

# INFOGRAPHIC

The best way to learn anything is to teach it. Infographics combine writing, drawing, and other visuals to explain an idea or synthesize information. Students can start an infographic in the field, then research the topic and add to their journal entry and their understanding.

An infographic is a chart, poster, drawing, or diagram that uses words, pictures, icons, and data to explain an idea or offer information. Making a clear infographic takes as much thought as putting together a good lesson plan. The process guides students through studying a topic and coming up with words and images to explain and describe the phenomenon, leading them to synthesize information. Creating an infographic requires two steps. In the field, students observe and describe the phenomenon, leaving space to add more material later. Back in the classroom, they research the topic and add more information and background to their journal page. This is an opportunity to build visual literacy and to focus on layout skills, such as integrating drawings with other forms of note taking, and thinking about page structure and how to communicate information.

## NATURAL PHENOMENA

Students can make an infographic about any interesting discovery in nature, such as a found object, plant, animal, or phenomenon. This activity can be a great way for your class to build common understanding of a part of nature and set the foundation for learning related science ideas in a lesson or unit of study. If you want to use the activity in this way, make sure that students all focus on the same type of organism or phenomenon. Alternatively, students can decide what they want to focus on and search for a part of nature they find interesting.

## PROCEDURE SUMMARY

1. Record observations and a description of a species or phenomenon in the field.
2. Research the topic using books, journal articles, or internet resources.
3. Add at least three things learned from your research.
4. Add supporting elements (decorative borders, arrows, frames, titles, subtitles, etc.) to the page.

## DEMONSTRATION

When the whiteboard icon appears in the procedure description: Block out areas to place the title and three things learned in research. As you discuss making observations with students, sketch a plant in the center with lines suggesting writing or numbers. Then add some supportive elements, such as frames, titles, subtitles, and arrows to represent connecting ideas on the page.



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Excerpted from the book *How to Teach Nature Journaling*,  
published by Heyday books.

### Time

Introduction: 10 minutes  
Activity: 30–50 minutes  
in the field and another 60 minutes  
for research and completing the  
infographic  
Discussion: 10–15 minutes



### Materials

- Journals and pencils
- Examples of infographics (clip from magazines, or download from the internet)



### Teaching Notes

You can find great examples of infographics in *National Geographic*, popular science and engineering magazines, newspaper articles (often in the science section), and online. Start a clip file or folder of good infographics. Having a lot of examples will inspire your students and give them many ideas about ways to use images to explain concepts.



Students will need to identify plants or animals for this activity. If students cannot identify species in the field, make sure they collect enough information in their notes to be able to identify the species later from reference material.

This activity can be the basis of a longer project for which students do more extensive, long-term research on a phenomenon or part of nature.

## PROCEDURE STEP-BY-STEP

**1. Show students examples of infographics, then ask pairs to discuss how the infographics were designed and how they communicate information.**

- a. "These are examples of infographics. They are carefully planned drawings and diagrams that explain ideas."
- b. "In groups of four, analyze two infographics. Try to figure out what the designer is attempting to communicate. Are there any techniques or methods that they use to help explain things clearly? How do they help you see the most important ideas quickly?"

**2. Explain that students will create their own infographics based on observations in the field and research back at school.**

- a. "You are going to make your own infographics about something you find in nature. Take your journal and find and describe an interesting [plant, mushroom, animal, or phenomenon]."
- b. "In the center of your page, use words, pictures, and numbers to richly describe what you see. It is OK if you don't know what species you have found. You will be using your notes later in class to try to identify what you have seen, so be precise and careful in your note taking."
- c. "Later, you will add information to this page based on research you conduct. Leave some blank space at the top and along the bottom of the page for titles and information you will uncover."



**3. Give students time to make and record observations in their journals, circulating to offer support to any who are struggling.**

**4. Return to class, library, or home and offer opportunities to research the subject. Start by trying to identify the observed object based on field notes. If students cannot identify the species they have described, they should make a checklist of the kinds of details they should look for next time to make a more complete description. Then they can add questions, "It reminds me of," and titles to their page.**

**5. Encourage research in books, journals, magazines, and online sources, and through expert interviews.**

- a. "Now let's do some research to find out as much as we can about the subjects of your infographics." Methods will vary depending on resources available and students' abilities.

"When you find something really interesting, write it down and note the book or web page you learned it from."

**6. Tell students to use words, pictures, and numbers to describe the most interesting or relevant facts or ideas they learned through their research.**

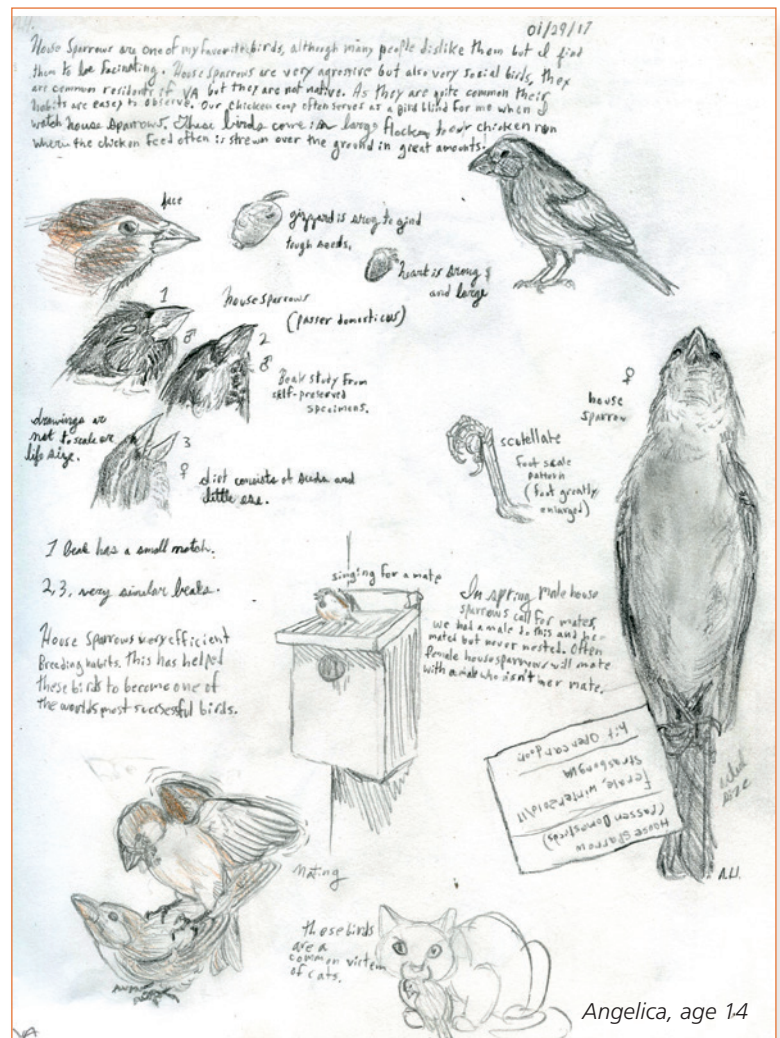
- a. "Now use words, pictures, and numbers to show the most interesting or relevant things you learned about this species. Your challenge is to show this information in the most clear and memorable way you can."
- b. "You can use icons or graphics and get creative if you want."

**7. Tell students to cite the sources of the new information in the journal.**

- a. "Write the name of the book or other resource you got the information from next to the fact on the page."

**8. Tell students to add borders, titles, names, scientific names, and other features to make the page easier to scan and understand.**

- a. "Now add some elements to the page to make it easier to scan, and to make the information easier to understand."



Make a clear distinction between information that is directly observed and information from a secondary source.



- b. "These could be titles, underlines, arrows, boxes, decorative borders, or icons and graphics."
- c. "Think about the infographics we looked at earlier. Are there any design elements from those examples that you could include here?"

## DISCUSSION

Lead a discussion using the general discussion questions. Interperse pair talk with group discussion.

