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# Vocabulary Builder Reference from...

Justin Hall-Tipping: Freeing energy from the grid | TED Talk

https://www.ted.com/talks/justin\_hall\_tipping\_freeing\_ energy\_from\_the\_grid



# **Advanced Words Only**

#### **IMPORTANT**

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# **Session 1: Word List**

## iceberg

n. a large piece of ice floating in the sea, detached from a glacier

synonym: glacier, ice mass, floe

(1) hit an iceberg, (2) iceberg melting

The ship encountered a series of **icebergs** and had to change its course.

# gigaton

- a unit of explosive energy equal to one billion tons of TNT (= a powerful, yellow explosive substance); one billion tons
- (1) **gigaton-class** bomb, (2) half a **gigaton** of CO2 The earthquake that hit the Pacific Ocean last night is said to have released about 30 **gigatons** of energy.

# humming

adj. producing a continuous, low, vibrating sound like that of the bee

synonym: buzzing, droning, vibrating

(1) **humming** sound, (2) **humming** bird

The **humming** of the bees filled the air as she walked through the garden.

#### unwind

v. to relax and release tension, often by engaging in leisure activities or by simply resting; to reverse the winding or

# twisting of something

synonym: relax, de-stress, unroll

(1) **unwind** after work, (2) **unwind** on vacation

I like to **unwind** with a good book after a long day at work.

#### nanoscale

- adj. on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale
- (1) nanoscale device, (2) things at the nanoscale

This process improves the strength of the metal by controlling the **nanoscale** lattice structure of the metal.

#### worthless

- adj. having no value or usefulness; not worth consideringsynonym: valueless, useless, pointless
- (1) worthless stock, (2) worthless coin

The product was found to be **worthless** as it failed to meet the customer's expectations.

### subtraction

- the process or action of removing one number from another; the mathematical operation of finding the difference between two numbers or quantities
- synonym: deduction, minus, withdrawal
- (1) **subtraction** equation, (2) double-digit **subtraction**The **subtraction** of expenses from revenue resulted in a net profit for the company.

# cheaply

adv. in a stingy or inexpensive manner synonym: inexpensively, tattily, stingily

(1) **cheaply** available, (2) buy stock **cheaply** 

You can live very **cheaply** in Southeast Asia.

flick

 to make a sudden sharp movement or hit something quickly with a sharp movement

synonym: snap, tap, flip

(1) flicker candle, (2) flick through pages

He **flicked** the light switch, and the room was illuminated.

## graphite

 a soft, black, lustrous form of carbon that is conductive and used as a lubricant and in pencils and electrodes in electrical devices

synonym: carbon, black lead, plumbago

(1) graphite pencil, (2) graphite mine

The **graphite** in the brake pads helps to reduce friction during braking.

#### condense

 to reduce the volume or size of something, often by removing water or other liquid; to make something shorter, more concise, or more concentrated

synonym: compress, compact, shorten

(1) **condense** the text, (2) **condense** water vapor I need to **condense** all of my notes into a manageable summary for my presentation.

## chickenwire

 n. (also known as "poultry netting") a type of woven wire mesh made of thin galvanized steel or other materials, typically used in construction, fencing, or as a protective barrier

synonym: hex netting, mesh fencing, poultry netting

(1) **chickenwire** netting, (2) **chickenwire** mesh

The chicken coop was built using sturdy **chickenwire** to keep the chickens safe.

#### nanotube

- n. a tube-shaped structure that is composed of very small particles, typically with a diameter of a few nanometers; nanotubes are used in a variety of applications, including electronics and materials science
- (1) **nanotube** technology, (2) metallic **nanotube**Carbon **nanotubes** are used in various fields of science and technology due to their unique properties.

# 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.

#### affix

- v. to attach or add something to something else synonym: attach, paste, stick
- (1) **affix** a label, (2) **affix** a seal to a document She **affixed** a stamp to the letter before mailing it.

#### bleach

 to remove color or stains, whiten, or sterilize using a solution of chemicals or other substances, such as bleach

synonym: whiten, lighten, blanch

(1) bleach stains, (2) bleach hair

I need to **bleach** this shirt to remove the stains.

## desalination

- n. the process of removing salt, especially from seawater
- (1) shut down a **desalination** plant, (2) water **desalination** He worked on improving the equipment using the freeze-**desalination** method.

# supple

- adj. flexible and easy to bend or move; gracefully agile;adaptable or responsive to change or new ideassynonym: flexible, pliable, bendable
- supple muscles, (2) supple leather
   The ballerina's supple movements left the audience mesmerized.

#### famine

 a severe shortage of food, often caused by drought, war, or economic reasons

synonym: hunger, starvation, drought

(1) famine relief, (2) coal famine

The severe **famine** caused by the drought has left many people without food.

#### thirst

 a feeling of needing something to drink; a strong desire for something

synonym:

craving, desire, appetite
(1) a burning **thirst**, (2) **thirst** for authority
He read books to quench his **thirst** for knowledge.

# **Session 2: Spelling**

1.	gr	te	pencil
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- 2. ic\_\_\_g melting
- 3. water des\_\_\_\_ion
- 4. chi\_\_\_\_re netting
- 5. co\_\_\_se water vapor
- 6. un\_\_\_d after work
- 7. a burning th\_\_\_t
- 8. buy stock ch\_\_\_y
- 9. metallic na be

- a soft, black, lustrous form of carbon that is conductive and used as a lubricant and in pencils and electrodes in electrical devices
- n. a large piece of ice floating in the sea, detached from a glacier
- n. the process of removing salt, especially from seawater
- n. (also known as "poultry netting") a type of woven wire mesh made of thin galvanized steel or other materials, typically used in construction, fencing, or as a protective barrier
- v. to reduce the volume or size of something, often by removing water or other liquid; to make something shorter, more concise, or more concentrated
- to relax and release tension, often by engaging in leisure activities or by simply resting; to reverse the winding or twisting of something
- a feeling of needing something to drink;
   a strong desire for something
- adv. in a stingy or inexpensive manner
- a tube-shaped structure that is composed of very small particles, typically with a diameter of a few nanometers; nanotubes are used in a variety of applications, including electronics and materials science

ANSWERS: 1. graphite, 2. iceberg, 3. desalination, 4. chickenwire, 5. condense, 6. unwind, 7. thirst, 8. cheaply, 9. nanotube

10. flker candle	v.	to make a sudden sharp movement or hit something quickly with a sharp movement
11. low conity	n.	the quality of a material's ability to conduct electricity, heat, etc.
12. nale device	adj.	on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale
13. sue muscles	adj.	flexible and easy to bend or move; gracefully agile; adaptable or responsive to change or new ideas
14. half a gin of CO2	n.	a unit of explosive energy equal to one billion tons of TNT (= a powerful, yellow explosive substance); one billion tons
15. fae relief	n.	a severe shortage of food, often caused by drought, war, or economic reasons
16. woss stock	adj.	having no value or usefulness; not worth considering
17. things at the nale	adj.	on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale
18. blh hair	v.	to remove color or stains, whiten, or sterilize using a solution of chemicals or other substances, such as bleach
19. electrical conity	n.	the quality of a material's ability to conduct electricity, heat, etc.
20. blh stains	v.	to remove color or stains, whiten, or sterilize using a solution of chemicals or other substances, such as bleach

ANSWERS: 10. flick, 11. conductivity, 12. nanoscale, 13. supple, 14. gigaton, 15. famine, 16. worthless, 17. nanoscale, 18. bleach, 19. conductivity, 20. bleach

21. su e leather adj. flexible and easy to bend or move; gracefully agile; adaptable or responsive to change or new ideas 22. coal fa\_\_\_e a severe shortage of food, often caused n. by drought, war, or economic reasons 23. sub\_\_\_\_on equation the process or action of removing one n. number from another; the mathematical operation of finding the difference between two numbers or quantities 24. af\_\_x a label to attach or add something to something else a large piece of ice floating in the sea, 25. hit an ic\_\_\_g detached from a glacier 26. co\_\_\_se the text to reduce the volume or size of something, often by removing water or other liquid; to make something shorter, more concise, or more concentrated 27. th\_\_\_t for authority a feeling of needing something to drink; n. a strong desire for something 28. ch y available adv. in a stingy or inexpensive manner 29. wo\_\_\_\_ss coin adj. having no value or usefulness; not worth considering to attach or add something to 30. af x a seal to a document  $\nu$ . something else 31. gr\_\_\_te mine a soft, black, lustrous form of carbon that is conductive and used as a

lubricant and in pencils and electrodes in electrical devices

ANSWERS: 21. supple, 22. famine, 23. subtraction, 24. affix, 25. iceberg, 26. condense, 27. thirst, 28. cheaply, 29. worthless, 30. affix, 31. graphite

