

Englist.me



Vocabulary Builder Reference from...

Fabio Pacucci: Hawking's black hole paradox explained | TED Talk

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

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

paradox

n. a statement, situation, or person that has two opposite facts or features and therefore seems impossible, is difficult to understand, or is strange;

synonym: incongruity, dichotomy, contradiction

(1) French **paradox**, (2) the **paradox** of the heap

There are many theories to explain this **paradox**.

reshape

v. to change the form or structure of something

synonym: alter, adjust, modify

(1) **reshape** education policy, (2) **reshape** my thoughts

The advent of the Internet completely **reshaped** the manufacturing industry.

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.

physicist

n. a scientist who specializes in the field of physics

(1) talented **physicist**, (2) theoretical **physicist**

Einstein was an outstanding and famous **physicist** of the

20th century.

evoke

v. to bring or recall a feeling, memory, or image into your mind

synonym: arouse, raise, inspire

(1) **evoke** a sense of awe, (2) **evoke** sympathy

This movie is likely to **evoke** strong emotions in the viewer.

conserve

v. to protect something, especially the natural environment or culture, from change, damage, or destruction

synonym: preserve, save, maintain

(1) means to **conserve** energy, (2) **conserve** coal resources

Children must be taught to **conserve** our natural environment.

recreate

v. to make something that existed previously happen or appear to exist again

synonym: renovate, vivify, revive

(1) **recreate** a single country, (2) **recreate** the feeling of the 1920s

She **recreated** the atmosphere of the pre-war age with her stage setting.

irretrievable

adj. not able to be retrieved or recovered; irreparable or irreversible; not able to be rectified or undone

synonym: unrecoverable, irredeemable, hopeless

(1) an **irretrievable** mistake, (2) cause **irretrievable** damage

The damage to the computer's hard drive was **irretrievable**, and I lost all of my important files.

hawk

n. a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations

synonym: militarist, jingo, aggressor

(1) cast off a **hawk**, (2) congressional **hawk**

That team signed a center forward who was a ball- **hawk**.

evaporate

v. to turn a liquid into a gas; to become less intense and disappear gradually

synonym : vaporize, disappear, vanish

(1) **evaporate** the water, (2) **evaporate** almost overnight

The sun will **evaporate** the mist.

doe

n. a mature female of mammals of which the male is called a buck, such as a deer or a rabbit

synonym : rabbit, bunny, hare

(1) **doe** rabbit, (2) buck and **doe**

Hunters use a whistle that makes the **doe** sound to lure stags.

evaporation

n. the process of a liquid changing into a gas or vapor, often as a result of high temperatures or reduced pressure; the gradual disappearance or dissipation of something, such as money or resources

synonym : vaporization, dehydration, desiccation

(1) **evaporation** cooling, (2) slow **evaporation**

The formation of clouds is facilitated by the process of **evaporation** and condensation

opportune

adj. suitable or happening at a time that is suitable or convenient for a particular purpose

synonym : suitable, timely, practical

(1) **opportune** occasion, (2) an **opportune** remark

The phone rang at the most **opportune** time.

misunderstand

v. to interpret or understand something in the wrong way

synonym : misinterpret, misperceive, misapprehend

(1) **misunderstand** each other, (2) **misunderstand** entirely about her

You should not **misunderstand** the meaning of freedom.

holography

n. a technique for creating three-dimensional images using lasers to record and reconstruct interference patterns

synonym: three-dimensional photography, laser holography, digital holography

(1) optical **holography**, (2) 3D **holography**

Holography technology uses light interference patterns to create a 3D image.

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.

Session 2: Spelling

- | | | |
|-----------------------------------|------|---|
| 1. mis_____and each other | v. | to interpret or understand something in the wrong way |
| 2. un_____l a plot | v. | undo twisted, knitted, or woven threads by separating it |
| 3. an op_____ne remark | adj. | suitable or happening at a time that is suitable or convenient for a particular purpose |
| 4. mis_____and entirely about her | v. | to interpret or understand something in the wrong way |
| 5. re_____e education policy | v. | to change the form or structure of something |
| 6. French pa_____x | n. | a statement, situation, or person that has two opposite facts or features and therefore seems impossible, is difficult to understand, or is strange; |
| 7. ev_____te almost overnight | v. | to turn a liquid into a gas; to become less intense and disappear gradually |
| 8. co_____ve coal resources | v. | to protect something, especially the natural environment or culture, from change, damage, or destruction |
| 9. optical hol_____hy | n. | a technique for creating three-dimensional images using lasers to record and reconstruct interference patterns |
| 10. slow eva_____on | n. | the process of a liquid changing into a gas or vapor, often as a result of high temperatures or reduced pressure; the gradual disappearance or dissipation of something, such as money or resources |

ANSWERS: 1. misunderstand, 2. unravel, 3. opportune, 4. misunderstand, 5. reshape, 6. paradox, 7. evaporate, 8. conserve, 9. holography, 10. evaporation

