Englist.me

Vocabulary Builder Reference from...

Jill Farrant: How we can make crops survive without

water | TED Talk

https://www.ted.com/talks/jill_farrant_how_we_can_m

ake_crops_survive_without_water



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

resurrect

- v. to bring back to life or bring into existence again synonym: revive, bring back, bring to life
- (1) **resurrect** the dead, (2) **resurrect** an argument They tried to **resurrect** the ancient tradition.

arid

- adj. lacking in moisture or rainfall; dry and barren; lacking in interest, life, or vitality
- synonym: dry, parched, barren
- (1) arid terrain, (2) semi- arid zone

The desert is known for its **arid** climate and lack of rainfall.

infrequent

- adj. occurring rarely or irregularly; happening at long intervals; not happening often or in large numbers
- synonym: rare, sporadic, uncommon
- (1) infrequent showers, (2) infrequent meetings

Traveling to remote villages can be difficult due to **infrequent** transportation.

rainfed

adj. referring to agricultural practices or crops that rely solely on rainfall for moisture and do not utilize additional irrigation methods, which are dependent on the natural precipitation in a region and can be subject to variations in rainfall patterns and drought conditions synonym: dryland, unirrigated

(1) rainfed agriculture, (2) rainfed regions

Rainfed crops rely solely on rainfall for their water supply rather than irrigation systems.

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.

predominate

v. to be the most powerful, important, or frequent; to be more common or prevalent than others

synonym: reign, prevail, rule

(1) **predominate** in the army, (2) **predominate** religion In this particular field, his work **predominated** over all others.

succulent

adj. having thick and fleshy leaves or stems that can store water, typically used to describe plants in arid environments; (noun) a type of plant that has thick, fleshy leaves or stems that are capable of storing water
 synonym: juicy, fleshy, moist

(1) succulent plant, (2) potted succulent

The tropical island is known for its **succulent** seafood dishes featuring fresh fish, lobster, and shrimp.

shrub

 a woody plant that is smaller than a tree and has several main stems emerging from the soil

synonym: bush, hedge, fern

(1) tree and shrubs, (2) small shrub

These are **shrubs** with no trunks that rarely grow taller than 3 meters.

subterranean

adj. under the ground

synonym: underground, belowground, subsurface

(1) **subterranean** rooms, (2) **subterranean** motives for

murder

Such **subterranean** passages span kilometers in London.

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.

baobab

n. a type of African tree with a large, bulbous trunk and sparse branches that often looks upside-down; also known as the "tree of life" due to its ability to store water during droughts

synonym: monkey bread tree, cream of tartar tree, bottle tree

(1) baobab pulp, (2) ancient baobab

The **baobab** tree can grow over 60 feet tall and live for thousands of years.

desiccate

v. to remove moisture and liquids from something thoroughly

synonym: dehydrate, dry up, exsiccate

(1) desiccate food, (2) desiccated milk

The bricks were **desiccated** by the hot air completely.

prolong

v. to extend the duration or length of something, particularly a period of time or an event

synonym: extend, lengthen, stretch

(1) **prolong** the agony, (2) measures to **prolong** the lifespan

We need to **prolong** the meeting for another hour to discuss all the issues.

germinate

- v. 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.

colonize

v. to establish a colony in or on a specific place; to settle or occupy in large numbers

synonym: settle, occupy, inhabit

(1) **colonize** planets, (2) **colonize** for cultivation European powers **colonized** much of the Americas in the 16th and 17th centuries.

angiosperm

n. a type of flowering plant that produces seeds enclosed within a protective structure, such as a fruit or seed pod, which comprises the largest group of plants in the plant kingdom, and they include most of the familiar plants found in gardens, forests, and fields

synonym: flowering plant

(1) **angiosperm** reproduction, (2) **angiosperm** classification Scientists are studying the **angiosperm** reproduction process to understand how these plants produce seeds within enclosed ovaries.

