opinion, Part One First, locate the article “Using Editorial Cartoons” under Curriculum Tools (located at the bottom of any page of *Today's Science*). Activate students' prior knowledge regarding editorial cartoons by asking them to respond to the following questions, either orally as part of a class discussion, or in writing, to the best of their ability: What do you think the purpose of editorial cartoons is or should be? Should they always have a serious purpose? Are they meant to educate? Are cartoons meant to change readers' minds about a particular topic, or do they simply intend to inform and promote discussion? Do cartoons have to be funny to best get their point across? Why is humor an effective means to express an insight or point of view?



Draw My Life Opinion, Part Two Ask students to draw their own cartoons modeled after those found in *Today's Science*. To start, have them read news or historical coverage of a science topic they are studying. Advise them to jot down some notes reflecting their opinion on that topic, and to think about how they might go about making a visual representation of their opinions. When they have completed the cartoon itself, they should then write three thought-provoking questions to go with the editorial cartoons they created. Share these cartoons with the class and start a good discussion about the science topic!. OPTIONAL: Select the best cartoons and post them on the school or library's website, submit them to the school newspaper, or share them via the school's or the teacher's social media account.

Additional Suggestions: Write a summary and/or create an outline of an assigned article; Make a poster, draw a diagram, or create a 3-D model of a science-related concept based on their reading; After reading an article or a series of articles on a given topic, write down several questions about the article(s) and quiz each other; research and present on a science-related topic of interest.

