

# Englist.me



## Vocabulary Builder Reference from...

*Fan Zhang: What in the world is topological quantum matter? | TED Talk*

[https://www.ted.com/talks/fan\\_zhang\\_what\\_in\\_the\\_world\\_is\\_topological\\_quantum\\_matter](https://www.ted.com/talks/fan_zhang_what_in_the_world_is_topological_quantum_matter)

### Advanced Words Only

#### IMPORTANT

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## Session 1: Word List

### electrify

v. to make a machine or system work by using electricity; to make someone extremely enthusiastic about or interested in something

*synonym*: wire, amaze, astonish

(1) **electrify** the audience, (2) **electrify** a manufacturing process

The product developed through years of research continues to **electrify** the market.

### diminish

v. to reduce or be reduced in size, extent, or importance; to make something smaller, weaker, etc.

*synonym*: decline, dwindle, lessen

(1) **diminish** a reputation, (2) **diminish** swelling

As people get old, their energies may **diminish**.

### microscopic

*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy

*synonym*: infinitesimal, tiny, atomic

(1) **microscopic** inquiry, (2) **microscopic** analysis

Inspectors noticed **microscopic** cracks in the submarine's hull.

## macroscopic

*adj.* visible to the naked eye; relating to objects or phenomena that are large enough to be seen without the aid of a microscope or other magnifying tools

*synonym* : large, visible, apparent

(1) **macroscopic** observation, (2) **macroscopic** anatomy

The **macroscopic** view of the galaxy is simply breathtaking.

## reshape

*v.* to change the form or structure of something

*synonym* : alter, adjust, modify

(1) **reshape** education policy, (2) **reshape** my thoughts

The advent of the Internet completely **reshaped** the manufacturing industry.

## pretzel

*n.* a type of baked bread product that is twisted into a knot-like shape, usually sprinkled with salt, and often served as a snack or appetizer

(1) chocolate **pretzel**, (2) **pretzel** stand

I love snacking on **pretzels** while watching a movie at home.

## revolutionize

*v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas

*synonym* : transform, innovate, modernize

(1) **revolutionize** the industry, (2) **revolutionize** the technology

The invention of the smartphone **revolutionized** the way we communicate with each other.

## insulate

*v.* to protect something by interposing material that prevents heat, noise, electricity, etc.

*synonym* : isolate, protect, seclude

(1) **insulate** the room from sound, (2) **insulate** electricity

We had our bedroom **insulated** before winter came.

## passee

*adj.* no longer fashionable or current; outdated; considered to be old-fashioned or out of date

*synonym* : outdated, old-fashioned, antique

(1) **passe** entertainment, (2) **passe** trend

Bell-bottom jeans, once considered **passe** fashion, have made a surprising comeback in recent years.

## conductivity

*n.* the quality of a material's ability to conduct electricity, heat, etc.

*synonym* : conduction

(1) low **conductivity**, (2) electrical **conductivity**

High thermal **conductivity** is also essential for the exterior of the machine.

## impure

*adj.* mixed with other substances or foreign matter; (of persons or behaviors) immoral or obscene, especially in sexual matters

*synonym* : contaminated, polluted, unclean

(1) **impure** water, (2) **impure** thoughts

In some religions, pork is deemed **impure**.

## imperfectly

*adv.* in a faulty or incomplete way

*synonym* : amiss, insufficiently, clumsily

(1) **imperfectly** developed, (2) **imperfectly** known disease

He created an **imperfectly** shaped torso.

## qubit

*n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits

*synonym* : quantum bit

(1) quantum **qubit**, (2) **qubit** storage

Technology development for controlling **qubits** is a major research goal in quantum computing.

## riddle

*n.* a type of question that describes something in a difficult and confusing way, and that has a surprising answer, often asked as a game

*synonym* : mystery, puzzle, enigma

(1) **riddle** me a riddle, (2) solve the **riddle**  
The **riddle** remains mysterious to us.

## Session 2: Spelling

1. ri\_\_\_e me a riddle  
*n.* a type of question that describes something in a difficult and confusing way, and that has a surprising answer, often asked as a game
2. mic\_\_\_\_\_ic inquiry  
*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
3. mac\_\_\_\_\_ic anatomy  
*adj.* visible to the naked eye; relating to objects or phenomena that are large enough to be seen without the aid of a microscope or other magnifying tools
4. solve the ri\_\_\_e  
*n.* a type of question that describes something in a difficult and confusing way, and that has a surprising answer, often asked as a game
5. low con\_\_\_\_\_ity  
*n.* the quality of a material's ability to conduct electricity, heat, etc.
6. pa\_\_e entertainment  
*adj.* no longer fashionable or current; outdated; considered to be old-fashioned or out of date
7. im\_\_\_e water  
*adj.* mixed with other substances or foreign matter; (of persons or behaviors) immoral or obscene, especially in sexual matters
8. in\_\_\_\_\_te the room from sound  
*v.* to protect something by interposing material that prevents heat, noise, electricity, etc.
9. re\_\_\_\_\_e my thoughts  
*v.* to change the form or structure of something

ANSWERS: 1. riddle, 2. microscopic, 3. macroscopic, 4. riddle, 5. conductivity, 6. passe, 7. impure, 8. insulate, 9. reshape

10. rev\_\_\_\_\_ize the technology      *v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas
11. el\_\_\_\_\_fy a manufacturing process      *v.* to make a machine or system work by using electricity; to make someone extremely enthusiastic about or interested in something
12. mac\_\_\_\_\_ic observation      *adj.* visible to the naked eye; relating to objects or phenomena that are large enough to be seen without the aid of a microscope or other magnifying tools
13. di\_\_\_\_\_sh a reputation      *v.* to reduce or be reduced in size, extent, or importance; to make something smaller, weaker, etc.
14. pa\_\_e trend      *adj.* no longer fashionable or current; outdated; considered to be old-fashioned or out of date
15. pr\_\_\_\_\_l stand      *n.* a type of baked bread product that is twisted into a knot-like shape, usually sprinkled with salt, and often served as a snack or appetizer
16. el\_\_\_\_\_fy the audience      *v.* to make a machine or system work by using electricity; to make someone extremely enthusiastic about or interested in something
17. di\_\_\_\_\_sh swelling      *v.* to reduce or be reduced in size, extent, or importance; to make something smaller, weaker, etc.
18. mic\_\_\_\_\_ic analysis      *adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy

ANSWERS: 10. revolutionize, 11. electrify, 12. macroscopic, 13. diminish, 14. passe, 15. pretzel, 16. electrify, 17. diminish, 18. microscopic

19. imp\_\_\_\_\_ly known disease *adv.* in a faulty or incomplete way
20. electrical con\_\_\_\_\_ity *n.* the quality of a material's ability to conduct electricity, heat, etc.
21. chocolate pr\_\_\_\_\_l *n.* a type of baked bread product that is twisted into a knot-like shape, usually sprinkled with salt, and often served as a snack or appetizer
22. imp\_\_\_\_\_ly developed *adv.* in a faulty or incomplete way
23. im\_\_\_\_\_e thoughts *adj.* mixed with other substances or foreign matter; (of persons or behaviors) immoral or obscene, especially in sexual matters
24. re\_\_\_\_\_e education policy *v.* to change the form or structure of something
25. in\_\_\_\_\_te electricity *v.* to protect something by interposing material that prevents heat, noise, electricity, etc.
26. quantum qu\_\_t *n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits
27. qu\_\_t storage *n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits

ANSWERS: 19. imperfectly, 20. conductivity, 21. pretzel, 22. imperfectly, 23. impure, 24. reshape, 25. insulate, 26. qubit, 27. qubit

28. rev\_\_\_\_\_ize the industry

v. to bring about a complete or radical change in something, often through the introduction of new methods or ideas

ANSWERS: 28. revolutionize



## Session 3: Fill in the Blanks

1. High thermal \_\_\_\_\_ is also essential for the exterior of the machine.  
*n.* the quality of a material's ability to conduct electricity, heat, etc.
2. The product developed through years of research continues to \_\_\_\_\_ the market.  
*v.* to make a machine or system work by using electricity; to make someone extremely enthusiastic about or interested in something
3. I love snacking on \_\_\_\_\_ while watching a movie at home.  
*n.* a type of baked bread product that is twisted into a knot-like shape, usually sprinkled with salt, and often served as a snack or appetizer
4. The \_\_\_\_\_ view of the galaxy is simply breathtaking.  
*adj.* visible to the naked eye; relating to objects or phenomena that are large enough to be seen without the aid of a microscope or other magnifying tools
5. He created an \_\_\_\_\_ shaped torso.  
*adv.* in a faulty or incomplete way
6. The advent of the Internet completely \_\_\_\_\_ the manufacturing industry.  
*v.* to change the form or structure of something
7. The \_\_\_\_\_ remains mysterious to us.  
*n.* a type of question that describes something in a difficult and confusing way, and that has a surprising answer, often asked as a game
8. In some religions, pork is deemed \_\_\_\_\_.  
*adj.* mixed with other substances or foreign matter; (of persons or behaviors) immoral or obscene, especially in sexual matters

ANSWERS: 1. conductivity, 2. electrify, 3. pretzels, 4. macroscopic, 5. imperfectly, 6. reshaped, 7. riddle, 8. impure

9. Technology development for controlling \_\_\_\_\_ is a major research goal in quantum computing.
- n.* a unit of information used in quantum computing, equivalent to a single binary digit (or "bit") of classical computing, which can exist in multiple possible states simultaneously, offering greater information processing potential than classical bits
10. Inspectors noticed \_\_\_\_\_ cracks in the submarine's hull.
- adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
11. Bell-bottom jeans, once considered \_\_\_\_\_ fashion, have made a surprising comeback in recent years.
- adj.* no longer fashionable or current; outdated; considered to be old-fashioned or out of date
12. We had our bedroom \_\_\_\_\_ before winter came.
- v.* to protect something by interposing material that prevents heat, noise, electricity, etc.
13. The invention of the smartphone \_\_\_\_\_ the way we communicate with each other.
- v.* to bring about a complete or radical change in something, often through the introduction of new methods or ideas
14. As people get old, their energies may \_\_\_\_\_.
- v.* to reduce or be reduced in size, extent, or importance; to make something smaller, weaker, etc.

ANSWERS: 9. qubits, 10. microscopic, 11. passe, 12. insulated, 13. revolutionized, 14. diminish