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.

downside

 the negative aspects or consequences of something; the potential for loss or failure

synonym: drawback, negative, disadvantage

(1) major **downside**, (2) **downside** of globalization The **downside** of the new policy was that it would be more expensive for customers.

vegetative

adj. composed of or relating to the division of nature comprising the plant; alive but losing brain functioning and having only involuntary bodily functioning synonym: herbal, monotonous

(1) a dull **vegetative** lifestyle, (2) the **vegetative** world He was in what was described as a **vegetative** state.

concerted

adj. involving the joint activity of more than one person, government, country, etc.

synonym: coordinated, planned, united

(1) **concerted** effort, (2) apply **concerted** pressure The NGO launched a **concerted** campaign to raise awareness about the issue.

improvisation

- the act of making something up on the spot or creating or performing something without preparation
- synonym: spontaneity, ad-lib, extemporization
- (1) **improvisation** on stage, (2) jazz **improvisation** He created a beautiful piece of music using only **improvisation**.

staple

adj. essential, crucial, or regularly used synonym: essential, fundamental, pivotal

(1) **staple** commodities, (2) **staple** crop Rice and beans are a **staple** food in many cultures.

gluten

- a protein found in wheat, barley, and rye that is responsible for the elastic texture of the dough
- synonym: wheat protein, wheat starch
- (1) **gluten-free** diets, (2) **gluten** intolerance Many people with celiac disease must avoid **gluten** in their diet.

transcriptome

n. the complete set of messenger RNA (mRNA) molecules present within a cell or tissue at a specific time, which represents the collection of genes that are actively being transcribed

synonym: gene expression pattern

(1) transcriptome analysis, (2) transcriptome sequencing

The researchers examined the **transcriptome** of cancer cells to identify genes associated with the disease.

proteome

- the entire complement of proteins that can be expressed by a genome, cell, tissue, or organism, including all of its functional forms and modifications
- (1) bacterial **proteome**, (2) **proteome** database Scientists are studying the human **proteome** to understand better how proteins work in the body.

metabolite

 a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions

synonym: intermediate

(1) **metabolite** concentration, (2) drug **metabolite** The liver **metabolite** levels were higher than usual.

metabolome

n. the complete set of small molecules, such as metabolites, found within a cell, tissue, or organism at a specific time, which represents the metabolic status and activity of a biological system

synonym: metabolic fingerprint

(1) lipid **metabolome**, (2) analyze the **metabolome**The study aimed to analyze the changes in the **metabolome** of cancer cells.

arsenal

 a collection of weapons or military equipment stored in preparation for war or conflict; a collection of resources or tools available for use in a particular field or endeavor

synonym: storage, stockpile, armory

(1) **arsenal** of knowledge, (2) political **arsenal**The police found a hidden **arsenal** of weapons in the suspect's house.

biochemical

adj. relating to the chemical processes and substances that occur within living organisms

synonym: molecular, biological

(1) **biochemical** reaction, (2) complex **biochemical Biochemical** research is essential to understanding the complex chemical reactions in living organisms.

ancestor

- n. a person from whom one is descended; a forefathersynonym: forebear, forefather, progenitor
- (1) **ancestor** language, (2) earliest human **ancestor**My remote **ancestor** immigrated to the United States from Ireland in the 1800s.

spearhead

- v. to lead or initiate an effort or campaign synonym: lead, initiate, begin
- (1) spearhead campaign, (2) spearhead movement The CEO decided to spearhead the new project to ensure its success.

embark

- v. to go on board a ship or plane; to set out on an enterprise or subject of study; to start somethingsynonym: enter, undertake, commence
- (1) **embark** on a trip, (2) **embark** on a foolish adventure We **embarked** on a new project.

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

fine-tuning

 the act of making small adjustments or changes to improve or optimize the performance, quality, or effectiveness of something

synonym: adjustment, calibration, tweaking

(1) **fine-tuning** process, (2) **fine-tuning** of a financial plan The **fine-tuning** of the car engine made it run more smoothly.

inducible

adj. capable of being brought about or caused; able to be prompted, persuaded, or influenced to do or experience something; responsive to a stimulus or condition

synonym: persuasive, convincing, inducible

(1) **inducible** enzyme, (2) **inducible** response

The scientist conducted experiments to determine if the gene was **inducible** under certain conditions.

antioxidant

- n. a substance that inhibits oxidation, especially one used to counteract the deterioration of stored food products
- (1) high levels of **antioxidants**, (2) **antioxidant** behavior Fruits and vegetables are good sources of **antioxidants**.

mimic

v. to imitate someone's speech, movement, or behavior, especially to make others laugh

synonym: mirror, imitate, ape

(1) **mimic** a human voice, (2) **mimic** numerous instruments He is very popular at school because he can **mimic** all the teachers' accents.

Session 2: Spelling

1.	earliest human an	_or	n.	a person from whom one is descended;
				a forefather

2.	sur	t plant	adj.	having thick and fleshy leaves or stems
				that can store water, typically used to
				describe plants in arid environments;
				(noun) a type of plant that has thick,
				fleshy leaves or stems that are capable
				of storing water

- n. the negative aspects or consequences of something; the potential for loss or failure
 - v. to be the most powerful, important, or frequent; to be more common or prevalent than others
 - v. to remove moisture and liquids from something thoroughly
 - adj. capable of being brought about or caused; able to be prompted, persuaded, or influenced to do or experience something; responsive to a stimulus or condition
 - adj. essential, crucial, or regularly used
 - adj. relating to the chemical processes and substances that occur within living organisms
 - adj. essential, crucial, or regularly used

3.

major do de

4. pre____te religion

5. de____te food

6. in____le enzyme

7. st___e commodities

8. bio____al reaction

9. st___e crop

ANSWERS: 1. ancestor, 2. succulent, 3. downside, 4. predominate, 5. desiccate, 6. inducible, 7. staple, 8. biochemical, 9. staple

10. bacterial prme	n.	the entire complement of proteins that can be expressed by a genome, cell, tissue, or organism, including all of its functional forms and modifications
11. complex bioal	adj.	relating to the chemical processes and substances that occur within living organisms
12. inle response	adj.	capable of being brought about or caused; able to be prompted, persuaded, or influenced to do or experience something; responsive to a stimulus or condition
13. the vegve world	adj.	composed of or relating to the division of nature comprising the plant; alive but losing brain functioning and having only involuntary bodily functioning
14. drug mette	n.	a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
15. infnt showers	adj.	occurring rarely or irregularly; happening at long intervals; not happening often or in large numbers
16. coal fae	n.	a severe shortage of food, often caused by drought, war, or economic reasons
17. mies sterilizer	n.	a tiny living thing that can only be seen with a microscope and that may cause disease
18. gete the idea	v.	to begin to grow or develop, typically as a seed sprouts

ANSWERS: 10. proteome, 11. biochemical, 12. inducible, 13. vegetative, 14. metabolite, 15. infrequent, 16. famine, 17. microbe, 18. germinate

19.	semi-ad zone	adj.	lacking in moisture or rainfall; dry and barren; lacking in interest, life, or vitality
20.	potted sunt	adj.	having thick and fleshy leaves or stems that can store water, typically used to describe plants in arid environments; (noun) a type of plant that has thick, fleshy leaves or stems that are capable of storing water
21.	small shb	n.	a woody plant that is smaller than a tree and has several main stems emerging from the soil
22.	angrm classification	n.	a type of flowering plant that produces seeds enclosed within a protective structure, such as a fruit or seed pod, which comprises the largest group of plants in the plant kingdom, and they include most of the familiar plants found in gardens, forests, and fields
23.	rect an argument	<i>v</i> .	to bring back to life or bring into existence again
24.	subean rooms	adj.	under the ground
25.	und after 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
26.	ancient bab	n.	a type of African tree with a large, bulbous trunk and sparse branches that often looks upside-down; also known as the "tree of life" due to its ability to store water during droughts

ANSWERS: 19. arid, 20. succulent, 21. shrub, 22. angiosperm, 23. resurrect, 24. subterranean, 25. unwind, 26. baobab

n.	the complete set of small molecules, such as metabolites, found within a cell, tissue, or organism at a specific time,
	which represents the metabolic status and activity of a biological system
n.	a type of flowering plant that produces seeds enclosed within a protective structure, such as a fruit or seed pod, which comprises the largest group of plants in the plant kingdom, and they include most of the familiar plants found in gardens, forests, and fields
n.	a person from whom one is descended; a forefather
<i>v</i> .	to go on board a ship or plane; to set out on an enterprise or subject of study; to start something
n.	a type of African tree with a large, bulbous trunk and sparse branches that often looks upside-down; also known as the "tree of life" due to its ability to store water during droughts
ν.	to bring back to life or bring into existence again
ν.	to imitate someone's speech, movement, or behavior, especially to make others laugh
	v. n.

ANSWERS: 27. proteome, 28. metabolome, 29. angiosperm, 30. ancestor, 31. embark, 32. baobab, 33. resurrect, 34. mimic

35.	coed effort	adj.	involving the joint activity of more than one person, government, country, etc.
36.	high levels of antnts	n.	a substance that inhibits oxidation, especially one used to counteract the deterioration of stored food products
37.	arI of knowledge	n.	a collection of weapons or military equipment stored in preparation for war or conflict; a collection of resources or tools available for use in a particular field or endeavor
38.	days to gete	<i>v</i> .	to begin to grow or develop, typically as a seed sprouts
39.	traome analysis	n.	the complete set of messenger RNA (mRNA) molecules present within a cell or tissue at a specific time, which represents the collection of genes that are actively being transcribed
40.	coze for cultivation	<i>v</i> .	to establish a colony in or on a specific place; to settle or occupy in large numbers
41.	fae relief	n.	a severe shortage of food, often caused by drought, war, or economic reasons
42.	tree and shbs	n.	a woody plant that is smaller than a tree and has several main stems emerging from the soil
43.	prg the agony	<i>v</i> .	to extend the duration or length of something, particularly a period of time or an event
44.	subean motives for murder	adj.	under the ground

ANSWERS: 35. concerted, 36. antioxidant, 37. arsenal, 38. germinate, 39. transcriptome, 40. colonize, 41. famine, 42. shrub, 43. prolong, 44. subterranean

the complete set of small molecules, 45. analyze the met me n. such as metabolites, found within a cell, tissue, or organism at a specific time, which represents the metabolic status and activity of a biological system 46. ra____d regions adj. referring to agricultural practices or crops that rely solely on rainfall for moisture and do not utilize additional irrigation methods, which are dependent on the natural precipitation in a region and can be subject to variations in rainfall patterns and drought conditions 47. fin ng process the act of making small adjustments or changes to improve or optimize the performance, quality, or effectiveness of something 48. apply co____ed pressure adj. involving the joint activity of more than one person, government, country, etc. 49. a dull veg ve lifestyle adj. composed of or relating to the division of nature comprising the plant; alive but losing brain functioning and having only involuntary bodily functioning 50. sp____ad campaign to lead or initiate an effort or campaign ν. 51. ra____d agriculture adj. referring to agricultural practices or crops that rely solely on rainfall for moisture and do not utilize additional irrigation methods, which are dependent on the natural precipitation in a region and can be subject to variations in

ANSWERS: 45. metabolome, 46. rainfed, 47. fine-tuning, 48. concerted, 49. vegetative, 50. spearhead, 51. rainfed

rainfall patterns and drought conditions

52.	pathogenic mie	n.	a tiny living thing that can only be seen with a microscope and that may cause disease
53.	emk on a trip	<i>v</i> .	to go on board a ship or plane; to set out on an enterprise or subject of study; to start something
54.	jazz impion	n.	the act of making something up on the spot or creating or performing something without preparation
55.	coze planets	ν.	to establish a colony in or on a specific place; to settle or occupy in large numbers
56.	deted milk	v.	to remove moisture and liquids from something thoroughly
57.	mic a human voice	ν.	to imitate someone's speech, movement, or behavior, especially to make others laugh
58.	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
59.	gln-free diets	n.	a protein found in wheat, barley, and rye that is responsible for the elastic texture of the dough
60.	finng of a financial plan	n.	the act of making small adjustments or changes to improve or optimize the performance, quality, or effectiveness of something
61.	antnt behavior	n.	a substance that inhibits oxidation, especially one used to counteract the deterioration of stored food products

