

# Englist.me



## Vocabulary Builder Reference from...

Joshua W. Pate: *The mysterious science of pain* |  
TED Talk

[https://www.ted.com/talks/joshua\\_w\\_pate\\_the\\_mysterious\\_science\\_of\\_pain](https://www.ted.com/talks/joshua_w_pate_the_mysterious_science_of_pain)

### Advanced Words Only

#### IMPORTANT

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## Session 1: Word List

### astonishing

*adj.* surprising or shocking; difficult to believe

*synonym*: surprising, shocking, astounding

(1) **astonishing** achievement, (2) make **astonishing** gains  
The news of her sudden death was **astonishing** to everyone who knew her.

### pierce

*v.* to cut or make a way through with a sharp instrument

*synonym*: jab, penetrate, stab

(1) **pierce** the armored shells, (2) **pierce** a mystery  
The extreme cold **pierced** our bones.

### agon

*n.* a contest or competition, typically one in which participants exert themselves physically or mentally to achieve victory or surpass others

*synonym*: struggle, conflict, fight

(1) emotional **agon**, (2) an **agon** of creativity

The weightlifting competition brought together athletes from different countries for an international **agon**.

### unbearable

*adj.* not able to be tolerated or endured; too difficult, severe, or intense to be dealt with or suffered through; intolerable or insufferable

*synonym*: intolerable, insufferable, unendurable

(1) **unbearable** heat, (2) **unbearable** pain

The loss of his wife was an **unbearable** sorrow that he found hard to overcome.

## **nociceptor**

*n.* a sensory nerve ending that is capable of detecting harmful stimuli, such as heat, cold, pressure, or tissue damage, and transmitting this information to the brain

(1) thermal **nociceptor**, (2) **nociceptor** fiber

The **nociceptors** in the skin are activated by heat, cold, and pressure.

## **amplify**

*v.* to enhance something, particularly sound or brightness  
*synonym*: intensify, boost, argument

(1) **amplify** a signal, (2) **amplify** the effect

You might need to **amplify** this point.

## **amplification**

*n.* the process of increasing the volume or intensity of something; the expansion or elaboration of a concept or idea

*synonym*: enlargement, expansion, intensification

(1) **amplification** system, (2) sound **amplification**

The political debate was an **amplification** of the candidates' views on key issues.

## **nudge**

*v.* to push someone or something gently, especially with your elbow, to attract the person's attention; (noun) a small push or prod to encourage a desired action or behavior

*synonym*: bump, elbow, (noun) prod

(1) **nudge** price levels up, (2) give a person a **nudge**

The teacher **nudged** the student to get his attention and asked him a question.

## **outlast**

*v.* to endure or last longer than something else; to overcome challenges or obstacles and remain in existence

*synonym*: endure, survive, persevere

(1) **outlast** competitors, (2) **outlast** the storm  
Some species of turtles can **outlast** human beings by centuries.

## two-pronged

*adj.* having two prongs:

(1) **two-pronged** process, (2) **two-pronged** fork  
A **two-pronged** attack with synchronized landings at both camps was deemed the optimal strategy.

## uncover

*v.* to remove the cover from something; to discover something previously unseen or hidden

*synonym*: disclose, reveal, unveil

(1) **uncover** a potential problem, (2) **uncover** the truth  
He continued his investigation and soon **uncovered** another crime.

## glia

*n.* a type of brain cell that supports and insulates neurons, provides nutrients to them, and helps to regulate their activity

*synonym*: astrocyte, microglia, oligodendrocyte

(1) neural **glia**, (2) **glia** function

The human brain contains both neurons and **glia** cells.

## neuron

*n.* a cell that is specialized to carry information within the brain and between the brain and other parts of the body

*synonym*: nerve cell

(1) excite the **neurons**, (2) **neuron** cell body

Our body transfers information along each **neuron** using an electrical impulse.

## amygdala

*n.* one of two parts of the almond-shaped neural structure that are linked to emotions, especially fear and pleasure, memory, and the sense of smell

(1) the decline in **amygdala** activity, (2) **amygdala** damage

The **amygdala** has been associated with memories of past emotional events.

## pinpoint

v. to locate or identify the exact position in space or time of something

*synonym*: name, direct, identify

(1) **pinpoint** the problem, (2) **pinpoint** signs of manipulation

This radar quickly **pinpoints** the position of the enemy.

## Session 2: Spelling

1. g\_\_a function *n.* a type of brain cell that supports and insulates neurons, provides nutrients to them, and helps to regulate their activity
2. am\_\_\_\_la damage *n.* one of two parts of the almond-shaped neural structure that are linked to emotions, especially fear and pleasure, memory, and the sense of smell
3. thermal noc\_\_\_\_or *n.* a sensory nerve ending that is capable of detecting harmful stimuli, such as heat, cold, pressure, or tissue damage, and transmitting this information to the brain
4. un\_\_\_\_r the truth *v.* to remove the cover from something; to discover something previously unseen or hidden
5. make ast\_\_\_\_ng gains *adj.* surprising or shocking; difficult to believe
6. ast\_\_\_\_ng achievement *adj.* surprising or shocking; difficult to believe
7. nu\_\_e price levels up *v.* to push someone or something gently, especially with your elbow, to attract the person's attention; (noun) a small push or prod to encourage a desired action or behavior
8. give a person a nu\_\_e *v.* to push someone or something gently, especially with your elbow, to attract the person's attention; (noun) a small push or prod to encourage a desired action or behavior

ANSWERS: 1. glia, 2. amygdala, 3. nociceptor, 4. uncover, 5. astonishing, 6. astonishing, 7. nudge, 8. nudge

9. pi\_\_\_\_\_nt the problem      *v.* to locate or identify the exact position in space or time of something
10. noc\_\_\_\_\_or fiber      *n.* a sensory nerve ending that is capable of detecting harmful stimuli, such as heat, cold, pressure, or tissue damage, and transmitting this information to the brain
11. two\_\_\_\_\_ed fork      *adj.* having two prongs:
12. am\_\_\_\_\_y a signal      *v.* to enhance something, particularly sound or brightness
13. ne\_\_\_\_n cell body      *n.* a cell that is specialized to carry information within the brain and between the brain and other parts of the body
14. ou\_\_\_\_\_t competitors      *v.* to endure or last longer than something else; to overcome challenges or obstacles and remain in existence
15. amp\_\_\_\_\_ion system      *n.* the process of increasing the volume or intensity of something; the expansion or elaboration of a concept or idea
16. neural g\_\_a      *n.* a type of brain cell that supports and insulates neurons, provides nutrients to them, and helps to regulate their activity
17. emotional a\_\_n      *n.* a contest or competition, typically one in which participants exert themselves physically or mentally to achieve victory or surpass others
18. am\_\_\_\_\_y the effect      *v.* to enhance something, particularly sound or brightness

ANSWERS: 9. pinpoint, 10. nociceptor, 11. two-pronged, 12. amplify, 13. neuron, 14. outlast, 15. amplification, 16. glia, 17. agon, 18. amplify

19. unb\_\_\_\_\_le heat *adj.* not able to be tolerated or endured; too difficult, severe, or intense to be dealt with or suffered through; intolerable or insufferable
20. an a\_\_n of creativity *n.* a contest or competition, typically one in which participants exert themselves physically or mentally to achieve victory or surpass others
21. ou\_\_\_\_\_t the storm *v.* to endure or last longer than something else; to overcome challenges or obstacles and remain in existence
22. pi\_\_\_e a mystery *v.* to cut or make a way through with a sharp instrument
23. the decline in am\_\_\_\_\_la activity *n.* one of two parts of the almond-shaped neural structure that are linked to emotions, especially fear and pleasure, memory, and the sense of smell
24. un\_\_\_\_\_r a potential problem *v.* to remove the cover from something; to discover something previously unseen or hidden
25. unb\_\_\_\_\_le pain *adj.* not able to be tolerated or endured; too difficult, severe, or intense to be dealt with or suffered through; intolerable or insufferable
26. excite the ne\_\_\_ns *n.* a cell that is specialized to carry information within the brain and between the brain and other parts of the body
27. sound amp\_\_\_\_\_ion *n.* the process of increasing the volume or intensity of something; the expansion or elaboration of a concept or idea

