

-meter, -metry

1.

2.

3.

4.

5.

graph

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

thermo

16.

17.

-ology, -ologist

18.

19.

20.

Read the spelling words and sentences.

- | | | |
|-------------------|-----------------------|--|
| 1. autobiographer | <i>autobiographer</i> | I am an autobiographer . |
| 2. speedometer | <i>speedometer</i> | Check the speedometer . |
| 3. thermometer | <i>thermometer</i> | The thermometer says zero. |
| 4. photography | <i>photography</i> | I took a photography class. |
| 5. oceanographer | <i>oceanographer</i> | She is an oceanographer . |
| 6. biographer | <i>biographer</i> | His biographer was truthful. |
| 7. paragraph | <i>paragraph</i> | Write a brief paragraph . |
| 8. geographer | <i>geographer</i> | A geographer read the map. |
| 9. thermostat | <i>thermostat</i> | A thermostat regulates heat. |
| 10. geography | <i>geography</i> | The land's geography is hilly. |
| 11. diameter | <i>diameter</i> | What is the circle's diameter ? |
| 12. thermal | <i>thermal</i> | The skier's socks are thermal . |
| 13. autograph | <i>autograph</i> | The star signed an autograph . |
| 14. graphic | <i>graphic</i> | Sue is a graphic designer. |
| 15. barometer | <i>barometer</i> | Check the barometer . |
| 16. geology | <i>geology</i> | Jim studied Alaska's geology . |
| 17. biology | <i>biology</i> | We studied insects in biology . |
| 18. geologist | <i>geologist</i> | A geologist studied the rocks. |
| 19. telegraph | <i>telegraph</i> | He sent a telegraph message. |
| 20. geometry | <i>geometry</i> | I study shapes in geometry . |

Think & Sort the spelling words.

- 1–5. Write the words that end in **-meter** or **-metry**.
- 6–15. Write the words that have the root **graph**.
- 16–17. Write the words that have the root **thermo**.
- 18–20. Write the words that end in **-ology** or **-ologist**.

Remember

Many English words have Greek roots with meaning-based spelling patterns: **meter** ("measure"), **graph** ("write"), **logy** ("to speak," "to study"), and **thermo** ("heat").



Word Meanings

Write spelling words to match these definitions. Check your answers in the **Spelling Dictionary**.

1. one who studies Earth, its features, and inhabitants
2. the study of the composition of Earth's structure
3. an instrument that measures air pressure
4. the study of solid and plane figures
5. an instrument that measures speed
6. one who writes the story of someone else's life
7. the study of Earth, its features, and inhabitants
8. one who studies the composition of Earth's structure
9. the process of producing digital pictures

Word Structure

Match a word part from Group **A** with one from Group **B** to write spelling words.

- | | | |
|--------|----------------|-----------------|
| 10–14. | A. para | B. meter |
| | bio | al |
| | dia | graph |
| | therm | logy |
| | ocean | ographer |



Use the Dictionary

Write the spelling words that can be formed from the Greek roots. Check your answers in the **Spelling Dictionary**.

15. **graphein** (to write)
16. **therme** (heat) + **states** (one that causes to stand)
17. **tele** (at a distance) + **graphein** (to write)
18. **therme** (heat) + **metron** (measure)
19. **autos** (self) + **graphein** (to write)
20. **autos** (self) + **bios** (life) + **graphein** (to write)

Word Meanings

1.

2.

3.

4.

5.

6.

7.

8.

9.

Word Structure

10.

11.

12.

13.

14.

Use the Dictionary

15.

16.

17.

18.

19.

20.

autobiographer	speedometer	thermometer	photography
oceanographer	biographer	paragraph	geographer
thermostat	geography	diameter	thermal
autograph	graphic	barometer	geology
biology	geologist	telegraph	geometry

Complete the Analogies

1.

2.

3.

4.

5.

6.

7.

Make Inferences

8.

9.

10.

11.

12.

13.

14.

15.

Use Context Clues

16.

17.

18.

19.

20.

Complete the Analogies

Write a spelling word to complete each analogy.

1. Water is to faucet as heat is to ____.
2. Animal is to zoologist as rock is to ____.
3. Letter is to word as sentence is to ____.
4. Time is to watch as speed is to ____.
5. Around is to circumference as across is to ____.
6. Picture is to photograph as signature is to ____.
7. Stove is to cookery as camera is to ____.



Make Inferences

Write a spelling word to complete each sentence.

8. We hired a ____ design artist to illustrate the book.
9. The ____ wrote Martin Luther King Jr.'s life story.
10. The scientists studied the ____ of the earthquake site.
11. You can use ____ to determine the area of that field.
12. The ____ dropped rapidly, indicating a storm.
13. In 1866, the first successful ____ cable was laid.
14. Frederick Douglass, an ____, wrote about his own life.
15. They are studying the ____ of pond life.

Use Context Clues

Write spelling words from the box to complete the paragraph.

To explore the ocean, an 16. must wear a 17. suit for protection from the cold. The diver uses a special 18. to record water temperature. The diver explores the 19. of the ocean floor. A 20. uses this information to learn about Earth.

thermometer
thermal
oceanographer
geographer
geography

Proofread a Biographical Sketch

Proofread the paragraph below for ten misspelled words. Then rewrite the paragraph. Write the spelling words correctly and make the corrections indicated by the proofreading marks.

¶ Jacques Cousteau was an oceanographer who traveled the world to study the biology of the ocean's animals and plants. cousteau had to read many gauges on his trips, including the barameter to measure the air pressure and the speedometr to see how fast his ship was going. Cousteau, also an Autobiografer, wrote in graphick detail about his own life experiences. Each paragraf in his books is filled with interesting details. his fotography of the undersea world is breathtaking. More than one biographor has written about Cousteau's life. I'm sure many people would have liked to have Cousteau's autograf.

Proofreading Marks

≡	Make Uppercase
/	Make Lowercase
^	Add
~	Delete
◉	Add a Period
¶	Indent

Informative/Explanatory Writing

Write a Biographical Sketch

Write or type a paragraph about a scientist who interests you. Follow the form used in the proofreading sample. Use as many spelling words as you can.

- Use the writing process: prewrite, draft, revise, edit, and publish.
- Include details, facts, and evidence that will inform your readers as much as possible about the scientist and his or her work. Explain the significance of his or her discovery or accomplishment.
- Make sure you use complete sentences with correct capitalization, punctuation, grammar, and spelling.
- Use the spell-check function in word processing and a print or online dictionary to check spelling.

Transfer

Search the Internet for three more words with Greek roots that will help you tell about the scientist. Write the words in your Spelling Journal and circle the Greek roots.

Extend & Transfer

Word Study

Word Study A

1.

2.

3.

4.

5.

Word Study B

6.

7.

8.

Word Building

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

biography	geography	geographer	physiology
homograph	diameter	thermostat	geothermal
kilowatt	biology	thermal	topography
perimeter	geologist	autograph	bibliography
telecast	telegraph	graphic	altimeter
thermometer	geometry	barometer	biologist
photography	autobiographer	geology	lexicographer
biographer	speedometer	autobiographical	thermos
paragraph	oceanographer	diagram	mythology

Use words from the spelling list above to complete these exercises.

Word Study

A. The Greek word **graphein** means "to write."

1–5. Write the words that describe people who study or write about something.

B. The suffix **-ology** comes from Greek and means "the study of."

6–8. Write the words that are fields of scientific studies.

Word Building

9–20. Write as many words from the list as possible using one or more word parts from group **A** and one word part from group **B**. You may add word endings.

A

dia

tele

bio

auto

alt

B

meter

phone

gram

graph

ology, ologist

Science



Word Hunt

Read the paragraphs below. Look for the words with Greek roots.

A geoscience is a science that deals with Earth, such as geology. These days, you may hear about a geoscience called glaciology. That's the study of glaciers. In recent years, temperature readings on thermometers in the Arctic have been rising, and the diameter of the glaciers is shrinking.

You couldn't use a speedometer to measure the rate of melting Arctic ice, but 9 percent every 10 years is fast! By 2099 the topography of the Arctic could look very different in summer than in winter. There would be no ice and snow cover.

The Arctic snow and ice acts like a cooling thermostat for Earth. The ice and snow reflect the heat of the sun off Earth's surface and back into space. Without this protection the planet may suffer from thermal overload.

There are things people can do to help. They can use fewer kilowatt-hours of energy by switching to compact fluorescent light bulbs. They can drive hybrid cars that make less air pollution. They can unplug electronics when not in use. So turn off the television and tell Mother Earth how much you care!

1.

2.

3.

4.

5.

6.

7.

8.

9.



WORD SORT

- 1-2. Write the words with the Greek root meaning "science or study of."
3. Write the word with the Greek root meaning "write."
- 4-6. Write the words with the Greek root meaning "measure."
- 7-8. Write the words with the Greek root meaning "heat." Do not repeat words from earlier answers.
9. Write the word with the Greek root meaning "thousand."