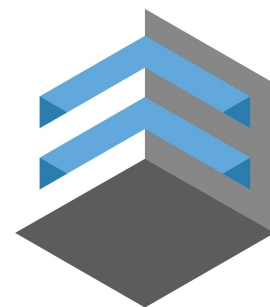


Englist.me



Vocabulary Builder Reference from...

Juna Kollmeier: The most detailed map of galaxies, black holes and stars ever made | TED Talk

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

Advanced Words Only

IMPORTANT

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Session 1: Word List

fascinate

v. to attract and hold the attention of someone deeply and irresistibly

synonym : captivate, intrigue, mesmerize

(1) **fascinate** the public, (2) **fascinate** the young

The magic tricks **fascinated** the children.

relic

n. an object from a previous era, especially one of historical value

synonym : whiff, vestige, antique

(1) historical **relic**, (2) holy **relics**

This bronze sword is a **relic** of ancient times.

tusk

n. a long, pointed tooth, usually found in animals such as elephants, walruses, or wild boars, which protrudes from the mouth and is used as a weapon or for digging

synonym : ivory, tush, horn

(1) **tusk** of an elephant, (2) **tusk-like** tooth

The ivory poacher was arrested for possession of illegal **tusks**.

carving

n. the act or process of cutting or shaping a hard material, such as wood or stone, into a specific form or design

synonym : sculpture, engraving, sculpture

(1) a wood **carving**, (2) **carving** instrument

The intricate **carving** on the wooden box was the work of a master craftsman.

neolithic

adj. (also called New Stone Age) the period of human history that followed the end of the last ice age and that is characterized by the development of agriculture and the use of polished stone tools

synonym : ancient, old, primitive

(1) the **neolithic** age, (2) **neolithic** society

The **neolithic** village was located near a river.

clam

n. a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness

(1) giant **clam**, (2) shuck a **clam**

The **clam** digs through the sand to a significant depth.

astronomer

n. a physicist who studies astronomy

synonym : stargazer, cosmologist, astrophysicist

(1) amateur **astronomer**, (2) solar **astronomer**

This question has fascinated solar **astronomers** for decades.

unrelenting

adj. not easing or slackening in intensity; persistent and unwavering in pursuit of a goal

synonym : relentless, persistent, unyielding

(1) **unrelenting** pressure, (2) **unrelenting** pursuit

The **unrelenting** heat made it difficult to sleep.

observable

adj. that can be noticed or seen

synonym : visible, perceptible, detectable

(1) **observable** change, (2) experimentally **observable**

Any theorem relies on both **observable** fact and assumption.

bestie

n. a term of endearment used to describe one's closest friend, a term that connotes a deep and unbreakable bond between the two friends

synonym : friend, pal, buddy

(1) **bestie** bond, (2) longtime **bestie**

I love having a loyal and supportive **bestie** like her in my life.

craftsman

n. a skilled worker who creates handmade objects, especially one who works with wood, metal, or other materials

synonym : artisan, mechanic, workman

(1) **craftsman** skill, (2) a subtle **craftsman**

The adept **craftsman** carefully carved the wooden figurine with precision and skill.

shepherd

n. a person who tends and guards sheep, especially in a rural area

synonym : herder, flock-keeper, sheepdog

(1) **shepherd** boy, (2) sheep without a **shepherd**

The **shepherd's** dog helped keep the sheep in line and protect them from predators.

hemisphere

n. half of the terrestrial globe; half of a sphere

(1) northern **hemisphere**, (2) cerebral **hemisphere**

This weather pattern is unique to the southern **hemisphere**.

spectrograph

n. an instrument that separates light into its component wavelengths and records the distribution of intensities as a graph, used for chemical analysis or to determine the properties of stars and galaxies

synonym : spectrometer, spectroscope, instrument

(1) **spectrograph** analysis, (2) acoustic **spectrograph**

The **spectrograph** data showed that the element was composed of multiple spectral lines.

unravel

v. undo twisted, knitted, or woven threads by separating it

synonym : separate, unknot, ravel

(1) **unravel** a knit, (2) **unravel** a plot

Detectives are still attempting to **unravel** the mystery of his

death.

