Englist.me

Vocabulary Builder Reference from...

Congrui Jin: What if cracks in concrete could fix themselves? | TED Talk https://www.ted.com/talks/congrui_jin_what_if_cracks

Titips://www.tea.com/taiks/congrui_jiii_wiiat_ii_crack

_in_concrete_could_fix_themselves



Advanced Words Only

IMPORTANT

This material is a commentary and does not contain any copyrighted material of the reference source. We strongly recommend accessing/buying the reference source at the same time.

Session 1: Word List

swath

 a strip of land, especially a long, narrow one; a large amount or quantity of something

synonym: strip, band, fodder

(1) a large **swath** of territory, (2) a **swath** of green grass The charity organization has helped to provide education to a vast **swath** of the population.

pave

 to cover something with a hard, flat material such as stones, bricks, or concrete, to make it suitable for travel or use

synonym: surface, coat, cover

(1) **pave** a new path, (2) **pave** a smoother road They **paved** the courtyard with bricks, giving it a more polished appearance.

skyscraper

n. a very tall building, typically one in a city

synonym: high-rise, tower

(1) **skyscraper** apartment house, (2) steel-framed **skyscraper**

The 50-floor **skyscraper** loomed over the city, dwarfing the other buildings.

catastrophic

adj. extremely harmful; causing physical or financial destruction

synonym: fatal, disastrous, destructive

(1) victim of **catastrophic** injuries, (2) **catastrophic** climate change

The extinction rate of aquatic animals was **catastrophic**.

limestone

n. a sedimentary rock that is composed mainly of calcium carbonate, which is the mineral calcite

synonym: calcareous rock, chalk

(1) sheer **limestone** cliffs, (2) **limestone** pavement The Great Pyramid of Giza was built using blocks of **limestone**.

hydrate

v. to add water or moisture to something; to drink enough fluids to maintain proper moisture; (noun) any compound that contains water of crystallization

synonym: moisturize, water, rehydrate

(1) **hydrate** my skin, (2) acid **hydrate**

She drank water to **hydrate** her body.

lifespan

 the length of time for which a person, animal lives, or thing exists

synonym: duration, lifetime, continuance

(1) **lifespan** extension, (2) **lifespan** retrieval curve Generally speaking, men have a shorter **lifespan** than women.

shrinkage

 the process of becoming smaller or less in size or quantity; the amount by which something has shrunk, contracted, or diminished

synonym: loss, decrease, reduction

(1) muscle **shrinkage**, (2) budget **shrinkage**

The **shrinkage** in the wool sweater was caused by washing it in hot water.

thaw

v. to become less rigid or hostile; to melt, soften, or become more friendly

synonym: melt, defrost, unfreeze

(1) **thaw** out a glacier, (2) **thaw** relations between countries The sun was beginning to **thaw** the frozen ground.

corrode

- v. to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time
 synonym: erode, rust, eat away
- (1) **corrode** steel drums, (2) **corrode** pipes

 The saltwater can **corrode** metal over time if not properly maintained.

disastrous

adj. extremely bad, harmful, or unsuccessful synonym: catastrophic, destructive, fatal

(1) have **disastrous** consequences, (2) absolutely **disastrous** effect

The emission of hazardous substances has **disastrous** effects on the ecology of a region.

catastrophe

- n. a sudden event that causes extreme ruin and misfortunesynonym: disaster, calamity, cataclysm
- (1) catastrophe risk management, (2) avoid climate catastrophe

The lack of funds has resulted in a **catastrophe** for our university system.

endanger

- v. to put someone or something in a risky situation synonym: threaten, imperil, jeopardize
- (1) **endanger** my health, (2) **endanger** a close relationship Their actions **endangered** the lives of innocent people.

hydroxide

n. a chemical compound characterized by the presence of one or more hydroxyl groups (-OH), which can either act as a base or be neutralized by an acid to form a salt or water

synonym: base, lye, alkali

(1) **hydroxide** catalyst, (2) sodium **hydroxide** solution Aluminum **hydroxide** is used in the treatment of stomach ulcers and heartburn.

autogenous

adj. self-generated or originating from within the same organism or system

synonym: self-generated, self-produced, self-derived

(1) **autogenous** vaccine, (2) **autogenous** grinding
The welder used **autogenous** techniques to fuse the metal pieces without using filler material.

