

# Englist.me



## Vocabulary Builder Reference from...

*Sarah Rugheimer: The search for microscopic aliens | TED Talk*

[https://www.ted.com/talks/sarah\\_rugheimer\\_the\\_search\\_for\\_microscopic\\_aliens](https://www.ted.com/talks/sarah_rugheimer_the_search_for_microscopic_aliens)

### Advanced Words Only

#### IMPORTANT

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## Session 1: Word List

### hurdle

*n.* a barrier or obstacle that must be overcome

*synonym*: obstacle, barrier, challenge

(1) overcome **hurdles**, (2) **hurdle** race

The company faced several **hurdles** in the development of its new product.

### extraterrestrial

*adj.* relating to or existing outside of the Earth's atmosphere or planetary boundaries; pertaining to beings or phenomena that originate from beyond the Earth

*synonym*: alien, outer, otherworldly

(1) **extraterrestrial** planet, (2) **extraterrestrial** intelligence

Scientists are constantly searching for signs of **extraterrestrial** life in the universe.

### microbe

*n.* 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.

### biosphere

*n.* the part of the Earth and its atmosphere in which living organisms exist, including plants, animals, and microorganisms

*synonym*: ecosphere, ecospace, ecosystem

(1) terrestrial **biosphere**, (2) artificial **biosphere**

The balance of the **biosphere** is crucial for the survival of species.

## 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.

## 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.

## methane

*n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel

(1) atmospheric **methane**, (2) reduce **methane** emissions

The ignition of **methane** gas in the plant killed five employees.

## nit

*n.* the egg of a louse (= that is a tiny insect that lives in human hair) or some other insect; a foolish person

(1) **nit** in the dog's fur, (2) she is a little **nit**

Careful brushing can remove **nit**.

## determinant

*n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result

*synonym*: cause, factor, element

(1) environmental **determinant**, (2) a **determinant** of crop yields

One **determinant** of success is having a positive attitude and a strong work ethic.

## firefly

*n.* a flying nocturnal insect common in warm regions with a tail that shines in the dark

(1) the glow of a **firefly**, (2) sparkle like **firefly**

In that country, there is a culture of eating live **firefly** squid.

## biosignature

*n.* distinctive chemical or physical features that indicate the presence of past or current life

*synonym*: indicators, signs, evidence

(1) **biosignatures** detection, (2) **biosignatures** discovery

Scientists are searching for **biosignatures** on other planets that could indicate the presence of life.

## phosphine

*n.* a colorless, flammable gas that is made up of one phosphorus atom and three hydrogen atoms and has a fishy or garlic-like odor

*synonym*: phosphorus hydride, diphosphine, phosphorus trihydride

(1) **phosphine** gas, (2) organic **phosphine**

The synthesis of **phosphine** was first achieved in the 17th century.

## confuse

*v.* to mistake one thing for another; to make somebody hard to understand

*synonym*: confound, obscure, disorient

(1) **confuse** the listener, (2) **confuse** fantasy with reality

Her remarks **confused** the debate.

## temperate

*adj.* mild or moderate in temperature or climate; exhibiting self-restraint, particularly about the consumption of food, drink, or other indulgences; showing moderation or restraint in behavior or attitude

*synonym*: moderate, mild, genial

(1) **temperate** grassland, (2) **temperate** behavior

The **temperate** climate of the region made it an ideal vacation spot.

## photochemical

*adj.* relating to or caused by the chemical effects of light, particularly those that involve the absorption or emission

of light by molecules in a reaction

*synonym* : photooxidative, photoreactive, phototoxic

(1) **photochemical** degradation, (2) **photochemical** reaction

**Photochemical** smog is a major problem in many urban areas.

## sober

*adj.* not drunk or affected by alcohol; dignified in manner or character and committed to keeping promises

*synonym* : calm, lucid, temperate

(1) **sober** discussion, (2) as **sober** as a judge

He led a **sober** life.

## molten

*adj.* in a liquid state as a result of being heated

*synonym* : melted, liquefied, fused

(1) a **molten** image, (2) **molten** lava

The **molten** metal was poured into the mold.

## flare

*v.* to burn brightly with a sudden, intense burst of flame or light; (noun) a sudden and brief burst of bright flame or light; a sudden and intense burst of radiation from the Sun's surface

*synonym* : blaze, ignite, light up

(1) **flare** up into a major crisis, (2) the **flare** of a match

The Sun **flared** and caused a sudden brightening in the sky.

## ambiguity

*n.* the quality of being open to more than one interpretation; the uncertainty of meaning

*synonym* : uncertainty, vagueness, obscurity

(1) free from **ambiguity**, (2) avoid **ambiguity** in writing

The **ambiguity** in the instructions made it difficult for her to complete the task.

## nuanced

*adj.* characterized by subtle differences in appearance, meaning, sound, etc.

*synonym* : fine, subtle, slight

(1) **nuanced** view, (2) the common but **nuanced** opinion  
The sommelier can distinguish **nuanced** variance in the flavor of the wine.

## skepticism

*n.* an attitude of doubting or questioning that claims or statements are true or valuable or that something will happen; the disbelief in any claims of ultimate knowledge

*synonym*: distrust, doubt, suspicion

(1) natural **skepticism**, (2) **skepticism** toward bureaucracy  
This party expresses **skepticism** about the efficacy of the health insurance system.

## teleport

*v.* to transport or transmit instantly from one location to another, typically using advanced technology or imagined supernatural powers

*synonym*: beam, transport, transmit

(1) **teleport** objects through space, (2) **teleport** to any location in the world

The magician seemed to **teleport** instantly from one side of the stage to the other.

## kangaroo

*n.* a large marsupial native to Australia with powerful hind legs for jumping and carrying young in a pouch on the mother's belly

*synonym*: bouncy, marsupial, joey

(1) giant **kangaroo**, (2) red **kangaroo**

The female **kangaroo** carries and nurses her young, or joey, in a pouch on her belly.

## teem

*v.* to be abuzz; to move in large numbers; to fall heavily

*synonym*: brim, swarm, overflow

(1) **teem** with activity, (2) **teem** down

The city **teems** with traffic on holiday.

## Session 2: Spelling

- |                                    |   |
|------------------------------------|---|
| 1. amateur ast_____er              | <i>n.</i> a physicist who studies astronomy   |
| 2. t__m with activity              | <i>v.</i> to be abuzz; to move in large numbers; to fall heavily  |
| 3. mi_____es sterilizer            | <i>n.</i> a tiny living thing that can only be seen with a microscope and that may cause disease  |
| 4. the common but nu_____d opinion | <i>adj.</i> characterized by subtle differences in appearance, meaning, sound, etc.   |
| 5. natural ske_____sm              | <i>n.</i> an attitude of doubting or questioning that claims or statements are true or valuable or that something will happen; the disbelief in any claims of ultimate knowledge                    |
| 6. the glow of a fi_____y          | <i>n.</i> a flying nocturnal insect common in warm regions with a tail that shines in the dark  |
| 7. as so__r as a judge             | <i>adj.</i> not drunk or affected by alcohol; dignified in manner or character and committed to keeping promises  |
| 8. overcome hu___es                | <i>n.</i> a barrier or obstacle that must be overcome   |
| 9. fl__e up into a major crisis    | <i>v.</i> to burn brightly with a sudden, intense burst of flame or light; (noun) a sudden and brief burst of bright flame or light; a sudden and intense burst of radiation from the Sun's surface |

ANSWERS: 1. astronomer, 2. teem, 3. microbe, 4. nuanced, 5. skepticism, 6. firefly, 7. sober, 8. hurdle, 9. flare

10. te\_\_\_\_rt objects through space      *v.* to transport or transmit instantly from one location to another, typically using advanced technology or imagined supernatural powers
11. free from am\_\_\_\_\_ty      *n.* the quality of being open to more than one interpretation; the uncertainty of meaning
12. mo\_\_\_\_n lava      *adj.* in a liquid state as a result of being heated
13. co\_\_\_\_\_e the listener      *v.* to mistake one thing for another; to make somebody hard to understand
14. giant ka\_\_\_\_\_oo      *n.* a large marsupial native to Australia with powerful hind legs for jumping and carrying young in a pouch on the mother's belly
15. environmental det\_\_\_\_\_nt      *n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result
16. sparkle like fi\_\_\_\_\_y      *n.* a flying nocturnal insect common in warm regions with a tail that shines in the dark
17. ph\_\_\_\_\_ne gas      *n.* a colorless, flammable gas that is made up of one phosphorus atom and three hydrogen atoms and has a fishy or garlic-like odor
18. e\_\_t a gamma ray      *v.* to give off or send out something such as light, heat, sound, gas, etc.
19. the fl\_\_e of a match      *v.* to burn brightly with a sudden, intense burst of flame or light; (noun) a sudden and brief burst of bright flame or light; a sudden and intense burst of radiation from the Sun's surface