ANSWERS: 19. unbearable, 20. agon, 21. outlast, 22. pierce, 23. amygdala, 24. uncover, 25. unbearable, 26. neuron, 27. amplification

28. two\_\_\_\_\_ed process

*adj.* having two prongs:

29. pi\_\_\_\_\_nt signs of manipulation

*v.* to locate or identify the exact position in space or time of something

30. pi\_\_\_e the armored shells

*v.* to cut or make a way through with a sharp instrument

ANSWERS: 28. two-pronged, 29. pinpoint, 30. pierce



## Session 3: Fill in the Blanks

1. The extreme cold \_\_\_\_\_ our bones.  
*v.* to cut or make a way through with a sharp instrument
2. Our body transfers information along each \_\_\_\_\_ using an electrical impulse.  
*n.* a cell that is specialized to carry information within the brain and between the brain and other parts of the body
3. The \_\_\_\_\_ has been associated with memories of past emotional events.  
*n.* one of two parts of the almond-shaped neural structure that are linked to emotions, especially fear and pleasure, memory, and the sense of smell
4. The teacher \_\_\_\_\_ the student to get his attention and asked him a question.  
*v.* to push someone or something gently, especially with your elbow, to attract the person's attention; (noun) a small push or prod to encourage a desired action or behavior
5. The news of her sudden death was \_\_\_\_\_ to everyone who knew her.  
*adj.* surprising or shocking; difficult to believe
6. A \_\_\_\_\_ attack with synchronized landings at both camps was deemed the optimal strategy.  
*adj.* having two prongs:
7. The human brain contains both neurons and \_\_\_\_\_ cells.  
*n.* a type of brain cell that supports and insulates neurons, provides nutrients to them, and helps to regulate their activity

ANSWERS: 1. pierced, 2. neuron, 3. amygdala, 4. nudged, 5. astonishing, 6. two-pronged, 7. glia

8. This radar quickly \_\_\_\_\_ the position of the enemy.  
*v.* to locate or identify the exact position in space or time of something
9. You might need to \_\_\_\_\_ this point.  
*v.* to enhance something, particularly sound or brightness
10. He continued his investigation and soon \_\_\_\_\_ another crime.  
*v.* to remove the cover from something; to discover something previously unseen or hidden
11. The \_\_\_\_\_ in the skin are activated by heat, cold, and pressure.  
*n.* a sensory nerve ending that is capable of detecting harmful stimuli, such as heat, cold, pressure, or tissue damage, and transmitting this information to the brain
12. The weightlifting competition brought together athletes from different countries for an international \_\_\_\_\_.  
*n.* a contest or competition, typically one in which participants exert themselves physically or mentally to achieve victory or surpass others
13. Some species of turtles can \_\_\_\_\_ human beings by centuries.  
*v.* to endure or last longer than something else; to overcome challenges or obstacles and remain in existence
14. The political debate was an \_\_\_\_\_ of the candidates' views on key issues.  
*n.* the process of increasing the volume or intensity of something; the expansion or elaboration of a concept or idea
15. The loss of his wife was an \_\_\_\_\_ sorrow that he found hard to overcome.  
*adj.* not able to be tolerated or endured; too difficult, severe, or intense to be dealt with or suffered through; intolerable or insufferable

ANSWERS: 8. pinpoints, 9. amplify, 10. uncovered, 11. nociceptors, 12. agon, 13. outlast, 14. amplification, 15. unbearable

ANSWERS: