

Developing Plant Presentations

Guide students to explore digital interactive plant resources, then develop original presentations about the power of plants.

OBJECTIVE

Students will:

- ✓ Analyze different forms of media
- ✓ Extract information from several media formats
- ✓ Develop their own informational presentations

TIME

30 minutes plus work time

MATERIALS

- ✓ Plant Power! activity sheet
- ✓ Digital module at [scholastic.com/bloom/plantpower](https://www.scholastic.com/bloom/plantpower)

Optional:

- ✓ The Surprising World of Horticulture poster
- ✓ Make Your Community Bloom poster

1 Tell students that they will be creating an informational presentation about plants, but first, they will consider the qualities of different media in order to choose the format of their presentation—while learning more about plants.

2 Introduce the Plant Power online module, which mixes information (about plants) and entertainment (to engage the audience). Go through each of the three components as a class and then discuss:

VIDEO: The “Plant Power!” video presents information through visual and audio engagement. Bright graphics and animation illustrate the topics while the upbeat narrator and the quick-paced editing make the video entertaining. The narration also frequently addresses the viewer directly, which enhances engagement.

▶ At this stage, distribute the **Plant Power! activity sheet**, which acts as a video study guide. Have students fill in the blanks and break out into their group discussions.

INTERACTIVE DIAGRAM: The diagram “Peek Inside a Plant” presents information through interaction. The user is required to focus on specific parts of the diagram to direct the flow of information. The diagram also enhances comprehension by providing detailed views of a plant.

QUIZ: The “What’s Your Plant-Ability” quiz tests students’ knowledge while delivering extra information. While the quiz is an assessment tool, it also delivers additional topic details via the thoughtful answer choices and offers a platform for critical thinking.

3 Prompt students to discuss the pros and cons—as they see them—of the different formats used in the digital module. Encourage them to provide examples of features that they found helpful or not helpful for their learning.

4 Extend this conversation to guide students to analyze different media formats, such as videos, books, blogs, audiobooks, websites, and podcasts. For example:

VIDEOS: Pros—entertaining, engaging, dynamic, images are explanatory, audio/video combination; cons—often not as information-rich as other media, can be difficult to absorb.

BOOKS: Pros—rich in information, reader controls pace, usually well structured (chapters, sections, etc.), can be dynamic and engaging if well written; cons—requires more attention and focus than many other forms of media.

5 Tell students that now that they have considered the qualities of different media, they will create their own informational presentation. Challenge them to summarize and synthesize the information in the digital plant module (or another trustworthy source, if desired) and present it in their own original and exciting format. Explain that their presentations can be written in one of four formats (or another format they clear with their teacher):

- ▶ A blog post by a green-collar worker
- ▶ A transcript of a podcast in which an interviewer talks with a green-collar worker (horticulturalist)
- ▶ A short story in which the topics are part of the plot
- ▶ A script for a short video

LOW-TECH ALTERNATIVE

Use the posters **The Surprising World of Horticulture** as well as **Make Your Community Bloom** to expose students to key plant facts. Then have them present what they learned in their own original poster or in another format.



NAME _____

Plant Power!

Today, videos are at our fingertips. Some are short, some are long. Some are silly, some are serious. This form of media can be a great learning tool. A good nonfiction video (sometimes called a documentary) can hold an immense amount of information while also being fun and engaging. Now watch the video Plant Power! on [scholastic.com /bloom](http://scholastic.com/bloom) and fill in the blanks below.

VIDEO STUDY GUIDE

- 1) Fossils from the oldest plants date from _____ years ago.
- 2) An explosion of plant life hundreds of millions of years ago produced _____, which allows us to breathe today.
- 3) Plant roots hold soil in place, which helps to prevent _____.
- 4) Animals need plants for _____ and _____.
- 5) Plants provide us with everyday necessities like _____, _____, _____, _____, and _____.
- 6) Plants utilize _____ from the air during photosynthesis and release _____, which we need to live.
- 7) While many insects need flowers for food, flowers need _____ to carry out the pollination they need to create new _____.
- 8) The art, science, technology, and business of growing plants is known as _____.
- 9) People who work in horticulture are known as _____.
- 10) Earth has almost _____ species of plants.

TIPS & TRICKS

How to get the most information from a video:

- * **Watch closely. A good video will be dense with information.**
- * **Take notes. Write down everything that sounds important.**
- * **If the information is coming too fast, ask your teacher to hit pause or rewind to catch up.**
- * **Look for structure. Videos often have headings for their sections (sometimes called intertitles). These clue you in to the subjects.**



VIDEO DISCUSSION

Gather in small groups to discuss the video. Make a list of ecological issues that were mentioned in the video that happen in your own community. For example, how certain plants are controlling erosion or making the landscape beautiful.

THE SURPRISING WORLD of HORTICULTURE

How plants power our lives in innovative ways

DRONES & ROBOTS
help us **GROW PLANTS**

Beauty

Plant-based cosmetics are one of the fastest-growing segments of the beauty industry

More Trees - Less Pollution!
1 Tree Can Scrub **48 lbs.** of **CO₂** from the air each year

Environment

Simply looking at flowers and nature can improve your **MOOD**

Technology

People only eat roughly **2.5%** of the edible plants in the world
If we cultivated the others, maybe we could solve world hunger

Food

Art & Design

Ornamental Horticulture has been proven to:
REDUCE STRESS
IMPROVE MEMORY & CONCENTRATION
and **SPEED HEALING**

Sports

Athletes are **20%** more likely to sustain injuries on artificial turf vs. natural grass

Health & Wellness

1/2 of the top **100 MOST PRESCRIBED MEDICINES** come from **PLANTS!**

Fashion

More **PLANTS** - more comfort
39% of the World's Clothing is made from cotton plant fibers
MORE NATURAL
SUSTAINABLE COMFORTABLE
than chemical-based synthetics

Jobs

39% of the annual horticulture job openings are unfilled due to lack of qualified applicants

Economy

Horticulture contributes **\$196 b** to the **U.S. ECONOMY** (annually)

Science

Spinach
is being used in experiments to re-engineer **HUMAN TISSUE.**

Plant Scientists are working to solve some of the world's most challenging issues
Goodbye drought, starvation and cancer!

Want to solve unemployment?

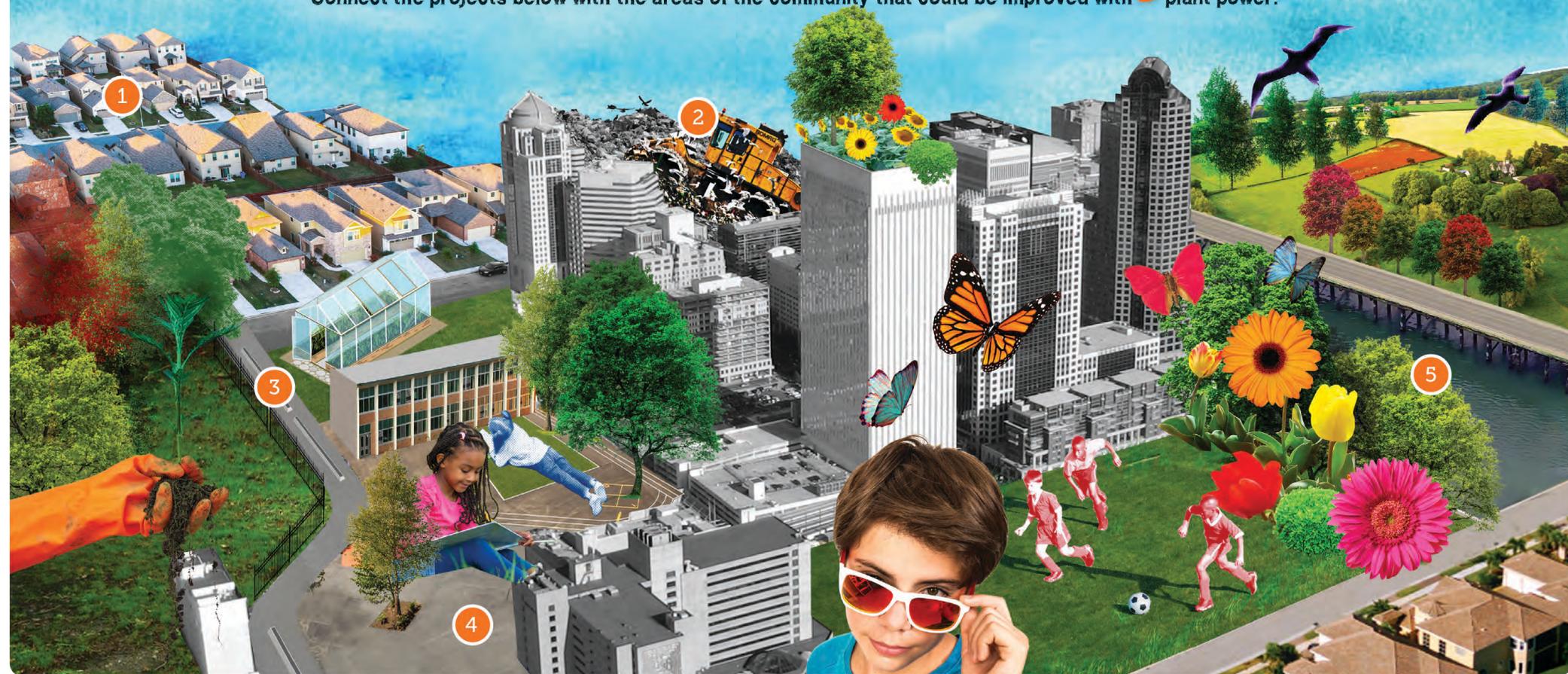
Show more people all the awesome jobs working with plants



SOURCES: Clockwise: Beauty: "What's Driving the Billion-Dollar Natural Beauty Movement," First Company; "Natural Segment Continues to Outpace the Overall Beauty Market," Global Cosmetic Industry; (Cosmetics); Environment: "Carbon & Tree Facts," Arbor Environmental Alliance; (Carbon Dioxide); "A Review of the Benefits of Nature Experiences," US National Library of Medicine; National Institutes of Health; (Mood); Art & Design: "Literature Review of Documented Health and Environmental Benefits Derived from Ornamental Horticulture," Landscape Ontario; Health & Wellness: "Facts and Figures on Biodiversity," ICUN; Economy: "Enriching Lives, Creating Jobs, Building Wealth, Saving Money," National Initiative for Consumer Horticulture; "Join Our Movement," "Seed Your Future," "Employment Opportunities for College Graduates," United States Department of Agriculture; Science: "Using Decellularized Plants as Porous Tissue Engineering Scaffolds," ScienceDirect; Sports: "NFL Leg Injuries More Common on FieldTurf than Grass," Reuters (Injuries); "Maintenance Salary," Sports Field Management Magazine; (Plant More Grass); Fashion: "How Much of the World is Made From Cotton," "Live-Strong Cotton," "Plants Used for Clothing," "Leaf TV (Plants); Food: "Plant Facts," Science Kids; Technology: "10 Ways Technology is Changing Our Food," TechRepublic; "9 Ways Drones Are Revolutionizing Agriculture," MIT Technology Review; "Unleashing A Decade of Innovation in Plant Science," Plant Summit.

Make Your Community Bloom

Connect the projects below with the areas of the community that could be improved with plant power.



A

Add greenery to roadways to dampen sound from traffic and lessen the amount of pollution that enters the air and nearby waterways.



B

Remove dangerous materials and waste from a dump, and plant trees, shrubs, and grasses to return the land to its natural state.



C

Plant vacant city lots and start green markets where neighbors can get together and share/buy fresh fruits, vegetables, and flowers.



D

Plant by riverbanks to help keep runoff and effluent out of the water. Plant tall grasses to increase food and habitat for wetland critters.



E

"Crank up" the variety of trees and plants in suburban neighborhoods to break up sprawling lawns and increase local biodiversity.

Extra Credit: Do you see plant solutions that have already taken root? Can you spot even more room to grow?

Answer key is located in Lesson 2.