

# Englist.me



## Vocabulary Builder Reference from...

Michael Hansmeyer: Building unimaginable shapes | TED Talk

[https://www.ted.com/talks/michael\\_hansmeyer\\_building\\_unimaginable\\_shapes](https://www.ted.com/talks/michael_hansmeyer_building_unimaginable_shapes)

### 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

### preconceived

*adj.* (of an idea or opinion) formed beforehand, especially without evidence for its truth or usefulness

(1) a **preconceived** notion, (2) **preconceived** opinions

We should start a discussion from scratch with no **preconceived** ideas.

### unseen

*adj.* not seen or noticed; not perceived

*synonym*: invisible, hidden, undercover

(1) **unseen** danger, (2) an **unseen** force

The consequences of the pandemic remain **unseen** as scientists continue to research the virus.

### intrigue

*v.* to make someone interested, especially by being strange, unusual, or mysterious; to make a secret plan with other people to harm someone

*synonym*: attract, captivate, charm

(1) **intrigue** him, (2) **intrigue** against his rival

The artist's innovative style of work **intrigues** me.

### 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.

## morphogenesis

*n.* the biological process of growth, development, and differentiation of cells, tissues, and organs to give rise to the complex three-dimensional structures of living organisms

*synonym*: development, growth, formation

(1) **morphogenesis** process, (2) cellular **morphogenesis**

Defects in **morphogenesis** can lead to developmental abnormalities and congenital disabilities.

## asymmetric

*adj.* lacking symmetry or balance; not corresponding in size, shape, or degree; characterized by an uneven or unequal distribution or arrangement

*synonym*: uneven, lopsided, unbalanced

(1) **asymmetric** warfare, (2) **asymmetric** information

The **asymmetric** design of the building made it stand out in the city skyline.

## astound

*v.* to surprise or shock someone with wonder very much

*synonym*: amaze, astonish, surprise

(1) **astound** everyone, (2) **astound** the viewer

The final result was nothing short of **astounding**.

## exert

*v.* to put forth effort; to put into action; to bring into play

*synonym*: exert, apply, use

(1) **exert** control, (2) **exert** influence

He **exerted** himself to lift the heavyweight.

## sculpt

*v.* to create a work of art by carving, casting, or other shaping techniques

*synonym*: carve, mold, shape

(1) **sculpt** an image, (2) **sculpt** prototype

He spent hours every day **sculpting** figures out of clay.

## intersect

*v.* to meet or cross one another

*synonym*: cross, bisect, cut

(1) **intersect** at a point, (2) railways **intersect** the country  
Her multidisciplinary works **intersect** music and picture with writing.

## expound

*v.* to explain or clarify something in detail or with great care; to interpret or elucidate

*synonym*: explain, clarify, interpret

(1) **expound** theory, (2) **expound** on the subject  
The professor spent hours **expounding** on the complexities of quantum physics.

## curvature

*n.* the degree to which a line or surface deviates from being straight or flat; a measure of the amount of bending of a curve

*synonym*: bend, arch, bow

(1) the degree of **curvature**, (2) spinal **curvature**  
The **curvature** of the earth can be seen from space.

## archetype

*n.* a very typical example of a certain person or thing; a recurrent symbol or motif in literature, art, or mythology that represents a universal pattern of human nature

*synonym*: prototype, model, paradigm

(1) **archetype** symbol, (2) feminine **archetype**  
The hero's journey is a common **archetype** in many myths and stories.

## microscopic

*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy

*synonym*: infinitesimal, tiny, atomic

(1) **microscopic** inquiry, (2) **microscopic** analysis  
Inspectors noticed **microscopic** cracks in the submarine's hull.

## sect

*n.* a group of people who follow a particular religious or philosophical belief system, especially one that is

regarded as outside the norm or mainstream

*synonym* : group, faction, cult

(1) **sect** beliefs, (2) secret **sect**

The minority **sect** believed in a set of unconventional religious practices.

## imaginable

*adj.* capable of being imagined

*synonym* : conceivable, plausible, possible

(1) easily **imaginable**, (2) worst **imaginable** case

This is the only **imaginable** strategy.

## envision

*v.* to imagine or expect what a situation will be like in the future

*synonym* : anticipate, foresee, picture

(1) **envision** the future, (2) **envision** the project's success

We cannot **envision** her as President.

## deterministic

*adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations

*synonym* : predictable, predetermined, certain

(1) **deterministic** approach, (2) **deterministic** system

The **deterministic** algorithm always produces the same result for a given input.

## cultivate

*v.* to prepare and foster land for growing crops or plants

*synonym* : boost, foster, nurture

(1) **cultivate** a field, (2) **cultivate** relationships

University is a great place to **cultivate** our minds and expertise.

## permutation

*n.* the act or process of rearranging or reordering a set of elements or objects in a different sequence or configuration; a specific arrangement or order of a set of elements or objects

*synonym* : variation, transformation, alteration

(1) **permutation** formula, (2) **permutation** test

Scientists study the **permutations** of chemical elements and compounds to better understand their properties and potential uses.

## orchestrate

*v.* to plan, coordinate, or arrange something, especially skillfully or cleverly; (noun) the act of organizing or directing the elements of a composition, especially in music

*synonym*: plan, coordinate, arrange

(1) **orchestrate** a takeover, (2) **orchestrate** the political reinstatement

He carefully **orchestrated** the details of his business plan.

## unfavorable

*adj.* not advantageous or beneficial; opposed to one's interests or desires

*synonym*: adverse, negative, hostile

(1) **unfavorable** situation, (2) **unfavorable** reviews

The unforeseen weather change resulted in an **unfavorable** outcome for the outdoor event.

## trade-off

*n.* a balance achieved between two desirable but incompatible features; an exchange that occurs as a compromise

*synonym*: compromise, balance, exchange

(1) **trade-off** problem, (2) environmental **trade-off**

There was a **trade-off** between speed and accuracy in the task.

## unbeknownst

*adv.* without the knowledge or awareness of someone; without someone's knowledge or participation

*synonym*: secretly, covertly

(1) **unbeknownst** to me, (2) **unbeknownst** to any of us

**Unbeknownst** to the family, the treasure had been hidden in the attic for years.

## intricacy

*n.* the quality of being complex, detailed, or highly involved; the existence of many interrelated parts or elements

*synonym*: complexity, intricateness, elaboration

(1) the **intricacy** of the design, (2) legal **intricacy**

The clockwork mechanism of the antique watch showed incredible **intricacy**.

## auditorium

*n.* a room or building used for concerts, plays, or other public performances

*synonym*: hall, theater, amphitheater

(1) open-air **auditorium**, (2) **auditorium** annex

The **auditorium** seating was filled with people waiting for the concert to begin.

## Session 2: Spelling

1. in\_\_\_\_\_ue him  
*v.* to make someone interested, especially by being strange, unusual, or mysterious; to make a secret plan with other people to harm someone
2. asy\_\_\_\_\_ic warfare  
*adj.* lacking symmetry or balance; not corresponding in size, shape, or degree; characterized by an uneven or unequal distribution or arrangement
3. det\_\_\_\_\_tic approach  
*adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations
4. per\_\_\_\_\_on test  
*n.* the act or process of rearranging or reordering a set of elements or objects in a different sequence or configuration; a specific arrangement or order of a set of elements or objects
5. mor\_\_\_\_\_sis process  
*n.* the biological process of growth, development, and differentiation of cells, tissues, and organs to give rise to the complex three-dimensional structures of living organisms
6. mic\_\_\_\_\_ic analysis  
*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
7. an un\_\_\_\_n force  
*adj.* not seen or noticed; not perceived
8. in\_\_\_\_\_ue against his rival  
*v.* to make someone interested, especially by being strange, unusual, or mysterious; to make a secret plan with other people to harm someone

ANSWERS: 1. intrigue, 2. asymmetric, 3. deterministic, 4. permutation, 5. morphogenesis, 6. microscopic, 7. unseen, 8. intrigue

9. mi\_\_c a human voice      *v.* to imitate someone's speech, movement, or behavior, especially to make others laugh
10. easily ima\_\_\_\_\_le      *adj.* capable of being imagined
11. cu\_\_\_\_\_te a field      *v.* to prepare and foster land for growing crops or plants
12. as\_\_\_\_\_d the viewer      *v.* to surprise or shock someone with wonder very much
13. unf\_\_\_\_\_le reviews      *adj.* not advantageous or beneficial; opposed to one's interests or desires
14. open-air aud\_\_\_\_\_um      *n.* a room or building used for concerts, plays, or other public performances
15. mi\_\_c numerous instruments      *v.* to imitate someone's speech, movement, or behavior, especially to make others laugh
16. sc\_\_\_\_t an image      *v.* to create a work of art by carving, casting, or other shaping techniques
17. en\_\_\_\_\_on the future      *v.* to imagine or expect what a situation will be like in the future
18. spinal cu\_\_\_\_\_re      *n.* the degree to which a line or surface deviates from being straight or flat; a measure of the amount of bending of a curve
19. in\_\_\_\_\_ct at a point      *v.* to meet or cross one another
20. ex\_\_\_\_\_d on the subject      *v.* to explain or clarify something in detail or with great care; to interpret or elucidate
21. orc\_\_\_\_\_te the political reinstatement      *v.* to plan, coordinate, or arrange something, especially skillfully or cleverly; (noun) the act of organizing or directing the elements of a composition, especially in music

ANSWERS: 9. mimic, 10. imaginable, 11. cultivate, 12. astound, 13. unfavorable, 14. auditorium, 15. mimic, 16. sculpt, 17. envision, 18. curvature, 19. intersect, 20. expound, 21. orchestrate



22. the degree of cu\_\_\_\_\_re  
*n.* the degree to which a line or surface deviates from being straight or flat; a measure of the amount of bending of a curve
23. ex\_\_t control  
*v.* to put forth effort; to put into action; to bring into play
24. aud\_\_\_\_\_um annex  
*n.* a room or building used for concerts, plays, or other public performances
25. worst ima\_\_\_\_\_le case  
*adj.* capable of being imagined
26. unb\_\_\_\_\_st to any of us  
*adv.* without the knowledge or awareness of someone; without someone's knowledge or participation
27. per\_\_\_\_\_on formula  
*n.* the act or process of rearranging or reordering a set of elements or objects in a different sequence or configuration; a specific arrangement or order of a set of elements or objects
28. cu\_\_\_\_\_te relationships  
*v.* to prepare and foster land for growing crops or plants
29. unb\_\_\_\_\_st to me  
*adv.* without the knowledge or awareness of someone; without someone's knowledge or participation
30. the in\_\_\_\_\_cy of the design  
*n.* the quality of being complex, detailed, or highly involved; the existence of many interrelated parts or elements
31. a pre\_\_\_\_\_ved notion  
*adj.* (of an idea or opinion) formed beforehand, especially without evidence for its truth or usefulness
32. un\_\_\_n danger  
*adj.* not seen or noticed; not perceived

ANSWERS: 22. curvature, 23. exert, 24. auditorium, 25. imaginable, 26. unbeknownst, 27. permutation, 28. cultivate, 29. unbeknownst, 30. intricacy, 31. preconceived, 32. unseen

33. as\_\_\_\_\_d everyone      *v.* to surprise or shock someone with wonder very much
34. railways in\_\_\_\_\_ct the country      *v.* to meet or cross one another
35. det\_\_\_\_\_tic system      *adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations
36. mic\_\_\_\_\_ic inquiry      *adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
37. legal in\_\_\_\_\_cy      *n.* the quality of being complex, detailed, or highly involved; the existence of many interrelated parts or elements
38. en\_\_\_\_\_on the project's success      *v.* to imagine or expect what a situation will be like in the future
39. pre\_\_\_\_\_ved opinions      *adj.* (of an idea or opinion) formed beforehand, especially without evidence for its truth or usefulness
40. feminine ar\_\_\_\_\_pe      *n.* a very typical example of a certain person or thing; a recurrent symbol or motif in literature, art, or mythology that represents a universal pattern of human nature
41. unf\_\_\_\_\_le situation      *adj.* not advantageous or beneficial; opposed to one's interests or desires
42. s\_\_t beliefs      *n.* a group of people who follow a particular religious or philosophical belief system, especially one that is regarded as outside the norm or mainstream

ANSWERS: 33. astound, 34. intersect, 35. deterministic, 36. microscopic, 37. intricacy, 38. envision, 39. preconceived, 40. archetype, 41. unfavorable, 42. sect

43. cellular mor\_\_\_\_\_sis *n.* the biological process of growth, development, and differentiation of cells, tissues, and organs to give rise to the complex three-dimensional structures of living organisms
44. tr\_\_\_\_\_ff problem *n.* a balance achieved between two desirable but incompatible features; an exchange that occurs as a compromise
45. ar\_\_\_\_\_pe symbol *n.* a very typical example of a certain person or thing; a recurrent symbol or motif in literature, art, or mythology that represents a universal pattern of human nature
46. asy\_\_\_\_\_ic information *adj.* lacking symmetry or balance; not corresponding in size, shape, or degree; characterized by an uneven or unequal distribution or arrangement
47. sc\_\_\_\_t prototype *v.* to create a work of art by carving, casting, or other shaping techniques
48. ex\_\_t influence *v.* to put forth effort; to put into action; to bring into play
49. ex\_\_\_\_\_d theory *v.* to explain or clarify something in detail or with great care; to interpret or elucidate
50. environmental tr\_\_\_\_\_ff *n.* a balance achieved between two desirable but incompatible features; an exchange that occurs as a compromise
51. orc\_\_\_\_\_te a takeover *v.* to plan, coordinate, or arrange something, especially skillfully or cleverly; (noun) the act of organizing or directing the elements of a composition, especially in music

ANSWERS: 43. morphogenesis, 44. trade-off, 45. archetype, 46. asymmetric, 47. sculpt, 48. exert, 49. expound, 50. trade-off, 51. orchestrate

52. secret s\_\_t

*n.* a group of people who follow a particular religious or philosophical belief system, especially one that is regarded as outside the norm or mainstream

ANSWERS: 52. sect

## Session 3: Fill in the Blanks

1. \_\_\_\_\_ to the family, the treasure had been hidden in the attic for years.  
*adv.* without the knowledge or awareness of someone; without someone's knowledge or participation
2. He spent hours every day \_\_\_\_\_ figures out of clay.  
*v.* to create a work of art by carving, casting, or other shaping techniques
3. We cannot \_\_\_\_\_ her as President.  
*v.* to imagine or expect what a situation will be like in the future
4. There was a \_\_\_\_\_ between speed and accuracy in the task.  
*n.* a balance achieved between two desirable but incompatible features; an exchange that occurs as a compromise
5. The \_\_\_\_\_ of the earth can be seen from space.  
*n.* the degree to which a line or surface deviates from being straight or flat; a measure of the amount of bending of a curve
6. The artist's innovative style of work \_\_\_\_\_ me.  
*v.* to make someone interested, especially by being strange, unusual, or mysterious; to make a secret plan with other people to harm someone
7. The unforeseen weather change resulted in an \_\_\_\_\_ outcome for the outdoor event.  
*adj.* not advantageous or beneficial; opposed to one's interests or desires
8. He \_\_\_\_\_ himself to lift the heavyweight.  
*v.* to put forth effort; to put into action; to bring into play

ANSWERS: 1. Unbeknownst, 2. sculpting, 3. envision, 4. trade-off, 5. curvature, 6. intrigues, 7. unfavorable, 8. exerted

9. The \_\_\_\_\_ seating was filled with people waiting for the concert to begin.  
*n.* a room or building used for concerts, plays, or other public performances
10. Scientists study the \_\_\_\_\_ of chemical elements and compounds to better understand their properties and potential uses.  
*n.* the act or process of rearranging or reordering a set of elements or objects in a different sequence or configuration; a specific arrangement or order of a set of elements or objects
11. Inspectors noticed \_\_\_\_\_ cracks in the submarine's hull.  
*adj.* tiny; exceedingly precise and detail-oriented; of or used in microscopy
12. The \_\_\_\_\_ algorithm always produces the same result for a given input.  
*adj.* characterized by an assumption of cause and effect and the absence of chance or randomness, often used to describe scientific or engineering calculations
13. The hero's journey is a common \_\_\_\_\_ in many myths and stories.  
*n.* a very typical example of a certain person or thing; a recurrent symbol or motif in literature, art, or mythology that represents a universal pattern of human nature
14. The consequences of the pandemic remain \_\_\_\_\_ as scientists continue to research the virus.  
*adj.* not seen or noticed; not perceived
15. 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

ANSWERS: 9. auditorium, 10. permutations, 11. microscopic, 12. deterministic, 13. archetype, 14. unseen, 15. mimic

16. He carefully \_\_\_\_\_ the details of his business plan.
- v. to plan, coordinate, or arrange something, especially skillfully or cleverly; (noun) the act of organizing or directing the elements of a composition, especially in music
17. The professor spent hours \_\_\_\_\_ on the complexities of quantum physics.
- v. to explain or clarify something in detail or with great care; to interpret or elucidate
18. Her multidisciplinary works \_\_\_\_\_ music and picture with writing.
- v. to meet or cross one another
19. Defects in \_\_\_\_\_ can lead to developmental abnormalities and congenital disabilities.
- n. the biological process of growth, development, and differentiation of cells, tissues, and organs to give rise to the complex three-dimensional structures of living organisms
20. This is the only \_\_\_\_\_ strategy.
- adj. capable of being imagined
21. The clockwork mechanism of the antique watch showed incredible \_\_\_\_\_.
- n. the quality of being complex, detailed, or highly involved; the existence of many interrelated parts or elements
22. The \_\_\_\_\_ design of the building made it stand out in the city skyline.
- adj. lacking symmetry or balance; not corresponding in size, shape, or degree; characterized by an uneven or unequal distribution or arrangement
23. We should start a discussion from scratch with no \_\_\_\_\_ ideas.
- adj. (of an idea or opinion) formed beforehand, especially without evidence for its truth or usefulness

ANSWERS: 16. orchestrated, 17. expounding, 18. intersect, 19. morphogenesis, 20. imaginable, 21. intricacy, 22. asymmetric, 23. preconceived

24. The final result was nothing short of \_\_\_\_\_.

*v.* to surprise or shock someone with wonder very much

25. The minority \_\_\_\_\_ believed in a set of unconventional religious practices.

*n.* a group of people who follow a particular religious or philosophical belief system, especially one that is regarded as outside the norm or mainstream

26. University is a great place to \_\_\_\_\_ our minds and expertise.

*v.* to prepare and foster land for growing crops or plants

ANSWERS: 24. astounding, 25. sect, 26. cultivate