33. hug bird  adj. producing a continuous, low, vibrating sound like that of the bee  34. shut down a desion plant  n. the process of removing salt, especially from seawater  35. double-digit subon  n. the process or action of removing one number from another; the mathematical operation of finding the difference between two numbers or quantities  36. fl_k through pages  v. to make a sudden sharp movement or hit something quickly with a sharp movement  37. und on vacation  v. to relax and release tension, often by engaging in leisure activities or by simply resting; to reverse the winding or twisting of something  38. chire mesh  n. (also known as "poultry netting") a type of woven wire mesh made of thin galvanized steel or other materials, typically used in construction, fencing, or as a protective barrier  39. hug sound  adj. producing a continuous, low, vibrating sound like that of the bee  a tube-shaped structure that is composed of very small particles, typically with a diameter of a few nanometers; nanotubes are used in a variety of applications, including electronics and materials science	32.	gin-class bomb		n.	a unit of explosive energy equal to one billion tons of TNT (= a powerful, yellow explosive substance); one billion tons
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ANSWERS: 32. gigaton, 33. humming, 34. desalination, 35. subtraction, 36. flick, 37. unwind, 38. chickenwire, 39. humming, 40. nanotube

Vocab-Builder Ref f	rom "Justin Hall-Ti	pping: Freeing en	ergy from the grid	TED Talk" (20 words)	
ANSWERS:					

# **Session 3: Fill in the Blanks**

1. I need to this shirt to remove the stains.
v. to remove color or stains, whiten, or sterilize using a solution of chemicals or other substances, such as bleach
2. I like to with a good book after a long day at work.
v. to relax and release tension, often by engaging in leisure activities or by simply resting; to reverse the winding or twisting of something
3. He the light switch, and the room was illuminated.
v. to make a sudden sharp movement or hit something quickly with a sharp movement
4. The severe caused by the drought has left many people without food.
n. a severe shortage of food, often caused by drought, war, or economic reasons
5. High thermal is also essential for the exterior of the machine.
n. the quality of a material's ability to conduct electricity, heat, etc.
6. He worked on improving the equipment using the freeze method.
n. the process of removing salt, especially from seawater
7. You can live very in Southeast Asia.
adv. in a stingy or inexpensive manner
8. She a stamp to the letter before mailing it.
v. to attach or add something to something else
ANSWERS: 1. bleach, 2. unwind, 3. flicked, 4. famine, 5. conductivity, 6. desalination 7. cheaply, 8. affixed

9.	The earthquake that hit the Pacific Ocean last night is said to have released about 30 of energy.
n.	a unit of explosive energy equal to one billion tons of TNT (= a powerful, yellow explosive substance); one billion tons
10.	The in the brake pads helps to reduce friction during braking.
n.	a soft, black, lustrous form of carbon that is conductive and used as a lubricant and in pencils and electrodes in electrical devices
11.	The of expenses from revenue resulted in a net profit for the company.
n.	the process or action of removing one number from another; the mathematical operation of finding the difference between two numbers or quantities
12.	The ballerina's movements left the audience mesmerized.
adj	flexible and easy to bend or move; gracefully agile; adaptable or responsive to change or new ideas
13.	The ship encountered a series of and had to change its course.
n.	a large piece of ice floating in the sea, detached from a glacier
14.	The chicken coop was built using sturdy to keep the chickens safe.
n.	(also known as "poultry netting") a type of woven wire mesh made of thin galvanized steel or other materials, typically used in construction, fencing, or as a protective barrier
15.	I need to all of my notes into a manageable summary for my presentation.
v.	to reduce the volume or size of something, often by removing water or other liquid; to make something shorter, more concise, or more concentrated
	SWERS: 9. gigatons, 10. graphite, 11. subtraction, 12. supple, 13. icebergs, 14. ckenwire, 15. condense

16.	The of the bees filled the air as she walked through the garden.
adj	producing a continuous, low, vibrating sound like that of the bee
17.	The product was found to be as it failed to meet the customer's expectations.
adj	having no value or usefulness; not worth considering
18.	He read books to quench his for knowledge.
n.	a feeling of needing something to drink; a strong desire for something
19.	Carbon are used in various fields of science and technology due to their unique properties.
n.	a tube-shaped structure that is composed of very small particles, typically with a diameter of a few nanometers; nanotubes are used in a variety of applications, including electronics and materials science
20.	This process improves the strength of the metal by controlling thelattice structure of the metal.
adj	on a scale that can be measured in nanometres (= one billionth of a meter); on a very small scale

ANSWERS: 16. humming, 17. worthless, 18. thirst, 19. nanotubes, 20. nanoscale