ANSWERS: 52. microbe, 53. embark, 54. improvisation, 55. colonize, 56. desiccate, 57. mimic, 58. hydrate, 59. gluten, 60. fine-tuning, 61. antioxidant

62.	mette concentration	n.	a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
63.	spad movement	<i>v</i> .	to lead or initiate an effort or campaign
64.	und on vacation	v.	to relax and release tension, often by engaging in leisure activities or by simply resting; to reverse the winding of twisting of something
65.	hye my skin	v.	to add water or moisture to something; to drink enough fluids to maintain proper moisture; (noun) any compound that contains water of crystallization
66.	political arI	n.	a collection of weapons or military equipment stored in preparation for war or conflict; a collection of resources or tools available for use in a particular field or endeavor
67.	gln intolerance	n.	a protein found in wheat, barley, and rye that is responsible for the elastic texture of the dough
68.	dode of globalization	n.	the negative aspects or consequences of something; the potential for loss or failure
69.	measures to prg the lifespan	v.	to extend the duration or length of something, particularly a period of time or an event
70.	ad terrain	adj.	lacking in moisture or rainfall; dry and barren; lacking in interest, life, or vitality

ANSWERS: 62. metabolite, 63. spearhead, 64. unwind, 65. hydrate, 66. arsenal, 67. gluten, 68. downside, 69. prolong, 70. arid

71. traome sequencing	n.	the complete set of messenger RNA (mRNA) molecules present within a cell or tissue at a specific time, which represents the collection of genes that are actively being transcribed
72. impion on stage	n.	the act of making something up on the spot or creating or performing something without preparation
73. prete in the army	v.	to be the most powerful, important, or frequent; to be more common or prevalent than others
74. infnt meetings	adj.	occurring rarely or irregularly; happening at long intervals; not happening often or in large numbers

ANSWERS: 71. transcriptome, 72. improvisation, 73. predominate, 74. infrequent

Session 3: Fill in the Blanks

1.	The seeds quickly in the warm soil.
v.	to begin to grow or develop, typically as a seed sprouts
2.	The tropical island is known for its seafood dishes featuring fresh fish, lobster, and shrimp.
adj	having thick and fleshy leaves or stems that can store water, typically used to describe plants in arid environments; (noun) a type of plant that has thick, fleshy leaves or stems that are capable of storing water
3.	He created a beautiful piece of music using only
n.	the act of making something up on the spot or creating or performing something without preparation
4.	The tree can grow over 60 feet tall and live for thousands of years.
n.	a type of African tree with a large, bulbous trunk and sparse branches that often looks upside-down; also known as the "tree of life" due to its ability to store water during droughts
5.	research is essential to understanding the complex chemical reactions in living organisms.
adj	relating to the chemical processes and substances that occur within living organisms
6.	He is very popular at school because he can all the teachers' accents.
v.	to imitate someone's speech, movement, or behavior, especially to make others laugh
7.	We on a new project.
<i>v</i> .	to go on board a ship or plane; to set out on an enterprise or subject of study; to start something
	SWERS: 1. germinated, 2. succulent, 3. improvisation, 4. baobab, 5. Biochemical mimic, 7. embarked

ANSWERS: 8. unwind, 9. prolong, 10. Microbes, 11. shrubs, 12. metabolome, 13. ancestor, 14. metabolite, 15. arsenal

ANSWERS: 16. resurrect, 17. vegetative, 18. inducible, 19. transcriptome, 20. spearhead, 21. desiccated, 22. fine-tuning, 23. proteome

tissue, or organism, including all of its functional forms and modifications

ANSWERS: 24. concerted, 25. arid, 26. colonized, 27. hydrate, 28. Rainfed, 29. staple, 30. famine, 31. downside

ANSWERS: 32. gluten, 33. antioxidants, 34. angiosperm, 35. infrequent, 36. predominated, 37. subterranean

adj. under the ground