11. op_____ne occasion *adj.* suitable or happening at a time that is suitable or convenient for a particular purpose
12. means to co_____ve energy *v.* to protect something, especially the natural environment or culture, from change, damage, or destruction
13. ev__e sympathy *v.* to bring or recall a feeling, memory, or image into your mind
14. re_____te a single country *v.* to make something that existed previously happen or appear to exist again
15. cast off a h__k *n.* a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations
16. obs_____le change *adj.* that can be noticed or seen
17. d_e rabbit *n.* a mature female of mammals of which the male is called a buck, such as a deer or a rabbit
18. congressional h__k *n.* a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations
19. cause irr_____ble damage *adj.* not able to be retrieved or recovered; irreparable or irreversible; not able to be rectified or undone
20. talented ph_____st *n.* a scientist who specializes in the field of physics
21. the pa_____x of the heap *n.* a statement, situation, or person that has two opposite facts or features and therefore seems impossible, is difficult to understand, or is strange;

ANSWERS: 11. opportune, 12. conserve, 13. evoke, 14. recreate, 15. hawk, 16. observable, 17. doe, 18. hawk, 19. irretrievable, 20. physicist, 21. paradox

22. re____e my thoughts *v.* to change the form or structure of something
23. experimentally obs_____le *adj.* that can be noticed or seen
24. buck and d_e *n.* a mature female of mammals of which the male is called a buck, such as a deer or a rabbit
25. ev__e a sense of awe *v.* to bring or recall a feeling, memory, or image into your mind
26. eva_____on cooling *n.* the process of a liquid changing into a gas or vapor, often as a result of high temperatures or reduced pressure; the gradual disappearance or dissipation of something, such as money or resources
27. ev_____te the water *v.* to turn a liquid into a gas; to become less intense and disappear gradually
28. re_____te the feeling of the 1920s *v.* to make something that existed previously happen or appear to exist again
29. theoretical ph_____st *n.* a scientist who specializes in the field of physics
30. un_____l a knit *v.* undo twisted, knitted, or woven threads by separating it
31. an irr_____ble mistake *adj.* not able to be retrieved or recovered; irreparable or irreversible; not able to be rectified or undone
32. 3D hol_____hy *n.* a technique for creating three-dimensional images using lasers to record and reconstruct interference patterns

ANSWERS: 22. reshape, 23. observable, 24. doe, 25. evoke, 26. evaporation, 27. evaporate, 28. recreate, 29. physicist, 30. unravel, 31. irretrievable, 32. holography

ANSWERS:

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. The sun will _____ the mist.
v. to turn a liquid into a gas; to become less intense and disappear gradually
3. Any theorem relies on both _____ fact and assumption.
adj. that can be noticed or seen
4. Hunters use a whistle that makes the ____ sound to lure stags.
n. a mature female of mammals of which the male is called a buck, such as a deer or a rabbit
5. There are many theories to explain this _____.
n. a statement, situation, or person that has two opposite facts or features and therefore seems impossible, is difficult to understand, or is strange;
6. That team signed a center forward who was a ball-_____.
n. a bird of prey typically having short rounded wings and a long tail; an advocate of an aggressive policy on foreign relations
7. The damage to the computer's hard drive was _____ and I lost all of my important files.
adj. not able to be retrieved or recovered; irreparable or irreversible; not able to be rectified or undone
8. The phone rang at the most _____ time.
adj. suitable or happening at a time that is suitable or convenient for a particular purpose

ANSWERS: 1. unravel, 2. evaporate, 3. observable, 4. doe, 5. paradox, 6. hawk, 7. irretrievable, 8. opportune

9. _____ technology uses light interference patterns to create a 3D image.
n. a technique for creating three-dimensional images using lasers to record and reconstruct interference patterns
10. She _____ the atmosphere of the pre-war age with her stage setting.
v. to make something that existed previously happen or appear to exist again
11. This movie is likely to _____ strong emotions in the viewer.
v. to bring or recall a feeling, memory, or image into your mind
12. The advent of the Internet completely _____ the manufacturing industry.
v. to change the form or structure of something
13. Einstein was an outstanding and famous _____ of the 20th century.
n. a scientist who specializes in the field of physics
14. You should not _____ the meaning of freedom.
v. to interpret or understand something in the wrong way
15. The formation of clouds is facilitated by the process of _____ and condensation
n. the process of a liquid changing into a gas or vapor, often as a result of high temperatures or reduced pressure; the gradual disappearance or dissipation of something, such as money or resources
16. Children must be taught to _____ our natural environment.
v. to protect something, especially the natural environment or culture, from change, damage, or destruction

ANSWERS: 9. Holography, 10. recreated, 11. evoke, 12. reshaped, 13. physicist, 14. misunderstand, 15. evaporation, 16. conserve

ANSWERS: