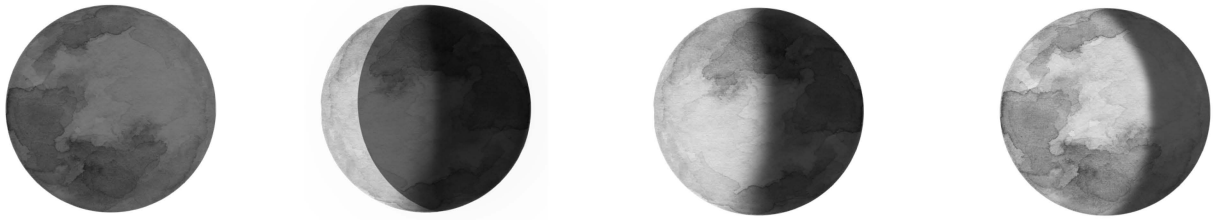


Science Resource Packet

- Grades 5th-9th
- Scientific Method
- Experiment Notebooking Pages
- Vocabulary + Written Narration
- Ecology
- Biology
- Botany
- Astronomy

Life, Abundantly

Questions + Comments:
erin@lifeabundantlyblog.com

Scientific Method: Step-by-Step

1.ASK A QUESTION. What problem are you trying to solve? What are you seeking to learn, prove, or identify? Can this question be tested?

2. DO BACKGROUND RESEARCH. What have you already learned that helps narrow/broaden your question? Has your question changed in some way? Make notes about important details that you need to remember as you move forward, making sure to record your sources. Include ideas on what might be an effective way to test your hypothesis.

3. STATE YOUR HYPOTHESIS. What do you THINK will happen as you conduct your experiment? What would be interesting or shocking? What alternate possibilities might you expect?

4. TEST YOUR HYPOTHESIS BY DOING AN EXPERIMENT. Is your experiment fair? Be sure to only test ONE thing at a time, in order to be able to accurately observe cause and effect. Record the process of your experiment along with any alterations as you try different variables. If possible, repeat your experiment multiple times to make sure the outcome holds true.

5. ANALYZE YOUR DATA AND DRAW A CONCLUSION. What happened in your experiment? Did the outcome align with your hypothesis? Why or why not? What might have been some alternate methods to test your hypothesis? If your hypothesis was not supported, consider going back, stating a new hypothesis and testing it. Testing, rehypothesizing, and retesting is the process that scientists walk through over and over again.

6. COMMUNICATE YOUR RESULTS. You might use a tri-fold board to display the process and results, utilize technology, or write a research paper. Include all steps, challenges, and works cited in preparation.

My Experiment: _____

1. What is your question?

2. Important research notes:

3. State your hypothesis:

4. Describe your experiment. List the materials, setting, and procedure.

5. List your observations, challenges, and conclusions here. If you choose to state a new hypothesis to test, begin a separate form for that experiment and make a note here.

6. Follow your teachers instruction about how to communicate your results. Use the space below or other materials, as directed.

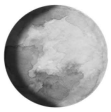
My Experiment: _____

What I expect to happen:

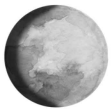
My materials:

My experiment process below, in 3 phases:

My results:



Astronomy



My Vocabulary

1. _____

2. _____

3. _____

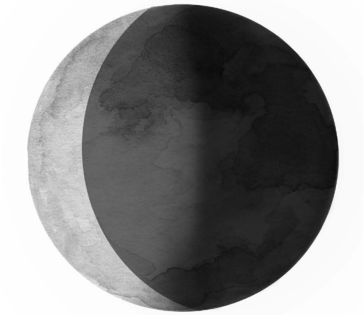
4. _____

5. _____

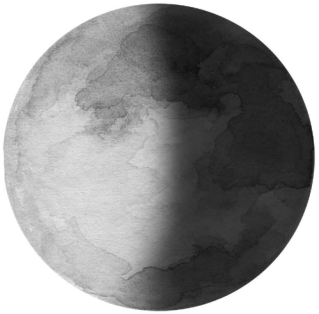
My Written Narration

Reading: _____ My Rating: _____

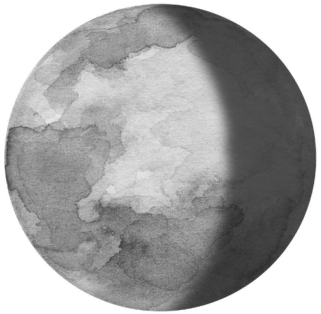
new moon



waning crescent



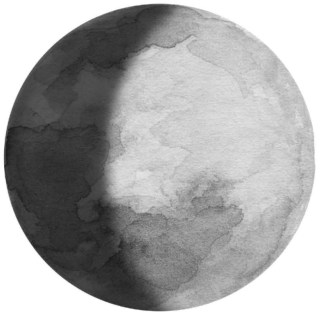
last quarter



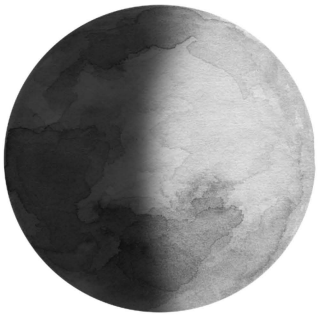
waning gibbous

Phases of the Moon

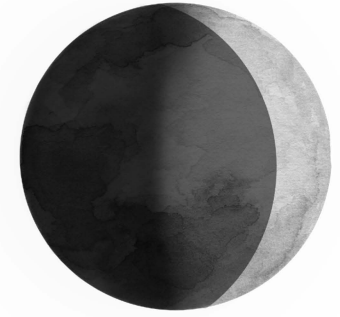
full moon



waxing gibbous



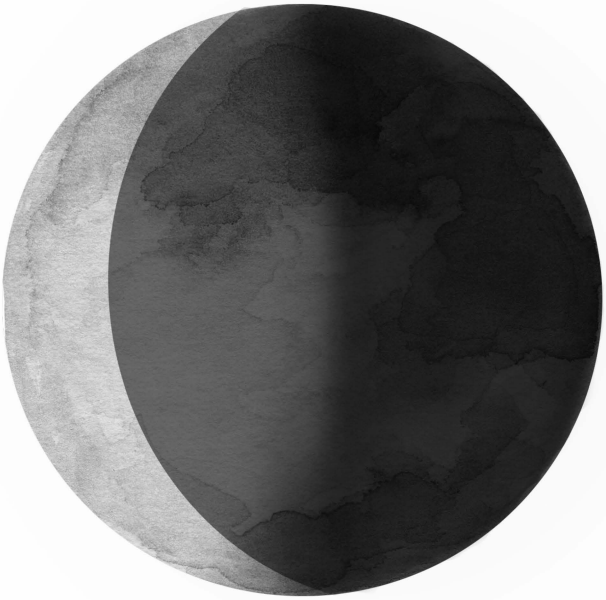
first quarter



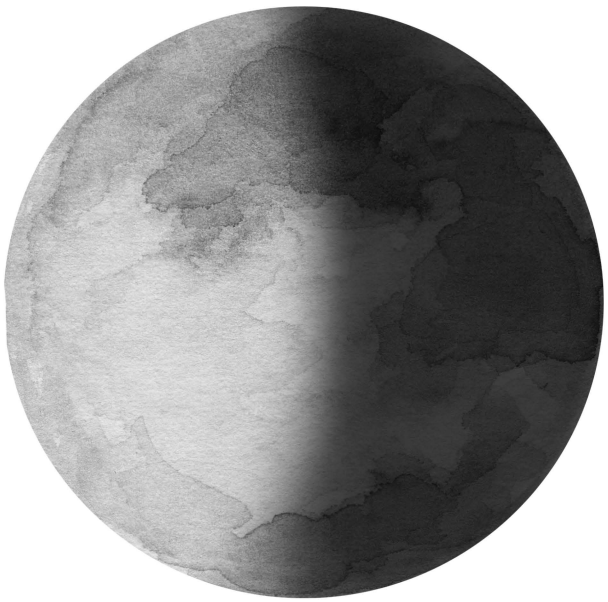
waxing crescent

Phases of the Moon

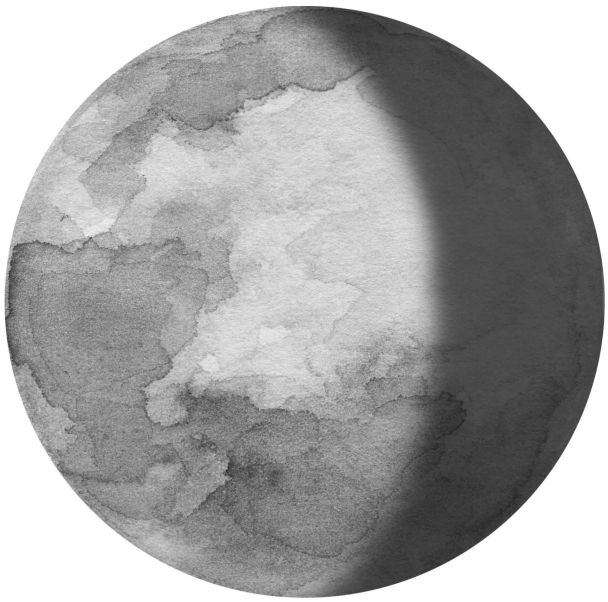
new moon



waning crescent

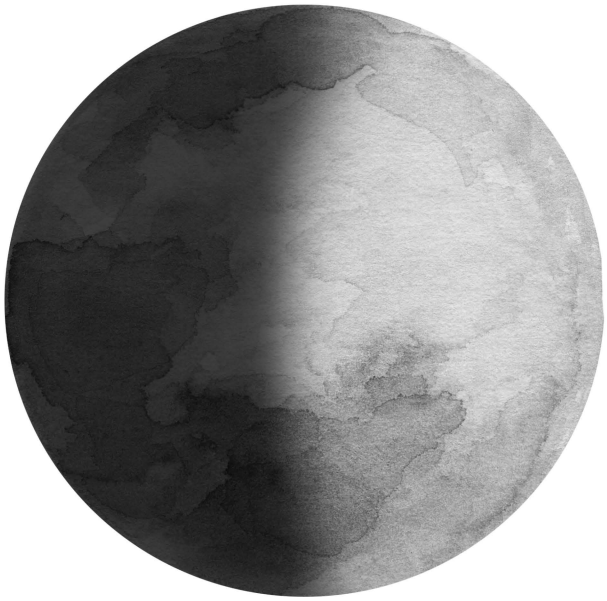


last quarter

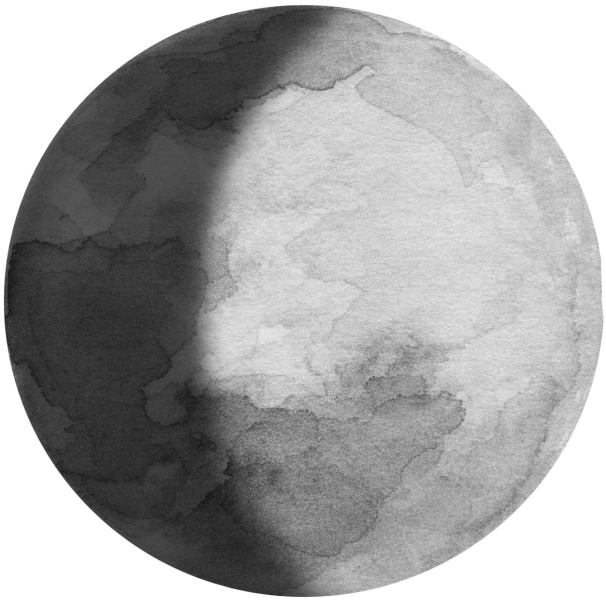


waning gibbous

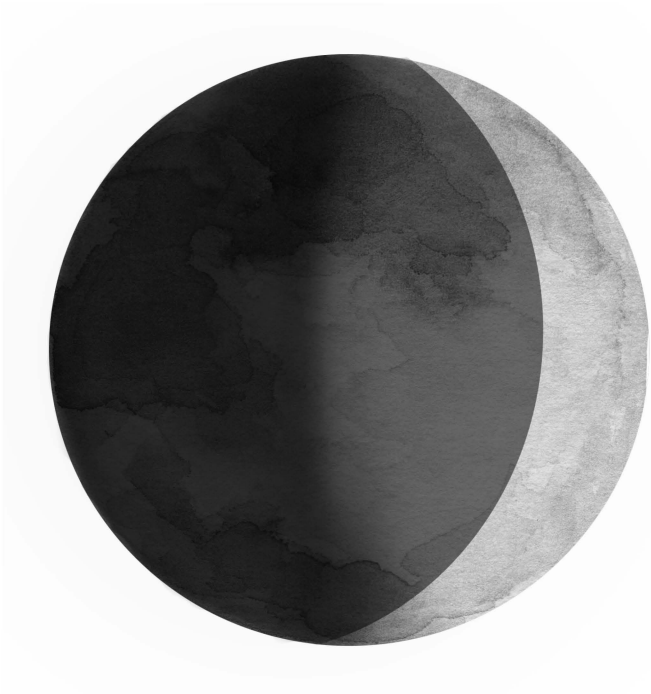
full moon



