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Vocabulary Builder Reference from...

Sheila Nirenberg: A prosthetic eye to treat blindness | TED Talk

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

Advanced Words Only

IMPORTANT

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Session 1: Word List

clinician

n. a practitioner, especially of medicine or psychology, who has direct contact with patients

synonym: psychiatrist, therapist, doctor

(1) experienced **clinician**, (2) from a **clinician's** perspective
Some **clinicians** believe that psychological characteristics alone may cause mental disorders.

prosthetic

adj. of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant

(1) have **prosthetic** arms, (2) **prosthetic** limbs
New **prosthetic** joints are less prone to metal poisoning.

foray

n. a sudden or brief attack or incursion; a venture into something unfamiliar or challenging

synonym: raid, attack, incursion

(1) make a quick **foray**, (2) **foray** into politics
The company made a **foray** into the Chinese market.

retina

n. the innermost light-sensitive membrane covering the back wall of the eyeball

(1) **retinal** cells, (2) **retina** scanner

Damage to the **retina** may play a role in the development of glaucoma.

macula

n. a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision

synonym : center of the retina, spot, eyespot

(1) **macula** lutea, (2) damage to the **macula**

There are several treatment options available for patients with **macula-related** disorders.

degenerate

v. (of a person, animal, or plant) to become worse in health or physical condition

synonym : deteriorate, decline, decay

(1) **degenerate** into a disagreement, (2) **degenerate** into recession

The once-thriving city has **degenerated** into a crime-ridden slum.

photoreceptor

n. a specialized cell in the retina of the eye that responds to light and enables vision; there are two types of photoreceptor cells - rods and cones - that are responsible for different aspects of vision

synonym : rod, cone, light-sensitive cell

(1) **photoreceptor** cells, (2) damaged **photoreceptor**

Cone **photoreceptors** are responsible for color vision.

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.

transducer

n. a device or instrument that converts one type of energy, such as sound, pressure, or temperature, into another type, typically an electrical signal

synonym : sensor, converter, detector

(1) medical **transducer**, (2) **transducer** calibration

The **transducer** in the sonar system converts electrical

pulses into sound waves to detect underwater objects.

gutsy

adj. displaying courage, determination, or boldness; characterized by a willingness to take risks or face challenges

synonym : courageous, brave, daring

(1) **gutsy** move, (2) **gutsy** performance

It was **gutsy** to quit her job and start her own business.

fir

n. a type of tall evergreen tree that is native to the northern hemisphere, with needle-like leaves and cones that stand upright on the branches

synonym : pine, spruce, cedar

(1) **fir** branch, (2) **fir** forest

The smell of fresh **fir** trees filled the air at the Christmas tree farm.

orient

v. to position or adjust someone or something for a particular purpose; (noun) the countries of Asia

synonym : position, align, adjust

(1) **orient** my thinking, (2) the exotic flavor of the **Orient**

She took a moment to **orient** herself in the unfamiliar city.

reconstruct

v. to build or form something again that has been damaged or destroyed

synonym : rebuild, revamp, reorganize

(1) **reconstruct** an image, (2) **reconstruct** the original text

They've decided to **reconstruct** a ruined castle.

generalize

v. to make something, such as a theory, idea, etc., more widespread or widely applicable based on what is true in some cases

synonym : conclude, derive, extrapolate

(1) **generalize** Kepler's first law, (2) **generalize** sophisticatedly

It's dangerous to **generalize** about people.

auditory

adj. of or relating to hearing or the ability to hear

synonym : hearing, audible, aural

(1) a good **auditory** memory, (2) **auditory** system

The **auditory** nerve carries sound signals from the ear to the brain.

cochlea

n. a spiral-shaped cavity in the inner ear that is responsible for hearing; it contains sensory hair cells that convert vibrations into electrical signals that are sent to the brain for interpretation

synonym : spiral organ, snail shell, inner ear

(1) **cochlea** spiral, (2) implanted **cochlea**

Damage to the **cochlea** can cause hearing loss or deafness.

Session 2: Spelling

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|-------------------------------------|---|
| 1. medical tra_____er | <i>n.</i> a device or instrument that converts one type of energy, such as sound, pressure, or temperature, into another type, typically an electrical signal |
| 2. au_____ry system | <i>adj.</i> of or relating to hearing or the ability to hear |
| 3. implanted co_____a | <i>n.</i> a spiral-shaped cavity in the inner ear that is responsible for hearing; it contains sensory hair cells that convert vibrations into electrical signals that are sent to the brain for interpretation |
| 4. the exotic flavor of the Or____t | <i>v.</i> to position or adjust someone or something for a particular purpose; (noun) the countries of Asia |
| 5. gen_____ze sophisticatedly | <i>v.</i> to make something, such as a theory, idea, etc., more widespread or widely applicable based on what is true in some cases |
| 6. from a cl_____an's perspective | <i>n.</i> a practitioner, especially of medicine or psychology, who has direct contact with patients |
| 7. deg_____te into recession | <i>v.</i> (of a person, animal, or plant) to become worse in health or physical condition |
| 8. make a quick fo__y | <i>n.</i> a sudden or brief attack or incursion; a venture into something unfamiliar or challenging |

ANSWERS: 1. transducer, 2. auditory, 3. cochlea, 4. orient, 5. generalize, 6. clinician, 7. degenerate, 8. foray

9. or___t my thinking *v.* to position or adjust someone or something for a particular purpose; (noun) the countries of Asia
10. f_r branch *n.* a type of tall evergreen tree that is native to the northern hemisphere, with needle-like leaves and cones that stand upright on the branches
11. damage to the ma___a *n.* a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision
12. pro_____ic limbs *adj.* of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant
13. mi__c numerous instruments *v.* to imitate someone's speech, movement, or behavior, especially to make others laugh
14. re___a scanner *n.* the innermost light-sensitive membrane covering the back wall of the eyeball
15. co_____a spiral *n.* a spiral-shaped cavity in the inner ear that is responsible for hearing; it contains sensory hair cells that convert vibrations into electrical signals that are sent to the brain for interpretation
16. mi__c a human voice *v.* to imitate someone's speech, movement, or behavior, especially to make others laugh
17. ma___a lutea *n.* a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision

ANSWERS: 9. orient, 10. fir, 11. macula, 12. prosthetic, 13. mimic, 14. retina, 15. cochlea, 16. mimic, 17. macula

18. gu__y move *adj.* displaying courage, determination, or boldness; characterized by a willingness to take risks or face challenges
19. fo__y into politics *n.* a sudden or brief attack or incursion; a venture into something unfamiliar or challenging
20. pho_____tor cells *n.* a specialized cell in the retina of the eye that responds to light and enables vision; there are two types of photoreceptor cells - rods and cones - that are responsible for different aspects of vision
21. deg_____te into a disagreement *v.* (of a person, animal, or plant) to become worse in health or physical condition
22. rec_____ct an image *v.* to build or form something again that has been damaged or destroyed
23. gu__y performance *adj.* displaying courage, determination, or boldness; characterized by a willingness to take risks or face challenges
24. re___al cells *n.* the innermost light-sensitive membrane covering the back wall of the eyeball
25. rec_____ct the original text *v.* to build or form something again that has been damaged or destroyed
26. tra_____er calibration *n.* a device or instrument that converts one type of energy, such as sound, pressure, or temperature, into another type, typically an electrical signal

ANSWERS: 18. gutsy, 19. foray, 20. photoreceptor, 21. degenerate, 22. reconstruct, 23. gutsy, 24. retina, 25. reconstruct, 26. transducer

27. a good au_____ry memory *adj.* of or relating to hearing or the ability to hear
28. f_r forest *n.* a type of tall evergreen tree that is native to the northern hemisphere, with needle-like leaves and cones that stand upright on the branches
29. experienced cl_____an *n.* a practitioner, especially of medicine or psychology, who has direct contact with patients
30. gen_____ze Kepler's first law *v.* to make something, such as a theory, idea, etc., more widespread or widely applicable based on what is true in some cases
31. damaged pho_____tor *n.* a specialized cell in the retina of the eye that responds to light and enables vision; there are two types of photoreceptor cells - rods and cones - that are responsible for different aspects of vision
32. have pro_____ic arms *adj.* of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant

ANSWERS: 27. auditory, 28. fir, 29. clinician, 30. generalize, 31. photoreceptor, 32. prosthetic

Session 3: Fill in the Blanks

1. Damage to the _____ may play a role in the development of glaucoma.
n. the innermost light-sensitive membrane covering the back wall of the eyeball
2. They've decided to _____ a ruined castle.
v. to build or form something again that has been damaged or destroyed
3. The once-thriving city has _____ into a crime-ridden slum.
v. (of a person, animal, or plant) to become worse in health or physical condition
4. Some _____ believe that psychological characteristics alone may cause mental disorders.
n. a practitioner, especially of medicine or psychology, who has direct contact with patients
5. The _____ nerve carries sound signals from the ear to the brain.
adj. of or relating to hearing or the ability to hear
6. There are several treatment options available for patients with _____ disorders.
n. a small, oval-shaped area near the center of the retina of the eye, responsible for providing high-resolution vision
7. New _____ joints are less prone to metal poisoning.
adj. of or relating to an artificial part of the body, such as a limb, a heart, or a breast implant
8. She took a moment to _____ herself in the unfamiliar city.
v. to position or adjust someone or something for a particular purpose; (noun) the countries of Asia

ANSWERS: 1. retina, 2. reconstruct, 3. degenerated, 4. clinicians, 5. auditory, 6. macula-related, 7. prosthetic, 8. orient

9. Damage to the _____ can cause hearing loss or deafness.
- n.* a spiral-shaped cavity in the inner ear that is responsible for hearing; it contains sensory hair cells that convert vibrations into electrical signals that are sent to the brain for interpretation
10. The _____ in the sonar system converts electrical pulses into sound waves to detect underwater objects.
- n.* a device or instrument that converts one type of energy, such as sound, pressure, or temperature, into another type, typically an electrical signal
11. It's dangerous to _____ about people.
- v.* to make something, such as a theory, idea, etc., more widespread or widely applicable based on what is true in some cases
12. It was _____ to quit her job and start her own business.
- adj.* displaying courage, determination, or boldness; characterized by a willingness to take risks or face challenges
13. Cone _____ are responsible for color vision.
- n.* a specialized cell in the retina of the eye that responds to light and enables vision; there are two types of photoreceptor cells - rods and cones - that are responsible for different aspects of vision
14. 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
15. The company made a _____ into the Chinese market.
- n.* a sudden or brief attack or incursion; a venture into something unfamiliar or challenging

ANSWERS: 9. cochlea, 10. transducer, 11. generalize, 12. gutsy, 13. photoreceptors, 14. mimic, 15. foray

16. The smell of fresh ____ trees filled the air at the Christmas tree farm.
- n.* a type of tall evergreen tree that is native to the northern hemisphere, with needle-like leaves and cones that stand upright on the branches

ANSWERS: 16. fir