# **Englist.me**

## Vocabulary Builder Reference from...

Steven Anderson: What makes volcanoes erupt? | TED Talk https://www.ted.com/talks/steven\_anderson\_what\_m akes\_volcanoes\_erupt



### All Words

#### IMPORTANT

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## Session 1: Word List

thunder	<ul> <li>n. the loud, deep sound made by air expanding along the path of a bolt of lightning; a deep, prolonged loud noise synonym: detonation, rumble, roar</li> </ul>
	(1) thunder cloud, (2) deafening thunder of applause
	The roaring <b>thunder</b> was so loud that it woke me from sleep.
crack	<ul> <li>v. to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking</li> <li>synonym: snap, burst, break</li> </ul>
	(1) crack an eggshell, (2) a crack in a board
	He that would eat the kernel must crack the nut.
emit	<ul> <li>v. to give off or send out something such as light, heat, sound, gas, etc.</li> <li>synonym: give off, radiate, expel</li> </ul>
	(1) <b>emit</b> a gamma ray, (2) <b>emit</b> air pollution
	During the unloading, the container box <b>emits</b> a clicking sound.
eject	<ul> <li>v. to force someone to put out or leave a particular place or position</li> <li>synonym: discharge, expel, emit</li> </ul>

	(1) <b>eject</b> a player from a game, (2) <b>eject</b> huge amounts of pollutant
	Our immune system can <b>eject</b> disease germs from the body.
fissure	<i>n</i> . a narrow opening or crack, especially in a rock or other hard substance; a division or splitting within a group or organization
	synonym: crack, crevice, gap
	(1) pulmonary <b>fissure</b> , (2) <b>fissure</b> in the relationship
	The <b>fissure</b> in the rock was too narrow to squeeze through.
volcano	<ul> <li><i>n</i>. a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapor, and gas are or have been erupted from the earth's crust.</li> <li><i>synonym</i>: mount, peak, crater</li> </ul>
	(1) volcano alert level, (2) active volcano
	The island was formed by a <b>volcano</b> millions of years ago.
lava	<i>n.</i> molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
	synonym: molten rock, magma, volcanic rock
	(1) lava flow, (2) molten lava
	The volcano's eruption caused a <b>lava</b> river to flow down the mountainside.
ash	<i>n.</i> the powdery residue left after the burning of a substance, typically containing minerals and other impurities; the solid remains of a dead person after cremation
	synonym: cinder, soot, dust
	(1) <b>ash</b> tree, (2) soda <b>ash</b>
	The volcanic <b>ash</b> covered the island after the eruption.
trigger	<ul> <li>v. to make something happen suddenly; to cause something such as a device, machine, etc. to function</li> <li>synonym: activate, spark, drive</li> </ul>

	(1) <b>trigger</b> a biochemical response, (2) <b>trigger</b> inflation The incident <b>triggered</b> a political controversy.
unpredictable	<ul> <li>adj. not capable of being foreseen or calculated; not regular or certain</li> <li>synonym: uncertain, variable, random</li> </ul>
	(1) dangerously <b>unpredictable</b> person, (2) <b>unpredictable</b> outcome
	The weather in this region is often <b>unpredictable</b> , with sudden rainstorms and strong winds.
eruption	<ul> <li>n. an instance of a sudden and violent release of lava, gas, or ash from a volcano; a sudden outburst or explosion of something</li> <li>synonym: explosion, outburst, burst</li> </ul>
	(1) <b>eruption</b> alert level, (2) emotional <b>eruption</b>
	The volcanic eruption caused widespread destruction and
	left the area covered in ash.
magma	<ul> <li>molten rock that is located beneath the earth's surface and can solidify to form igneous rock</li> <li>synonym: molten rock, lava, igneous rock</li> </ul>
	(1) volcanic magma, (2) magma flow
	Magma chambers are large underground reservoirs where molten rock is stored before an eruption.
molten	<i>adj.</i> in a liquid state as a result of being heated <i>synonym</i> : melted, liquefied, fused
	(1) a <b>molten</b> image, (2) <b>molten</b> lava
	The <b>molten</b> metal was poured into the mold.
mantle	<ul> <li>n. a layer of rock between the surface and the core of a planet or moon; a loose sleeveless cloak or shawl; the responsibilities of an important position or job that passes from one person to another</li> <li>synonym: crust, cloak, cover</li> </ul>
	(1) <b>mantle</b> of power, (2) <b>mantle</b> of the presidency

The **mantle** layer on Mars is much thinner than on Earth. to turn from something solid into something soft or liquid melt v. as a result of heating synonym: disintegrate, soften, disappear (1) melt the ice, (2) melt down gold Her resistance **melted** under his persuasion. *adj.* having the usual characteristics or traits of a specific typical group of things synonym: characteristic, usual, distinctive (1) **typical** leader, (2) fairly **typical** symptoms This artwork is **typical** of her work. balance a condition in which everything has the same weight or n. force; something left after other parts have been taken away *synonym*: equilibrium, counterpoise, remainder (1) the **balance** of power, (2) asset on the company's **balance** sheet Try to keep a **balance** between work and off. a science that deals with the history of the earth as geology n. recorded in rocks synonym: earth science (1) bureau of **geology**, (2) local **geology** He was a visiting **geology** professor at the University of Tokyo. the study of the physical and chemical properties of lithology n. rocks and geological formations synonym: study of rocks, rock formation, petrology (1) paleo- lithology, (2) geological lithology The rock's **lithology** suggests it was formed under high pressure and temperature.

crust	<ul> <li><i>n</i>. a hard outer layer that forms on the surface of a liquid as it cools or on a solid as a result of exposure to air or moisture</li> <li><i>synonym</i>: layer, coating, shell</li> </ul>
	(1) <b>crust</b> formation, (2) the earth's <b>crust</b>
	The bread's <b>crust</b> was golden brown and crispy.
strain	<i>n</i> . a force or pressure that stretches or pulls something, sometimes causing damage; (biology) a group of organisms within a species that differ in trivial ways from similar groups
	synonym: pressure, tension, breed
	(1) strain our eyes, (2) a strain of bacillus
	Dictators of the past often had the erroneous idea of a pure
	racial <b>strain</b> .
strength	<ul> <li>n. the quality or state of being physically, or sometimes mentally, strong</li> <li>synonym: resilience, power, muscles</li> </ul>
	(1) <b>strength</b> of the economy, (2) muscular <b>strength</b>
	Health and <b>strength</b> are, above all, gold.
equilibrium	<i>n</i> . a state in which opposing forces or influences are balanced
	synonym: balance, stability, harmony
	(1) equilibrium point, (2) political equilibrium
	The company struggled to maintain an <b>equilibrium</b> between its profits and social responsibilities.
consequence	<ul> <li>n. the outcome of a particular action or event, especially relative to an individual</li> <li>synonym: result, impact, outcome</li> </ul>
	(1) unintended <b>consequences</b> , (2) the <b>consequence</b> of an argument
	These economic activities had disastrous environmental <b>consequences</b> .

explosive	adj. easily able or likely to shatter violently or burst apart; sudden and loud
	synonym: volatile, dangerous, fiery
	(1) <b>explosive</b> device, (2) an <b>explosive</b> personality
	This container stores an <b>explosive</b> substance.
compound	<ul> <li>an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements</li> </ul>
	synonym: combination, mixture, blend
	(1) aquatic <b>compound</b> , (2) harmful <b>compound</b>
	Common salt is a sodium and chlorine <b>compound</b> .
dissolve	<ul> <li>v. to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss</li> <li>synonym: disband, disappear, liquefy</li> </ul>
	(1) <b>dissolve</b> the sugar, (2) officially <b>dissolved</b> the marriage
	The political party <b>dissolved</b> after much internal fighting.
concentration	<ul> <li>n. the ability to focus all your time and energy on one thing without thinking about anything else.</li> <li>synonym: attention, engagement, assiduity</li> </ul>
	(1) <b>concentration</b> of armaments, (2) his research area of
	concentration
	This exam requires excellent <b>concentration</b> to pass.
sulfur	<i>n.</i> (also sulphur) a chemical element with the symbol S and atomic number 16, found in many minerals and sulfur compounds, often used in the production of fertilizers, rubber, paper, and other industrial applications
	(1) <b>sulfur</b> dioxide, (2) <b>sulfur</b> mine
	The <b>sulfur</b> emissions from the nearby factory caused the rotten egg smell.
bubble	n. a thin, round, and often transparent mass of gas that is surrounded by a thin layer of liquid; a state of economic or social prosperity that is unsustainable and eventually

	collapses
	synonym: blob, balloon, mania
	(1) <b>bubble</b> in the champagne glass, (2) economic <b>bubble</b>
	Many people worry that the current real estate market is a
	bubble that could burst soon.
gunshot	<ul> <li>n. the sound or act of firing a gun or other firearm, usually accompanied by a loud explosion and a projectile that is propelled toward the target</li> <li>synonym: shot, blast, gunfire</li> </ul>
	(1) gunshot wound, (2) gunshot residue
	The loud <b>gunshot</b> startled the wildlife in the nearby forest.
explode	<ul> <li>v. to burst or break open violently and noisily; to cause something to burst or break open</li> <li>synonym: detonate, blast, rupture</li> </ul>
	(1) <b>explode</b> in anger, (2) <b>explode</b> in popularity
	The old building <b>exploded</b> in a fiery inferno.
	The old building <b>exploded</b> in a hery internet.
simultaneously	adv. at the same time
	synonym: concurrently, coincidently, together
	(1) <b>simultaneously</b> affected, (2) take several inputs
	simultaneously
	Two students answered the teacher's question
	simultaneously.
plume	<ul> <li>n. a large feather or group of feathers worn as an ornament or a symbol of achievement or distinction, especially on a hat</li> <li>synonym: feather, honor, token</li> </ul>
	(1) <b>plume</b> of smoke, (2) <b>plume</b> of feathers
	The bird had a beautiful <b>plume</b> on its head.
otroto on horo	the second lover of the Earth's atmosphere, extending
stratosphere	<ul> <li>n. the second layer of the Earth's atmosphere, extending from about 7 to 50 kilometers above the Earth's surface, containing the ozone layer</li> </ul>
	synonym:

	upper atmosphere, ozone layer
	(1) stratosphere layer, (2) stratosphere ozone
	The ozone layer, which protects us from harmful UV
	radiation, is in the stratosphere.
soda	<ul> <li>n. a carbonated soft drink containing a sweetened syrup or flavoring, often used interchangeably with "pop" or "soda pop" in different regions of the world</li> <li>synonym: pop, cola, soft drink</li> </ul>
	(1) <b>soda</b> pop, (2) lemon-lime <b>soda</b>
	I'm craving a cold <b>soda</b> to quench my thirst.
presence	<ul> <li>n. the fact or state that someone or something exists, occurs, or is present</li> <li>synonym: existence, actuality, fact</li> </ul>
	(1) the evidence of the <b>presence</b> , (2) his majestic <b>presence</b>
	The path to a solid online <b>presence</b> necessitates a high technical ability.
density	<i>n.</i> the quality of compactness of a substance <i>synonym</i> : tightness, viscosity
	(1) population <b>density</b> , (2) higher pixel <b>density</b>
	Do you know the <b>density</b> of the population in Hong Kong?
buoyant	<ul> <li>adj. lighthearted and cheerful; tending to float; having a positive attitude or outlook</li> <li>synonym: optimistic, lighthearted, floating</li> </ul>
	(1) <b>buoyant</b> force, (2) <b>buoyant</b> market
	His <b>buoyant</b> personality helped lift the spirits of everyone in the room.
upward	<i>adv.</i> toward the top or highest point, or a higher position or level; (adjective) extending or moving toward a higher place
	synonym: skyward, uphill
	(1) look <b>upward</b> , (2) demonstrate an <b>upward</b> trend

The company adjusted the revenue **upward**.

geologist	n. a scientist or specialist who studies geology
	(1) planetary <b>geologist</b> , (2) marine <b>geologist</b>
	These issues baffled <b>geologists</b> for many years.
process	<ul> <li>n. a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products</li> <li>synonym: procedure, method, system</li> </ul>
	(1) process improvement, (2) decision-making process
	The <b>process</b> for applying for a visa can be lengthy and complicated.
underground	<ul> <li>adj. under the surface of the ground; a secret group organized to achieve a specific purpose, such as overthrowing the government or occupying a force</li> <li>synonym: subterranean, subsurface, confidential</li> </ul>
	(1) water flowing <b>underground</b> , (2) <b>underground</b> activist
	Having <b>underground</b> parking has been very beneficial throughout the winter.
addition	<ul> <li>n. the act or process of adding something to something else; the process of adding numbers</li> <li>synonym: accumulation, expansion, addendum</li> </ul>
	(1) chemical <b>addition</b> , (2) <b>addition</b> of vectors
	In addition, private corporations provide healthcare services.
mixture	<ul> <li>n. a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties</li> </ul>
	synonym: blend, amalgam, concoction
	(1) <b>mixture</b> of emotions, (2) perfect <b>mixture</b>
	The paint was a <b>mixture</b> of different pigments to achieve the

desired color.

