

# Englist.me



## Vocabulary Builder Reference from...

*Julian Burschka: Could a breathalyzer detect cancer?*

| TED Talk

[https://www.ted.com/talks/julian\\_burschka\\_could\\_a\\_breathalyzer\\_detect\\_cancer](https://www.ted.com/talks/julian_burschka_could_a_breathalyzer_detect_cancer)

### Advanced Words Only

#### IMPORTANT

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## Session 1: Word List

### breathalyzer

*n.* a device that measures the level of alcohol in a person's breath, typically used by law enforcement to determine if someone is driving under the influence of alcohol

*synonym* : breath test, intoxilyzer, alcohol test

(1) **breathalyzer** result, (2) **breathalyzer** device

The police officer administered a **breathalyzer** test to the driver suspected of drunk driving.

### exhale

*v.* to breathe out air or vapor from the lungs or mouth; to release or emit something slowly or gently

*synonym* : breathe out, expel, emit

(1) **exhale** a big sigh, (2) **exhale** cigarette smoke

He took a deep breath and slowly began to **exhale**.

### bloodstream

*n.* the blood flowing through the body

(1) **bloodstream** in an artery, (2) **bloodstream** to the brain

Cancer cells are often carried throughout the body by the **bloodstream**.

### sac

*n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant

*synonym* : bag, pouch, knapsack

(1) **sac** contents, (2) abdominal **sac**

I placed my valuables in the **sac** before heading out on my hike.

## acetic

*adj.* relating to vinegar or containing acetic acid (= a colorless, pungent-smelling liquid organic compound with the chemical formula CH<sub>3</sub>COOH); having a sour or sharp taste or smell resembling vinegar

*synonym* : sour, acidic, tart

(1) **acetic** fermentation, (2) **acetic** smell

Adding **acetic** acid to a solution can lower its pH.

## 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.

## disrupt

*v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance

*synonym* : interrupt, disturb, break into

(1) **disrupt** a well-ordered condition, (2) **disrupt** sleep

I'm so sorry to **disrupt** you when you're pretty busy.

## biopsy

*n.* the process of removing and examining tissue from the body of the sick person to determine the existence or cause of a disease

*synonym* : examination, autopsy

(1) **biopsy** of bone marrow, (2) liquid **biopsy**

The doctor performed an excisional breast **biopsy**.

## glycolysis

*n.* the process by which glucose is broken down and converted into energy within cells, typically occurring in the cytoplasm and producing two molecules of ATP as well as other byproducts

*synonym*

: sugar breakdown, glucose metabolism

(1) aerobic **glycolysis**, (2) cancer **glycolysis**

**Glycolysis** regulation is a key aspect of energy metabolism in all cells.

## metabolite

*n.* 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.

## lactation

*n.* the secretion of milk by the mammary glands of a female mammal, typically the following pregnancy

*synonym* : nursing, breastfeeding, milk production

(1) **lactation** period, (2) **lactation** support

After giving birth, the mother's body produces milk through **lactation**.

## cascade

*n.* a small waterfall or series of small waterfalls; a succession of stages or operations or processes or units

*synonym* : waterfall, watercourse, step

(1) **cascade** connection, (2) transistor **cascade**

The **cascade** of waterfalls in the national park was a breathtaking sight.

## dimethyl

*n.* a chemical compound containing two methyl groups (CH<sub>3</sub>-) bound to a single carbon atom, often used as a building block for larger organic molecules

(1) **dimethyl** sulfate, (2) **dimethyl** ether

In organic chemistry, **dimethyl** formamide is often used as a reagent and solvent.

## rev

*n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute

*synonym* : revolution, RPM, speed

(1) low- **rev** engine, (2) **rev** up the crowd

He stepped on the gas pedal, and the engine released a loud **rev**.

## **inhale**

v. to breathe in air or a different substance, such as smoke

*synonym* : breathe in, take in, draw in

(1) **inhale** the smoke, (2) **inhale** the aroma

He **inhaled** deeply, trying to calm down.

## Session 2: Spelling

1. aerobic gly\_\_\_\_\_is  
*n.* the process by which glucose is broken down and converted into energy within cells, typically occurring in the cytoplasm and producing two molecules of ATP as well as other byproducts
2. complex bio\_\_\_\_\_al  
*adj.* relating to the chemical processes and substances that occur within living organisms
3. di\_\_\_\_\_yl sulfate  
*n.* a chemical compound containing two methyl groups (CH<sub>3</sub>-) bound to a single carbon atom, often used as a building block for larger organic molecules
4. ex\_\_\_e a big sigh  
*v.* to breathe out air or vapor from the lungs or mouth; to release or emit something slowly or gently
5. la\_\_\_\_\_on period  
*n.* the secretion of milk by the mammary glands of a female mammal, typically the following pregnancy
6. r\_v up the crowd  
*n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute
7. in\_\_\_e the smoke  
*v.* to breathe in air or a different substance, such as smoke
8. ca\_\_\_\_\_e connection  
*n.* a small waterfall or series of small waterfalls; a succession of stages or operations or processes or units

ANSWERS: 1. glycolysis, 2. biochemical, 3. dimethyl, 4. exhale, 5. lactation, 6. rev, 7. inhale, 8. cascade

9. ex\_\_\_e cigarette smoke      *v.* to breathe out air or vapor from the lungs or mouth; to release or emit something slowly or gently
10. transistor ca\_\_\_\_\_e      *n.* a small waterfall or series of small waterfalls; a succession of stages or operations or processes or units
11. blo\_\_\_\_\_am to the brain      *n.* the blood flowing through the body
12. ac\_\_\_c fermentation      *adj.* relating to vinegar or containing acetic acid (= a colorless, pungent-smelling liquid organic compound with the chemical formula CH<sub>3</sub>COOH); having a sour or sharp taste or smell resembling vinegar
13. bi\_\_\_y of bone marrow      *n.* the process of removing and examining tissue from the body of the sick person to determine the existence or cause of a disease
14. abdominal s\_c      *n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant
15. di\_\_\_\_\_yl ether      *n.* a chemical compound containing two methyl groups (CH<sub>3</sub>-) bound to a single carbon atom, often used as a building block for larger organic molecules
16. bre\_\_\_\_\_zer result      *n.* a device that measures the level of alcohol in a person's breath, typically used by law enforcement to determine if someone is driving under the influence of alcohol

ANSWERS: 9. exhale, 10. cascade, 11. bloodstream, 12. acetic, 13. biopsy, 14. sac, 15. dimethyl, 16. breathalyzer

17. di\_\_\_\_t a well-ordered condition      *v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
18. met\_\_\_\_\_te concentration      *n.* a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
19. di\_\_\_\_t sleep      *v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
20. drug met\_\_\_\_\_te      *n.* a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
21. bre\_\_\_\_\_zer device      *n.* a device that measures the level of alcohol in a person's breath, typically used by law enforcement to determine if someone is driving under the influence of alcohol
22. liquid bi\_\_\_\_y      *n.* the process of removing and examining tissue from the body of the sick person to determine the existence or cause of a disease
23. ac\_\_\_\_c smell      *adj.* relating to vinegar or containing acetic acid (= a colorless, pungent-smelling liquid organic compound with the chemical formula CH<sub>3</sub>COOH); having a sour or sharp taste or smell resembling vinegar

ANSWERS: 17. disrupt, 18. metabolite, 19. disrupt, 20. metabolite, 21. breathalyzer, 22. biopsy, 23. acetic

24. cancer gly\_\_\_\_\_is *n.* the process by which glucose is broken down and converted into energy within cells, typically occurring in the cytoplasm and producing two molecules of ATP as well as other byproducts
25. s\_c contents *n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant
26. la\_\_\_\_\_on support *n.* the secretion of milk by the mammary glands of a female mammal, typically the following pregnancy
27. in\_\_\_e the aroma *v.* to breathe in air or a different substance, such as smoke
28. bio\_\_\_\_\_al reaction *adj.* relating to the chemical processes and substances that occur within living organisms
29. low-r\_v engine *n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute
30. blo\_\_\_\_\_am in an artery *n.* the blood flowing through the body

ANSWERS: 24. glycolysis, 25. sac, 26. lactation, 27. inhale, 28. biochemical, 29. rev, 30. bloodstream



## Session 3: Fill in the Blanks

1. He stepped on the gas pedal, and the engine released a loud \_\_\_\_.  
*n.* a measure of the rate at which an engine or motor rotates, often expressed in revolutions per minute (RPM); (verb) to increase the number of rotations per minute
2. The \_\_\_\_\_ of waterfalls in the national park was a breathtaking sight.  
*n.* a small waterfall or series of small waterfalls; a succession of stages or operations or processes or units
3. I placed my valuables in the \_\_\_\_ before heading out on my hike.  
*n.* a bag or pouch, typically made of fabric or leather, used to hold something valuable or important; a structure resembling a bag in an animal or plant
4. Adding \_\_\_\_\_ acid to a solution can lower its pH.  
*adj.* relating to vinegar or containing acetic acid (= a colorless, pungent-smelling liquid organic compound with the chemical formula  $\text{CH}_3\text{COOH}$ ); having a sour or sharp taste or smell resembling vinegar
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 \_\_\_\_\_ deeply, trying to calm down.  
*v.* to breathe in air or a different substance, such as smoke
7. The doctor performed an excisional breast \_\_\_\_\_.  
*n.* the process of removing and examining tissue from the body of the sick person to determine the existence or cause of a disease

ANSWERS: 1. rev, 2. cascade, 3. sac, 4. acetic, 5. Biochemical, 6. inhaled, 7. biopsy

8. I'm so sorry to \_\_\_\_\_ you when you're pretty busy.
- v.* to prevent or stop something, especially an event, activity, or process, from continuing in the usual way by causing a problem or disturbance
9. Cancer cells are often carried throughout the body by the \_\_\_\_\_.
- n.* the blood flowing through the body
10. The police officer administered a \_\_\_\_\_ test to the driver suspected of drunk driving.
- n.* a device that measures the level of alcohol in a person's breath, typically used by law enforcement to determine if someone is driving under the influence of alcohol
11. The liver \_\_\_\_\_ levels were higher than usual.
- n.* a substance produced by metabolic processes in living organisms, especially those that are essential for normal physiological functions
12. \_\_\_\_\_ regulation is a key aspect of energy metabolism in all cells.
- n.* the process by which glucose is broken down and converted into energy within cells, typically occurring in the cytoplasm and producing two molecules of ATP as well as other byproducts
13. After giving birth, the mother's body produces milk through \_\_\_\_\_.
- n.* the secretion of milk by the mammary glands of a female mammal, typically the following pregnancy
14. In organic chemistry, \_\_\_\_\_ formamide is often used as a reagent and solvent.
- n.* a chemical compound containing two methyl groups (CH<sub>3</sub>-) bound to a single carbon atom, often used as a building block for larger organic molecules

ANSWERS: 8. disrupt, 9. bloodstream, 10. breathalyzer, 11. metabolite, 12. Glycolysis, 13. lactation, 14. dimethyl

15. He took a deep breath and slowly began to \_\_\_\_\_.

- v. to breathe out air or vapor from the lungs or mouth; to release or emit something slowly or gently

ANSWERS: 15. exhale