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.

carbonate

- n. a carbonic acid salt or ester that contains the anion CO3
- (1) sodium **carbonate**, (2) alkaline **carbonate**The explosive chemical reaction does not occur in all sodium **carbonate**.

fungus

 a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive

synonym: mold, mildew, yeast

 fungus infection, (2) symbiotic fungus
 Certain types of fungus can be toxic to humans, causing severe illness if ingested.

spore

 a reproductive cell that is capable of developing into a new individual without fertilization, especially one produced by certain bacteria, fungi, and algae

synonym: seed, reproductive cell, particle

(1) anthrax **spore**, (2) **spore** reproduction

Bacteria and some algae also produce **spores** as a means of survival and dispersal, and they are often found in soil, water,

and other environments.

dormant

adj. in a state of temporary inactivity, rest, or sleep; not growing or progressing but capable of doing so under the right circumstances

synonym: inactive, sleeping, quiescent

(1) dormant volcano, (2) dormant account

The disease can remain **dormant** for years before it presents any symptoms.

trickle

to flow or drip slowly and in small amounts; to happen or occur gradually or in small quantities

synonym: dribble, flow, seep

(1) trickle down my cheek, (2) trickle from his eyes Water was beginning to **trickle** into the basement after the heavy rain.

germinate

- to begin to grow or develop, typically as a seed sprouts synonym: sprout, grow, develop
- (1) days to **germinate**, (2) **germinate** the idea The seeds **germinated** quickly in the warm soil.

microbe

- a tiny living thing that can only be seen with a microscope and that may cause disease synonym: germ, microorganism, bacterium
- (1) pathogenic **microbe**, (2) **microbes** sterilizer **Microbes** thrive on the surface of the human skin.

resilient

adj. able to withstand or recover quickly from difficult conditions

synonym: robust, sturdy, tough

(1) a hard and **resilient** steel, (2) **resilient** population She is a **resilient** person and has always bounced back from

setbacks.

long-lasting

adj. existing or continuing for a long time

synonym: enduring, abiding, durable

(1) **long-lasting** battery, (2) a **long-lasting** friendship

They finally decided to solve the **long-lasting** problem.

drastic

adj. radical and extreme; likely to have a significant or far-reaching impact

synonym: extreme, fierce, radical

(1) drastic measures, (2) make drastic revision

The global community is undergoing **drastic** changes at present.

microorganism

 a very small living thing that may exist in its single-celled form or as a colony of cells and is too small to be seen without a microscope

synonym: germ, microbe, bacterium

(1) pathogenic **microorganism**, (2) **microorganisms** in his gut

This microorganism is a producer of respiratory disease.

reconsider

- v. to think about a decision or opinion again to synonym: rethink, review, revisit
- (1) **reconsider** the determination, (2) **reconsider** my transfer

He humbly **reconsidered** his conduct.

inanimate

adj. not having life or spirit; not animate

synonym: lifeless, inert, passive

(1) inanimate nature, (2) inanimate matter

The **inanimate** object was not capable of movement or feeling.

Session 2: Spelling

1.	acid hye	v.	to add water or moisture to something; to drink enough fluids to maintain proper moisture; (noun) any compound that contains water of crystallization
2.	drc measures	adj.	radical and extreme; likely to have a significant or far-reaching impact
3.	absolutely disus effect	adj.	extremely bad, harmful, or unsuccessful
4.	line pavement	n.	a sedimentary rock that is composed mainly of calcium carbonate, which is the mineral calcite
5.	sodium cate	n.	a carbonic acid salt or ester that contains the anion CO3
6.	hye my skin	ν.	to add water or moisture to something; to drink enough fluids to maintain proper moisture; (noun) any compound that contains water of crystallization
7.	loning battery	adj.	existing or continuing for a long time
8.	recer my transfer	<i>v</i> .	to think about a decision or opinion again to
9.	anthrax spe	n.	a reproductive cell that is capable of developing into a new individual without fertilization, especially one produced by certain bacteria, fungi, and algae
10.	a loning friendship	adj.	existing or continuing for a long time
11.	victim of cathic injuries	adj.	extremely harmful; causing physical or

