

Grades: 4-5

SciGirls, “Flower Power”

This series showcases bright, curious real girls putting science and engineering to work as they answer questions and make unexpected discoveries in the world around them. SciGirls spring into action! Minnesota sixth-grader, Jordan, gathers her girls to track changes in flowers and plants as spring emerges, and celebrates by creating a sculpture and a time-lapse video of the season's arrival.

After watching this episode, choose from the following questions and/or tasks to extend your learning

Question Box 1

- Provide at least two quotes of evidence that support the main claims or reasons.
- What is the central idea (main claim) of the text? Is there a quote from the TV show that represents the author's central idea?
- Describe each SciGirls' interest in plants.
- What is a naturalist?
- What are some signs of spring the girls discover at the beginning of the spring?
- How is a photo post utilized?
- What is a Nature's Notebook?
- What plant does each girl select to observe and record?
- Why do the girls put markers next to the plants they are studying?
- What do the girls include in their observation journals?
- What else do the girls record in their nature journals? What is the value of these journals?
- Explain the information the girls record online in their Nature's Notebook?
- What is the difference between their Nature's Journal and their Nature's Notebook?
- How many times do the girls return to observe changes in their plants?
- Describe the changes over time in their plants from April to May.
- Why does Lauren, the naturalist, feel it's important to look at the average data over several years?
- What type of graphs do the girls use to show their data? What findings does the data show?
- What pattern do the girls discover? What questions do their results elicit?

Question Box 2

Continued on the next page...

- What were some of my most powerful learning moments in the program and what made them so?
- How much did you know about the subject before we started? Explain.
- Make a connection between what the SciGirls are doing in this video and the cartoon character with his hair growth goal.
- How can art convey a message? What message do the SciGirls want to convey?

Box 3 (Tasks)

- Describe Spring in scientific terms
- What patterns changes in plants and flowers do the SciGirls notice?
- A flower's growth is measured every day. If it grows $\frac{1}{4}$ inch every day, how much will have grown after 3 days? 5 days? 8 days? Do you think this pattern will continue for 3 weeks? Why or why not?
- Make a Phenology Wheel. Read and follow the directions on the website. Phenology Wheels: Earth Observation Where You Live

Box 4 (Enrichment)

- Watch the Video Making Maple Syrup: Tapping your Trees
- Make a diagram or an artist rendition of your learnings
- Take your diagram to the next level. Put your information on boxes for display, similar to what the SciGirls did in this episode. Click here for an example.
- Describe why seasons are different times of the year around the Earth.
- Draw a model of a flower and label the parts.

Box 5 (Extend/Real-Life)

- Think Like A Scientist:
- Go to Nature's Notebook: <https://www.usanpn.org/nn/educate/activites>
- Select your grade level and activity.
- Follow the directions.
- Have fun!
- Research and explain why certain flowers bloom in different times of the year.
- Draw a model to show why Spring is in different months in northern hemisphere and southern hemisphere.