ANSWERS: 10. teleport, 11. ambiguity, 12. molten, 13. confuse, 14. kangaroo, 15. determinant, 16. firefly, 17. phosphine, 18. emit, 19. flare

20. ext\_\_\_\_\_ial planet *adj.* relating to or existing outside of the Earth's atmosphere or planetary boundaries; pertaining to beings or phenomena that originate from beyond the Earth
21. she is a little n\_t *n.* the egg of a louse (= that is a tiny insect that lives in human hair) or some other insect; a foolish person
22. e\_\_t air pollution *v.* to give off or send out something such as light, heat, sound, gas, etc.
23. pho\_\_\_\_\_cal degradation *adj.* relating to or caused by the chemical effects of light, particularly those that involve the absorption or emission of light by molecules in a reaction
24. artificial bi\_\_\_\_\_re *n.* the part of the Earth and its atmosphere in which living organisms exist, including plants, animals, and microorganisms
25. a mo\_\_\_n image *adj.* in a liquid state as a result of being heated
26. pathogenic mi\_\_\_\_\_e *n.* a tiny living thing that can only be seen with a microscope and that may cause disease
27. reduce me\_\_\_\_\_e emissions *n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel
28. a det\_\_\_\_\_nt of crop yields *n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result

ANSWERS: 20. extraterrestrial, 21. nit, 22. emit, 23. photochemical, 24. biosphere, 25. molten, 26. microbe, 27. methane, 28. determinant

29. te\_\_\_\_\_te behavior *adj.* mild or moderate in temperature or climate; exhibiting self-restraint, particularly about the consumption of food, drink, or other indulgences; showing moderation or restraint in behavior or attitude
30. n\_t in the dog's fur *n.* the egg of a louse (= that is a tiny insect that lives in human hair) or some other insect; a foolish person
31. terrestrial bi\_\_\_\_\_re *n.* the part of the Earth and its atmosphere in which living organisms exist, including plants, animals, and microorganisms
32. t\_\_m down *v.* to be abuzz; to move in large numbers; to fall heavily
33. te\_\_\_\_\_te grassland *adj.* mild or moderate in temperature or climate; exhibiting self-restraint, particularly about the consumption of food, drink, or other indulgences; showing moderation or restraint in behavior or attitude
34. te\_\_\_\_\_rt to any location in the world *v.* to transport or transmit instantly from one location to another, typically using advanced technology or imagined supernatural powers
35. co\_\_\_\_\_e fantasy with reality *v.* to mistake one thing for another; to make somebody hard to understand
36. bio\_\_\_\_\_ures detection *n.* distinctive chemical or physical features that indicate the presence of past or current life

ANSWERS: 29. temperate, 30. nit, 31. biosphere, 32. teem, 33. temperate, 34. teleport, 35. confuse, 36. biosignature

37. ext\_\_\_\_\_ial intelligence *adj.* relating to or existing outside of the Earth's atmosphere or planetary boundaries; pertaining to beings or phenomena that originate from beyond the Earth
38. hu\_\_\_e race *n.* a barrier or obstacle that must be overcome
39. bio\_\_\_\_\_ures discovery *n.* distinctive chemical or physical features that indicate the presence of past or current life
40. solar ast\_\_\_\_\_er *n.* a physicist who studies astronomy
41. atmospheric me\_\_\_\_\_e *n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel
42. ske\_\_\_\_\_sm toward bureaucracy *n.* an attitude of doubting or questioning that claims or statements are true or valuable or that something will happen; the disbelief in any claims of ultimate knowledge
43. so\_\_r discussion *adj.* not drunk or affected by alcohol; dignified in manner or character and committed to keeping promises
44. pho\_\_\_\_\_cal reaction *adj.* relating to or caused by the chemical effects of light, particularly those that involve the absorption or emission of light by molecules in a reaction
45. nu\_\_\_\_\_d view *adj.* characterized by subtle differences in appearance, meaning, sound, etc.
46. organic ph\_\_\_\_\_ne *n.* a colorless, flammable gas that is made up of one phosphorus atom and three hydrogen atoms and has a fishy or garlic-like odor

ANSWERS: 37. extraterrestrial, 38. hurdle, 39. biosignature, 40. astronomer, 41. methane, 42. skepticism, 43. sober, 44. photochemical, 45. nuanced, 46. phosphine

47. avoid am\_\_\_\_\_ty in writing

*n.* the quality of being open to more than one interpretation; the uncertainty of meaning

48. red ka\_\_\_\_\_oo

*n.* a large marsupial native to Australia with powerful hind legs for jumping and carrying young in a pouch on the mother's belly

ANSWERS: 47. ambiguity, 48. kangaroo

## Session 3: Fill in the Blanks

1. \_\_\_\_\_ 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
2. The \_\_\_\_\_ metal was poured into the mold.  
*adj.* in a liquid state as a result of being heated
3. The \_\_\_\_\_ climate of the region made it an ideal vacation spot.  
*adj.* mild or moderate in temperature or climate; exhibiting self-restraint, particularly about the consumption of food, drink, or other indulgences; showing moderation or restraint in behavior or attitude
4. In that country, there is a culture of eating live \_\_\_\_\_ squid.  
*n.* a flying nocturnal insect common in warm regions with a tail that shines in the dark
5. The ignition of \_\_\_\_\_ gas in the plant killed five employees.  
*n.* a chemical compound with the chemical formula CH<sub>4</sub> with no smell or color, often used as a fuel
6. The synthesis of \_\_\_\_\_ was first achieved in the 17th century.  
*n.* a colorless, flammable gas that is made up of one phosphorus atom and three hydrogen atoms and has a fishy or garlic-like odor
7. Scientists are searching for \_\_\_\_\_ on other planets that could indicate the presence of life.  
*n.* distinctive chemical or physical features that indicate the presence of past or current life

ANSWERS: 1. Microbes, 2. molten, 3. temperate, 4. firefly, 5. methane, 6. phosphine, 7. biosignatures

8. He led a \_\_\_\_\_ life.

*adj.* not drunk or affected by alcohol; dignified in manner or character and committed to keeping promises

9. This question has fascinated solar \_\_\_\_\_ for decades.

*n.* a physicist who studies astronomy

10. One \_\_\_\_\_ of success is having a positive attitude and a strong work ethic.

*n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result

11. Careful brushing can remove \_\_\_\_\_.

*n.* the egg of a louse (= that is a tiny insect that lives in human hair) or some other insect; a foolish person

12. The sommelier can distinguish \_\_\_\_\_ variance in the flavor of the wine.

*adj.* characterized by subtle differences in appearance, meaning, sound, etc.

13. The female \_\_\_\_\_ carries and nurses her young, or joey, in a pouch on her belly.

*n.* a large marsupial native to Australia with powerful hind legs for jumping and carrying young in a pouch on the mother's belly

14. \_\_\_\_\_ smog is a major problem in many urban areas.

*adj.* relating to or caused by the chemical effects of light, particularly those that involve the absorption or emission of light by molecules in a reaction

15. Her remarks \_\_\_\_\_ the debate.

*v.* to mistake one thing for another; to make somebody hard to understand

ANSWERS: 8. sober, 9. astronomers, 10. determinant, 11. nit, 12. nuanced, 13. kangaroo, 14. Photochemical, 15. confused

16. The balance of the \_\_\_\_\_ is crucial for the survival of species.  
*n.* the part of the Earth and its atmosphere in which living organisms exist, including plants, animals, and microorganisms
17. The city \_\_\_\_\_ with traffic on holiday.  
*v.* to be abuzz; to move in large numbers; to fall heavily
18. The company faced several \_\_\_\_\_ in the development of its new product.  
*n.* a barrier or obstacle that must be overcome
19. This party expresses \_\_\_\_\_ about the efficacy of the health insurance system.  
*n.* an attitude of doubting or questioning that claims or statements are true or valuable or that something will happen; the disbelief in any claims of ultimate knowledge
20. The \_\_\_\_\_ in the instructions made it difficult for her to complete the task.  
*n.* the quality of being open to more than one interpretation; the uncertainty of meaning
21. During the unloading, the container box \_\_\_\_\_ a clicking sound.  
*v.* to give off or send out something such as light, heat, sound, gas, etc.
22. The Sun \_\_\_\_\_ and caused a sudden brightening in the sky.  
*v.* to burn brightly with a sudden, intense burst of flame or light; (noun) a sudden and brief burst of bright flame or light; a sudden and intense burst of radiation from the Sun's surface
23. The magician seemed to \_\_\_\_\_ instantly from one side of the stage to the other.  
*v.* to transport or transmit instantly from one location to another, typically using advanced technology or imagined supernatural powers

ANSWERS: 16. biosphere, 17. teems, 18. hurdles, 19. skepticism, 20. ambiguity, 21. emits, 22. flared, 23. teleport

24. Scientists are constantly searching for signs of \_\_\_\_\_ life in the universe.

*adj.* relating to or existing outside of the Earth's atmosphere or planetary boundaries; pertaining to beings or phenomena that originate from beyond the Earth

ANSWERS: 24. extraterrestrial