ANSWERS: 1. hydrate, 2. drastic, 3. disastrous, 4. limestone, 5. carbonate, 6. hydrate, 7. long-lasting, 8. reconsider, 9. spore, 10. long-lasting, 11. catastrophic

financial destruction

12.	coe steel drums	ν.	to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time
13.	tre from his eyes	v.	to flow or drip slowly and in small amounts; to happen or occur gradually or in small quantities
14.	avoid climate cathe	n.	a sudden event that causes extreme ruin and misfortune
15.	muscle shge	n.	the process of becoming smaller or less in size or quantity; the amount by which something has shrunk, contracted, or diminished
16.	cathic climate change	adj.	extremely harmful; causing physical or financial destruction
17.	pathogenic mie	n.	a tiny living thing that can only be seen with a microscope and that may cause disease
18.	symbiotic fus	n.	a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive
19.	alkaline cate	n.	a carbonic acid salt or ester that contains the anion CO3
20.	micic inquiry	adj.	tiny; exceedingly precise and detail-oriented; of or used in microscopy
21.	ener a close relationship	<i>v</i> .	to put someone or something in a risky situation
22.	spe reproduction	n.	a reproductive cell that is capable of developing into a new individual without fertilization, especially one produced by certain bacteria, fungi, and algae

ANSWERS: 12. corrode, 13. trickle, 14. catastrophe, 15. shrinkage, 16. catastrophic, 17. microbe, 18. fungus, 19. carbonate, 20. microscopic, 21. endanger, 22. spore

23.	sodium hyde solution	n.	a chemical compound characterized by the presence of one or more hydroxyl groups (-OH), which can either act as a base or be neutralized by an acid to form a salt or water
24.	inte nature	adj.	not having life or spirit; not animate
25.	inte matter	adj.	not having life or spirit; not animate
26.	tre down my cheek	<i>v</i> .	to flow or drip slowly and in small amounts; to happen or occur gradually or in small quantities
27.	dot account	adj.	in a state of temporary inactivity, rest, or sleep; not growing or progressing but capable of doing so under the right circumstances
28.	micic analysis	adj.	tiny; exceedingly precise and detail-oriented; of or used in microscopy
29.	pe a new path	<i>v</i> .	to cover something with a hard, flat material such as stones, bricks, or concrete, to make it suitable for travel o use
30.	pathogenic micism	n.	a very small living thing that may exist in its single-celled form or as a colony o cells and is too small to be seen without a microscope
31.	ener my health	<i>v</i> .	to put someone or something in a risky situation
32.	coe pipes	<i>v</i> .	to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time

ANSWERS: 23. hydroxide, 24. inanimate, 25. inanimate, 26. trickle, 27. dormant, 28. microscopic, 29. pave, 30. microorganism, 31. endanger, 32. corrode

33.	budget shge	n.	the process of becoming smaller or less in size or quantity; the amount by which something has shrunk, contracted, or diminished
34.	lian retrieval curve	n.	the length of time for which a person, animal lives, or thing exists
35.	micisms in his gut	n.	a very small living thing that may exist in its single-celled form or as a colony o cells and is too small to be seen without a microscope
36.	gete the idea	<i>v</i> .	to begin to grow or develop, typically as a seed sprouts
37.	steel-framed skyer	n.	a very tall building, typically one in a city
38.	autus grinding	adj.	self-generated or originating from within the same organism or system
39.	pe a smoother road	v.	to cover something with a hard, flat material such as stones, bricks, or concrete, to make it suitable for travel o use
40.	tw out a glacier	v.	to become less rigid or hostile; to melt, soften, or become more friendly
41.	hyde catalyst	n.	a chemical compound characterized by the presence of one or more hydroxyl groups (-OH), which can either act as a base or be neutralized by an acid to form a salt or water
42.	have disus consequences	adj.	extremely bad, harmful, or unsuccessfu
43.	a large swh of territory	n.	a strip of land, especially a long, narrow one; a large amount or quantity of something

ANSWERS: 33. shrinkage, 34. lifespan, 35. microorganism, 36. germinate, 37. skyscraper, 38. autogenous, 39. pave, 40. thaw, 41. hydroxide, 42. disastrous, 43. swath

44.	skyer apartment house	n.	a very tall building, typically one in a city
45.	tw relations between countries	<i>v</i> .	to become less rigid or hostile; to melt, soften, or become more friendly
46.	make drc revision	adj.	radical and extreme; likely to have a significant or far-reaching impact
47.	sheer line cliffs	n.	a sedimentary rock that is composed mainly of calcium carbonate, which is the mineral calcite
48.	cathe risk management	n.	a sudden event that causes extreme ruin and misfortune
49.	lian extension	n.	the length of time for which a person, animal lives, or thing exists
50.	autus vaccine	adj.	self-generated or originating from within the same organism or system
51.	fus infection	n.	a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive
52.	rent population	adj.	able to withstand or recover quickly from difficult conditions
53.	mies sterilizer	n.	a tiny living thing that can only be seen with a microscope and that may cause disease
54.	a swh of green grass	n.	a strip of land, especially a long, narrow one; a large amount or quantity of something
55.	recer the determination	<i>v</i> .	to think about a decision or opinion again to

ANSWERS: 44. skyscraper, 45. thaw, 46. drastic, 47. limestone, 48. catastrophe, 49. lifespan, 50. autogenous, 51. fungus, 52. resilient, 53. microbe, 54. swath, 55. reconsider

56. days to ge____te

v. to begin to grow or develop, typically as a seed sprouts

57. do____t volcano

- adj. in a state of temporary inactivity, rest, or sleep; not growing or progressing but capable of doing so under the right circumstances
- 58. a hard and re____nt steel
- adj. able to withstand or recover quickly from difficult conditions

ANSWERS: 56. germinate, 57. dormant, 58. resilient

Session 3: Fill in the Blanks

1.	Bacteria and some algae also produce as a means of survival and dispersal, and they are often found in soil, water, and other environments.
n.	a reproductive cell that is capable of developing into a new individual without fertilization, especially one produced by certain bacteria, fungi, and algae
2.	He humbly his conduct.
<i>v</i> .	to think about a decision or opinion again to
3.	Their actions the lives of innocent people.
<i>v</i> .	to put someone or something in a risky situation
4.	The sun was beginning to the frozen ground.
<i>v</i> .	to become less rigid or hostile; to melt, soften, or become more friendly
5.	Certain types of can be toxic to humans, causing severe illness if ingested.
n.	a type of organism that includes yeasts, molds, and mushrooms, which are heterotrophic, meaning they do not produce their food and must consume organic matter to survive
6.	This is a producer of respiratory disease.
n.	a very small living thing that may exist in its single-celled form or as a colony of cells and is too small to be seen without a microscope
7.	The seeds quickly in the warm soil.
<i>v</i> .	to begin to grow or develop, typically as a seed sprouts
	SWERS: 1. spores, 2. reconsidered, 3. endangered, 4. thaw, 5. fungus, 6. croorganism, 7. germinated

3.	The charity organization has helped to provide education to a vast of the population.
n.	a strip of land, especially a long, narrow one; a large amount or quantity of something
9.	The emission of hazardous substances has effects on the ecology of a region.
adj	extremely bad, harmful, or unsuccessful
10.	Aluminum is used in the treatment of stomach ulcers and heartburn.
n.	a chemical compound characterized by the presence of one or more hydroxyl groups (-OH), which can either act as a base or be neutralized by an acid to form a salt or water
11.	The 50-floor loomed over the city, dwarfing the other buildings.
n.	a very tall building, typically one in a city
12.	She is a person and has always bounced back from setbacks.
adj	able to withstand or recover quickly from difficult conditions
13.	The global community is undergoing changes at present.
adj	radical and extreme; likely to have a significant or far-reaching impact
14.	The extinction rate of aquatic animals was
adj	extremely harmful; causing physical or financial destruction
15.	thrive on the surface of the human skin.
n.	a tiny living thing that can only be seen with a microscope and that may cause disease
	SWERS: 8. swath, 9. disastrous, 10. hydroxide, 11. skyscraper, 12. resilient, 13. stic, 14. catastrophic, 15. Microbes

Vocab-Builder Ref from "Congrui Jin: What if cracks in concrete could fix themselves? | TED Talk" (29 words)

29. carbonate