perplexing

adj. causing confusion or uncertainty; difficult to understand or explain; puzzling or mystifying

synonym: puzzling, confusing, baffling

(1) **perplexing** situation, (2) **perplexing** problem

The novel's ambiguous ending left readers with a **perplexing** message.

incarnate

adj. in bodily form; embodied

synonym: embodied, personified, manifested

(1) **incarnate** spirit, (2) a devil **incarnate**

The ancient people worshiped the **incarnate** deity.

animate

v. to make something full of interest and energy

synonym: invigorate, energize, enliven

(1) **animate** the body, (2) **animate** his soul

The positive attitude of the supervisor **animated** the discussion.

smoosh

v. to crush or flatten something; to press or squeeze something into a soft or shapeless mass

synonym: squash, mash, flatten

(1) **smooshed** my sandwich, (2) **smoosh** the delicate flowers

She had to **smoosh** the berries to make a jam, but it was worth it for the delicious taste.

emit

v. to give off or send out something such as light, heat, sound, gas, etc.

synonym: give off, radiate, expel

(1) **emit** a gamma ray, (2) **emit** air pollution

During the unloading, the container box **emits** a clicking sound.

disturb

v. to interrupt someone who is trying to work, sleep, etc.
synonym: agitate, bother, intrude

(1) **disturb** the peace, (2) **disturb** his sleep

Tourists frequently **disturb** the island's delicate natural balance.

cleave

v. to split or divide something into two parts, often with force; to adhere or cling to something closely and cohesively

synonym: split, sever, cleave

(1) **cleave** meat, (2) **cleave** the party

He swung the axe with all his might to **cleave** the wood in half.

arsenal

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

synonym: storage, stockpile, armory

(1) **arsenal** of knowledge, (2) political **arsenal**

The police found a hidden **arsenal** of weapons in the suspect's house.

observatory

n. a building designed and equipped to observe the planets, the stars, the weather, etc.

(1) space **observatory**, (2) a meteorological **observatory**

That astronomical **observatory** stands at the top of the mountain.

robotic

adj. of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots

synonym: automated, mechanical, laborsaving

(1) **robotic** arm, (2) **robotic** guide operation

The surgeon removed the tumor using **robotic** video assistance.

terrifying

adj. very frightening or intimidating

synonym : frightening, intimidating, alarming

(1) **terrifying** experience, (2) **terrifying** events

Large earthquakes often generate **terrifying** tsunamis.

explode

v. to burst or break open violently and noisily; to cause something to burst or break open

synonym : detonate, blast, rupture

(1) **explode** in anger, (2) **explode** in popularity

The old building **exploded** in a fiery inferno.

mow

v. to cut down and trim grass or other vegetation, usually with a machine such as a lawnmower; to cut down or harvest crops

synonym : cut, trim, clip

(1) **mow** the field, (2) **mow** a yard

My father likes to **mow** the lawn early on Saturday mornings.

recap

v. to repeat or summarize what has been said, decided, etc.

synonym : outline, summarize, abstract

(1) **recap** key points, (2) **recap** briefly

Let me quickly **recap** these results.

clap

v. to hit your hands together and make a short and loud noise, mainly to show your approval or praise

synonym : applaud, spat, acclaim

(1) **clap** my hands, (2) **clap** a book shut

We **clapped** along with the singer's song.

astrophysics

n. the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe

(1) **astrophysics** research, (2) neutrino **astrophysics**

He was studying **astrophysics** in an attempt to understand the origins of the universe.

rubble

n. fragments of rock, stone, or other materials that remain after a building or other structure has been destroyed or demolished; the remains of something that has been broken down or destroyed

synonym : debris, ruins, wreckage

(1) clear away **rubble**, (2) **rubble-strewn** road

After the earthquake, the city was left in a pile of **rubble**.

Session 2: Spelling

1. sm___h the delicate flowers
v. to crush or flatten something; to press or squeeze something into a soft or shapeless mass
2. in_____te spirit
adj. in bodily form; embodied
3. per_____ng problem
adj. causing confusion or uncertainty; difficult to understand or explain; puzzling or mystifying
4. ne_____ic society
adj. (also called New Stone Age) the period of human history that followed the end of the last ice age and that is characterized by the development of agriculture and the use of polished stone tools
5. longtime be___e
n. a term of endearment used to describe one's closest friend, a term that connotes a deep and unbreakable bond between the two friends
6. ast_____ics research
n. the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe
7. di_____b the peace
v. to interrupt someone who is trying to work, sleep, etc.
8. e__t a gamma ray
v. to give off or send out something such as light, heat, sound, gas, etc.

ANSWERS: 1. smoosh, 2. incarnate, 3. perplexing, 4. neolithic, 5. bestie, 6. astrophysics, 7. disturb, 8. emit

9. ter_____ng events *adj.* very frightening or intimidating
10. ex_____e in anger *v.* to burst or break open violently and noisily; to cause something to burst or break open
11. t__k of an elephant *n.* a long, pointed tooth, usually found in animals such as elephants, walruses, or wild boars, which protrudes from the mouth and is used as a weapon or for digging
12. a meteorological obs_____ry *n.* a building designed and equipped to observe the planets, the stars, the weather, etc.
13. m_w a yard *v.* to cut down and trim grass or other vegetation, usually with a machine such as a lawnmower; to cut down or harvest crops
14. c__p a book shut *v.* to hit your hands together and make a short and loud noise, mainly to show your approval or praise
15. un_____l a plot *v.* undo twisted, knitted, or woven threads by separating it
16. obs_____le change *adj.* that can be noticed or seen
17. historical re__c *n.* an object from a previous era, especially one of historical value
18. spe_____aph analysis *n.* an instrument that separates light into its component wavelengths and records the distribution of intensities as a graph, used for chemical analysis or to determine the properties of stars and galaxies

ANSWERS: 9. terrifying, 10. explode, 11. tusk, 12. observatory, 13. mow, 14. clap, 15. unravel, 16. observable, 17. relic, 18. spectrograph

19. an____e the body *v.* to make something full of interest and energy
20. per_____ng situation *adj.* causing confusion or uncertainty; difficult to understand or explain; puzzling or mystifying
21. holy re__cs *n.* an object from a previous era, especially one of historical value
22. clear away ru___e *n.* fragments of rock, stone, or other materials that remain after a building or other structure has been destroyed or demolished; the remains of something that has been broken down or destroyed
23. ar_____l 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
24. sm___hed my sandwich *v.* to crush or flatten something; to press or squeeze something into a soft or shapeless mass
25. di_____b his sleep *v.* to interrupt someone who is trying to work, sleep, etc.
26. shuck a c__m *n.* a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness
27. space obs_____ry *n.* a building designed and equipped to observe the planets, the stars, the weather, etc.

ANSWERS: 19. animate, 20. perplexing, 21. relic, 22. rubble, 23. arsenal, 24. smooch, 25. disturb, 26. clam, 27. observatory

28. the ne_____ic age
adj. (also called New Stone Age) the period of human history that followed the end of the last ice age and that is characterized by the development of agriculture and the use of polished stone tools
29. fa_____te the young
v. to attract and hold the attention of someone deeply and irresistibly
30. t__k-like tooth
n. a long, pointed tooth, usually found in animals such as elephants, walruses, or wild boars, which protrudes from the mouth and is used as a weapon or for digging
31. ex_____e in popularity
v. to burst or break open violently and noisily; to cause something to burst or break open
32. c__p my hands
v. to hit your hands together and make a short and loud noise, mainly to show your approval or praise
33. sheep without a sh_____rd
n. a person who tends and guards sheep, especially in a rural area
34. unr_____ng pressure
adj. not easing or slackening in intensity; persistent and unwavering in pursuit of a goal
35. cl___e meat
v. to split or divide something into two parts, often with force; to adhere or cling to something closely and cohesively
36. sh_____rd boy
n. a person who tends and guards sheep, especially in a rural area

ANSWERS: 28. neolithic, 29. fascinate, 30. tusk, 31. explode, 32. clap, 33. shepherd, 34. unrelenting, 35. cleave, 36. shepherd

37. giant c__m *n.* a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness
38. fa_____te the public *v.* to attract and hold the attention of someone deeply and irresistibly
39. cl___e the party *v.* to split or divide something into two parts, often with force; to adhere or cling to something closely and cohesively
40. amateur ast_____er *n.* a physicist who studies astronomy
41. cerebral hem_____re *n.* half of the terrestrial globe; half of a sphere
42. neutrino ast_____ics *n.* the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe
43. a devil in_____te *adj.* in bodily form; embodied
44. a subtle cr_____an *n.* a skilled worker who creates handmade objects, especially one who works with wood, metal, or other materials
45. re__p key points *v.* to repeat or summarize what has been said, decided, etc.
46. solar ast_____er *n.* a physicist who studies astronomy
47. political ar_____l *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

ANSWERS: 37. clam, 38. fascinate, 39. cleave, 40. astronomer, 41. hemisphere, 42. astrophysics, 43. incarnate, 44. craftsman, 45. recap, 46. astronomer, 47. arsenal

48. be___e bond *n.* a term of endearment used to describe one's closest friend, a term that connotes a deep and unbreakable bond between the two friends
49. acoustic spe_____aph *n.* an instrument that separates light into its component wavelengths and records the distribution of intensities as a graph, used for chemical analysis or to determine the properties of stars and galaxies
50. ro_____c arm *adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
51. cr_____an skill *n.* a skilled worker who creates handmade objects, especially one who works with wood, metal, or other materials
52. northern hem_____re *n.* half of the terrestrial globe; half of a sphere
53. ru___e-strewn road *n.* fragments of rock, stone, or other materials that remain after a building or other structure has been destroyed or demolished; the remains of something that has been broken down or destroyed
54. ro_____c guide operation *adj.* of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
55. ca_____g instrument *n.* the act or process of cutting or shaping a hard material, such as wood or stone, into a specific form or design

ANSWERS: 48. bestie, 49. spectrograph, 50. robotic, 51. craftsman, 52. hemisphere, 53. rubble, 54. robotic, 55. carving

56. ter_____ng experience *adj.* very frightening or intimidating
57. a wood ca_____g *n.* the act or process of cutting or shaping a hard material, such as wood or stone, into a specific form or design
58. re__p briefly *v.* to repeat or summarize what has been said, decided, etc.
59. m_w the field *v.* to cut down and trim grass or other vegetation, usually with a machine such as a lawnmower; to cut down or harvest crops
60. unr_____ng pursuit *adj.* not easing or slackening in intensity; persistent and unwavering in pursuit of a goal
61. un_____l a knit *v.* undo twisted, knitted, or woven threads by separating it
62. experimentally obs_____le *adj.* that can be noticed or seen
63. an_____e his soul *v.* to make something full of interest and energy
64. e__t air pollution *v.* to give off or send out something such as light, heat, sound, gas, etc.

ANSWERS: 56. terrifying, 57. carving, 58. recap, 59. mow, 60. unrelenting, 61. unravel, 62. observable, 63. animate, 64. emit

Session 3: Fill in the Blanks

1. Detectives are still attempting to _____ the mystery of his death.
v. undo twisted, knitted, or woven threads by separating it
2. During the unloading, the container box _____ a clicking sound.
v. to give off or send out something such as light, heat, sound, gas, etc.
3. The ivory poacher was arrested for possession of illegal _____.
n. a long, pointed tooth, usually found in animals such as elephants, walruses, or wild boars, which protrudes from the mouth and is used as a weapon or for digging
4. This weather pattern is unique to the southern _____.
n. half of the terrestrial globe; half of a sphere
5. I love having a loyal and supportive _____ like her in my life.
n. a term of endearment used to describe one's closest friend, a term that connotes a deep and unbreakable bond between the two friends
6. The surgeon removed the tumor using _____ video assistance.
adj. of or relating to mechanical robots; (robotics) the interdisciplinary branch of computer science and engineering with the practical use of robots
7. That astronomical _____ stands at the top of the mountain.
n. a building designed and equipped to observe the planets, the stars, the weather, etc.
8. The _____ digs through the sand to a significant depth.
n. a marine mollusk that burrows and lives on sand or mud, the shell closes with viselike firmness

ANSWERS: 1. unravel, 2. emits, 3. tusks, 4. hemisphere, 5. bestie, 6. robotic, 7. observatory, 8. clam

9. The magic tricks _____ the children.
- v. to attract and hold the attention of someone deeply and irresistibly
10. He was studying _____ in an attempt to understand the origins of the universe.
- n. the branch of physics concerned with the study of the properties and behavior of celestial objects and the physical processes that govern the behavior and evolution of the universe
11. He swung the axe with all his might to _____ the wood in half.
- v. to split or divide something into two parts, often with force; to adhere or cling to something closely and cohesively
12. This bronze sword is a _____ of ancient times.
- n. an object from a previous era, especially one of historical value
13. After the earthquake, the city was left in a pile of _____.
- n. fragments of rock, stone, or other materials that remain after a building or other structure has been destroyed or demolished; the remains of something that has been broken down or destroyed
14. The old building _____ in a fiery inferno.
- v. to burst or break open violently and noisily; to cause something to burst or break open
15. This question has fascinated solar _____ for decades.
- n. a physicist who studies astronomy
16. Let me quickly _____ these results.
- v. to repeat or summarize what has been said, decided, etc.

ANSWERS: 9. fascinated, 10. astrophysics, 11. cleave, 12. relic, 13. rubble, 14. exploded, 15. astronomers, 16. recap

17. The _____ heat made it difficult to sleep.

adj. not easing or slackening in intensity; persistent and unwavering in pursuit of a goal

18. Any theorem relies on both _____ fact and assumption.

adj. that can be noticed or seen

19. The intricate _____ on the wooden box was the work of a master craftsman.

n. the act or process of cutting or shaping a hard material, such as wood or stone, into a specific form or design

20. The police found a hidden _____ of weapons in the suspect's house.

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

21. The ancient people worshiped the _____ deity.

adj. in bodily form; embodied

22. She had to _____ the berries to make a jam, but it was worth it for the delicious taste.

v. to crush or flatten something; to press or squeeze something into a soft or shapeless mass

23. The positive attitude of the supervisor _____ the discussion.

v. to make something full of interest and energy

24. Tourists frequently _____ the island's delicate natural balance.

v. to interrupt someone who is trying to work, sleep, etc.

ANSWERS: 17. unrelenting, 18. observable, 19. carving, 20. arsenal, 21. incarnate, 22. smooch, 23. animated, 24. disturb

25. Large earthquakes often generate _____ tsunamis.

adj. very frightening or intimidating

26. The adept _____ carefully carved the wooden figurine with precision and skill.

n. a skilled worker who creates handmade objects, especially one who works with wood, metal, or other materials

27. The novel's ambiguous ending left readers with a _____ message.

adj. causing confusion or uncertainty; difficult to understand or explain; puzzling or mystifying

28. The _____ data showed that the element was composed of multiple spectral lines.

n. an instrument that separates light into its component wavelengths and records the distribution of intensities as a graph, used for chemical analysis or to determine the properties of stars and galaxies

29. My father likes to ____ the lawn early on Saturday mornings.

v. to cut down and trim grass or other vegetation, usually with a machine such as a lawnmower; to cut down or harvest crops

30. The _____ dog helped keep the sheep in line and protect them from predators.

n. a person who tends and guards sheep, especially in a rural area

31. We _____ along with the singer's song.

v. to hit your hands together and make a short and loud noise, mainly to show your approval or praise

ANSWERS: 25. terrifying, 26. craftsman, 27. perplexing, 28. spectrograph, 29. mow, 30. shepherd's, 31. clapped

32. The _____ village was located near a river.

adj. (also called New Stone Age) the period of human history that followed the end of the last ice age and that is characterized by the development of agriculture and the use of polished stone tools

ANSWERS: 32. neolithic