first quarter



waxing gibbous



waxing crescent

Biology

My Vocabulary

1. _____

2. _____

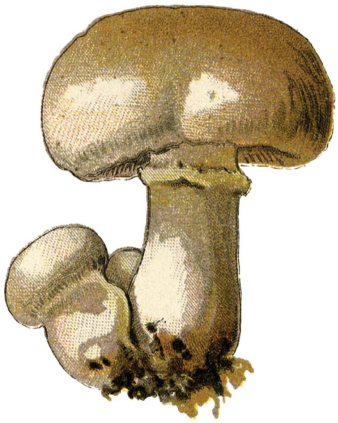
3. _____

4. _____

5. _____

My Written Narration

Reading: _____ My Rating: _____



Button Mushroom

Chantarelle

Fly Agaric

Gilled Mushroom

Morel

Porcini

Mushrooms

Psilocybe

Russula

Shitake

Botany

My Vocabulary

1. _____

2. _____

3. _____

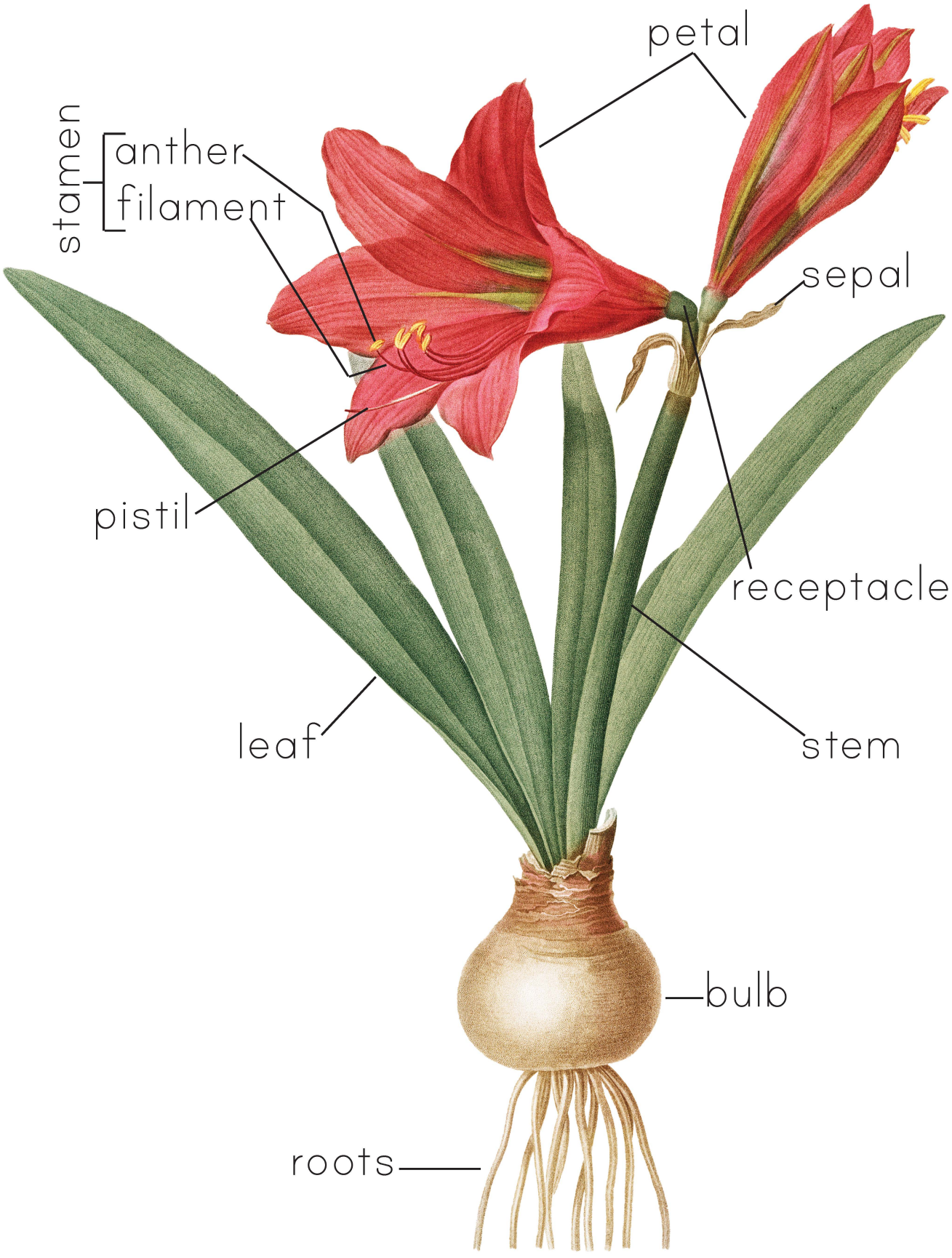
4. _____

5. _____

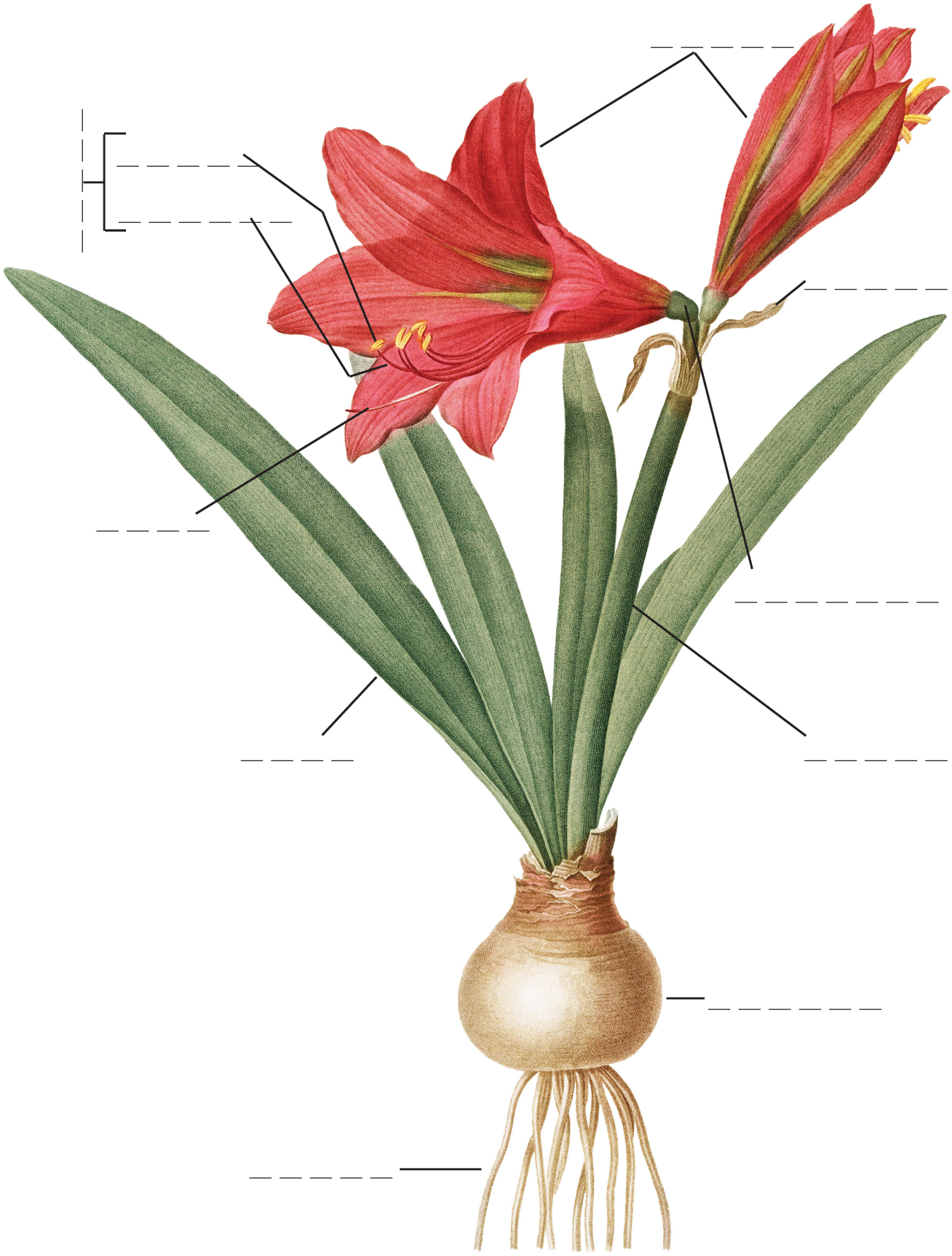
My Written Narration

Reading: _____ My Rating: _____

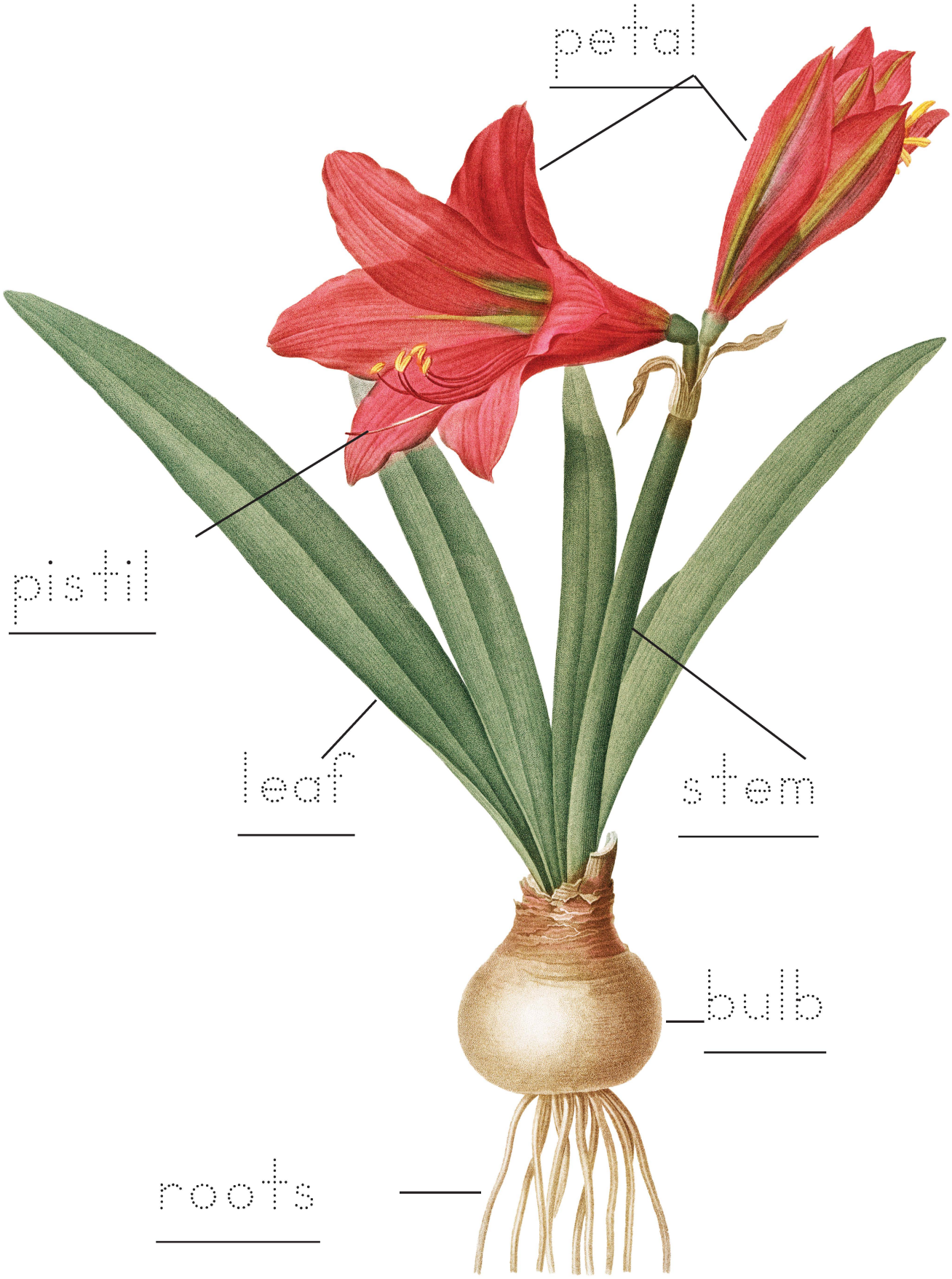
Parts of a Flower



Parts of a Flower



Parts of a Flower



Ecology

My Vocabulary

1. _____

2. _____

3. _____

4. _____

5. _____

My Written Narration

Reading: _____ My Rating: _____

Turn off the water while you brush your teeth.
Unplug electronics when not in use.
Take short showers.

Bring your own shopping bag.
Recycle batteries.
Use rechargeable batteries.
Separate and recycle all garbage.
Have a compost bin.

Opportunities to Conserve

Utilize renewable energy sources.
Turn off the lights when you leave a room.
Turn the thermostat up.

Grow your own food.
Research first, and buy from companies that have conscientious conservation practices.
Buy local.
Buy in-season produce.

Reduce. Reuse. Recycle.