## GENERAL DISCUSSION

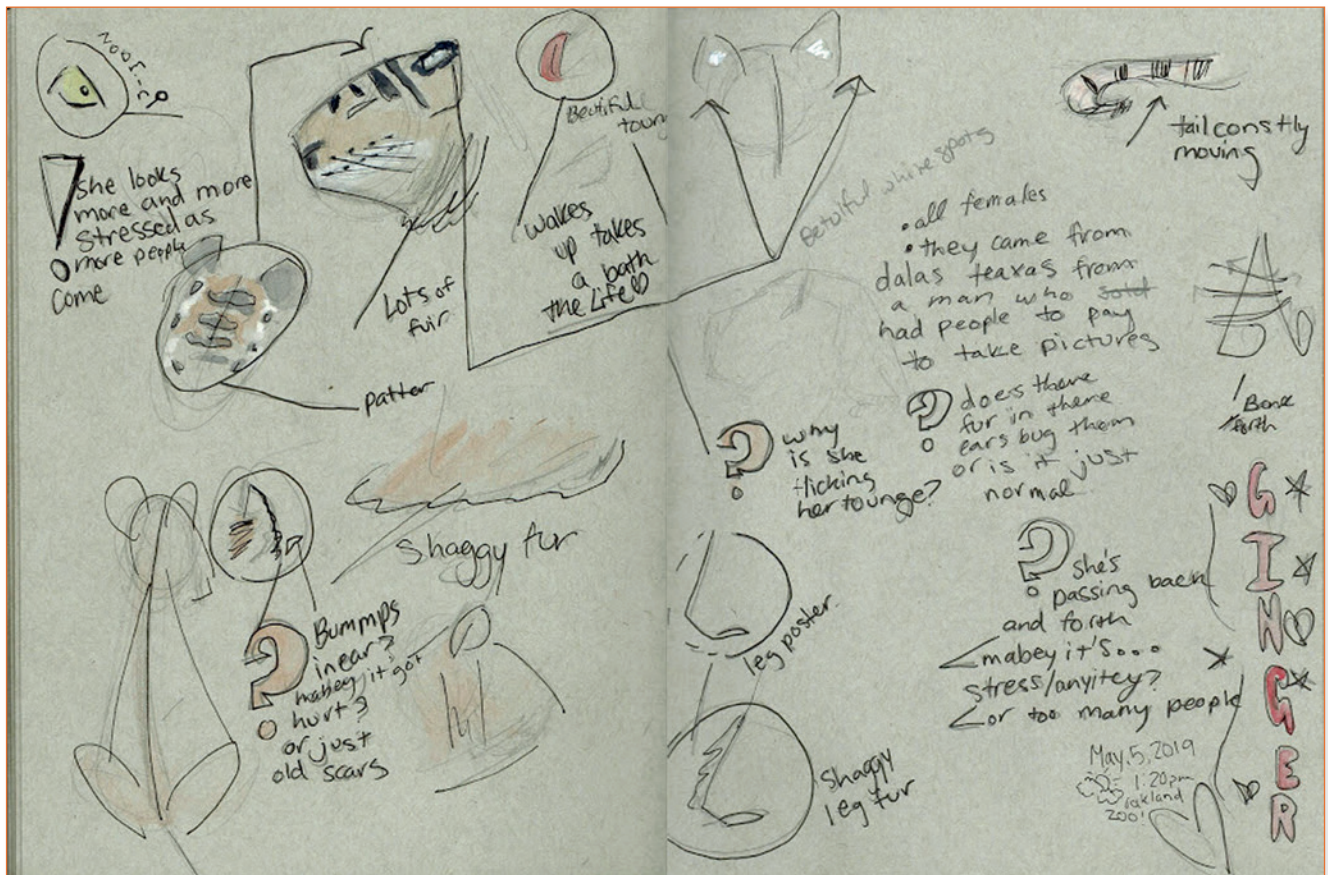
- a. "What are some of the best ways to make an infographic clear and understandable?"
- b. "How did you use drawing, writing, and layout elements on the page to show your thinking and ideas?"
- c. "If you were to do another draft of this infographic, what might be some approaches to layout or other elements you would want to change?"

- d. "Infographics are a fun and interesting way to show what you've learned about something. What is a topic you know a lot about? It doesn't have to be related to school—it could be about a hobby, such as cooking, playing sports, music, and so on. Talk with a partner about what you would include in an infographic about this topic."
- e. "When we made our infographics, we were careful to add in the name of the book or article we got information from. Scientists also do this when writing a research paper or communicating about their ideas. Why do you think this is important to do?"

## FOLLOW-UP ACTIVITY

### Make Your Own Infographic

Give students the opportunity to continue practicing their communication skills by allowing them to make an infographic about a subject that is interesting to them, or a topic they feel they know a lot about.



Sketches and diagrams made from life, additional information added from signs at the zoo

Amaya, age 13