mineral	<i>n.</i> a solid inorganic substance occurring in nature having a definite chemical composition
	(1) vitamin and <b>minerals</b> , (2) <b>mineral</b> rights
	The robust economy of the country is based on its mineral
	resources.
solidify	<ul> <li>v. to make solid, firm, or compact; to cause to become solid</li> </ul>
	synonym: set, harden, congeal
	(1) <b>solidify</b> a bond, (2) <b>solidify</b> a decision
	The committee's decision helped to <b>solidify</b> the rules of the game.
crystal	<ul> <li>n. a solid material with many even sides that is formed naturally when the substance becomes solid and has a highly regular atomic structure; clear and colorless glass made of almost pure silica</li> <li>synonym: quartz</li> </ul>
	(1) liquid <b>crystal</b> , (2) <b>crystal</b> analyses
	A vast crystal chandelier glittered brightly above us.
incorporate	v. to include something as a part of a larger entity <i>synonym</i> : contain, integrate, amalgamate
	(1) <b>incorporate</b> the current trends, (2) <b>incorporate</b> technology into daily life
	We will attempt to <b>incorporate</b> some of your suggestions into our future strategy.
landslide	<ul> <li>n. a large, sudden movement of a mass of rock, earth, or other material down a slope</li> <li>synonym: avalanche, mudslide, rockfall</li> </ul>
	(1) landslide victory, (2) prevent a landslide
	The massive landslide buried the small village under a thick
	layer of rock and dirt.

massive	adj. enormous amount; very heavy and solid synonym: enormous, giant, immense
	(1) massive amounts, (2) massive stars
	The recent economic downturn has resulted in massive
	layoffs.
quantity	<i>n.</i> the amount or number of something; magnitude
	synonym: abundance, portion, amount
	(1) half <b>quantity</b> , (2) residual <b>quantity</b>
	In southward, the average annual water <b>quantity</b> increases.
atop	adv. on, to, or at the top
	synonym: upon, onto
	(1) stand <b>atop</b> , (2) sit <b>atop</b> a stack of books
	The eagle perched <b>atop</b> the tallest tree in the forest.
chamber	<i>n.</i> a large room used for a formal, public, or particular
	purpose; one of the parts of a parliament
	synonym: association, cabin, legislature
	(1) a gas <b>chamber</b> , (2) the lower <b>chamber</b>
	The surgeon made an incision in the <b>chambers</b> of the
	patient's heart.
instantly	adv. immediately
	synonym: immediately, right away, directly
	(1) <b>instantly</b> cope with, (2) be killed <b>instantly</b>
	I remembered that person <b>instantly</b> and never forgot.
unload	v. to remove contents of something from a vehicle, ship, container, etc.
	synonym: empty, offload, unpack
	(1) <b>unload</b> the cargo, (2) <b>unload</b> a dishwasher
	He had to <b>unload</b> the merchandise before the Black Friday
	bargain.

responsible	<ul> <li>adj. answerable or accountable for something within one's power, control, or management</li> <li>synonym: accountable, answerable, liable</li> </ul>
	(1) <b>responsible</b> action, (2) <b>responsible</b> for a customer service
	She's a <b>responsible</b> pet owner who ensures her dog gets enough exercise and a healthy diet.
numerous	<i>adj.</i> amounting to a large indefinite number <i>synonym</i> : many, considerable, countless
	(1) <b>numerous</b> countries, (2) as <b>numerous</b> as the sand These descriptions are based on a number of <b>numerous</b> assumptions.
explosion	<i>n.</i> a violent release induced by a chemical or nuclear reaction
	synonym: burst, eruption, outbreak
	(1) a lot of <b>explosions</b> , (2) site of the <b>explosion</b>
	A broken gas pipe triggered the <b>explosion</b> .
mount	<ul> <li>v. to increase, go up, or advance gradually or continuously; to prepare and supply with the necessary equipment for execution or performance; to ride on something or someone</li> </ul>
	synonym: climb, increase, get on
	(1) mount a hill, (2) mount a counterattack They mounted pictures on the paper in preparation for the birthday card.
erosion	<ul> <li>n. the wearing away of rock, soil, or land by natural processes such as wind or water</li> <li>synonym: corrosion, weathering, decay</li> </ul>
	(1) erosion control, (2) wind erosion
	The <b>erosion</b> of the coastline has accelerated due to rising sea levels.

glacier	<ul> <li><i>n</i>. a slowly moving mass of ice formed from snow on mountains or near the North Pole or the South Pole</li> <li><i>synonym</i>: iceberg, ice floe</li> </ul>
	(1) glacier retreat, (2) glaciers move tardily
	The <b>glaciers</b> of the ice age have shaped Fjord.
glacial	<ul> <li>adj. relating to or resembling a glacier (= a slowly moving mass of ice) or the process of glaciation; characterized by an extremely slow or gradual pace or movement</li> <li>synonym: cold, icy, frozen</li> </ul>
	(1) glacial movements, (2) glacial terrain
	The <b>glacial</b> pace of the negotiations frustrated both parties.
climate	<i>n.</i> the weather in a particular location averaged over some long period
	synonym: atmosphere, weather, environment
	(1) a cold <b>climate</b> , (2) effects of <b>climate</b> change
	<b>Climate</b> and weather have an impact on every part of our lifestyles.
volcanic	adj. relating to or produced by or consisting of volcano
	<ul><li>(1) effects of volcanic eruptions, (2) increase in volcanic activity</li></ul>
	This study indicates <b>volcanic</b> activity affects global warming.
acidic	<ul><li><i>adj.</i> having a pH lower than 7; having characteristics of an acid, such as tasting sour or corroding metal</li><li><i>synonym</i>: sour, tart, acrid</li></ul>
	(1) acidic solution, (2) acidic taste
	The soil in this region is too <b>acidic</b> for most crops to grow well.
corrode	<ul> <li>v. to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time synonym: erode, rust, eat away</li> </ul>
	(1) <b>corrode</b> steel drums, (2) <b>corrode</b> pipes

	The saltwater can <b>corrode</b> metal over time if not properly maintained.
hydrothermal	<ul> <li>adj. relating to hot water or steam, especially in the Earth's crust, and the thermal energy and chemical reactions that occur as a result</li> <li>synonym: geothermal, thermal, volcanic</li> </ul>
	(1) hydrothermal vents, (2) hydrothermal chemistry
	The hydrothermal activity in this area creates a unique
	environment for marine creatures.
gradual	<i>adj.</i> happening slowly over a long period of time or distance; not steep or abrupt
	synonym: incremental, gradational, piecemeal
	(1) a <b>gradual</b> process, (2) a <b>gradual</b> change
	The country experienced a gradual increase in population.
clay	<ul> <li>n. a natural, earthy material that is made up of very small particles of minerals and can be molded when wet and then fired to produce ceramics</li> <li>synonym: ceramics, pottery, dirt</li> </ul>
	(1) <b>clay</b> animation, (2) soft <b>clay</b> ground
	The sculptor carefully molded the <b>clay</b> into the desired
	shape.
tectonic	<ul> <li>adj. relating to the structure of the Earth's crust and the large-scale processes that occur as a result of movements within it</li> <li>synonym: seismic, geologic, geological</li> </ul>
	(1) <b>tectonic</b> valleys, (2) a <b>tectonic</b> earthquake
	The <b>tectonic</b> plates shifted, causing an earthquake.
stretch	<ul> <li>v. to make or be capable of making anything longer or broader without hurting or breaking</li> <li>synonym: lengthen, prolong, extend</li> </ul>
	(1) <b>stretch</b> along the coast, (2) <b>stretch</b> a story
	Some herds have been observed to stretch hundreds of

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	lometers.
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continental	<ul> <li>adj. of or relating to a continent (= one of the earth's large landmasses)</li> <li>synonym: mainland, intercontinental, transcontinental</li> <li>(1) continental divide, (2) polar continental air</li> <li>The continental breakfast at the hotel was included with the room.</li> </ul>
shift	<ul> <li><i>n.</i> a slight transition in position, direction, or trend synonym: transition, change, modification</li> <li>(1) Doppler shift, (2) major paradigm shift</li> <li>Could you help me shift some furniture?</li> </ul>
unfortunately	<ul> <li>adv. by bad luck; unluckily</li> <li>synonym: regrettably, unluckily, alas</li> <li>(1) unfortunately caught in a shower, (2) even more</li> <li>unfortunately</li> <li>The treatments were done but, unfortunately, were</li> <li>unsuccessful.</li> </ul>
predict	<ul> <li>v. to state beforehand that something will happen in the future, mainly based on knowledge or experience <i>synonym</i>: forecast, anticipate, foresee</li> <li>(1) predict the future, (2) predict when she will arrive It's notoriously challenging to predict birth rates.</li> </ul>
roughly	<ul> <li>adv. approximately but not precisely; with a violent manner synonym: approximately, more or less, around</li> <li>(1) roughly explain my idea, (2) roughly speaking</li> <li>Five miles is roughly similar to eight kilometers.</li> </ul>
determinant	<ul> <li><i>n</i>. a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result</li> <li><i>synonym</i>: cause, factor, element</li> </ul>

	(1) environmental <b>determinant</b> , (2) a <b>determinant</b> of crop yields				
	One <b>determinant</b> of success is having a positive attitude and a strong work ethic.				
depth	<ul> <li>n. the distance between the top and bottom of something; between the top surface and a distance below it</li> <li>synonym: deepness, profoundness, extent</li> </ul>				
	(1) <b>depth</b> camera, (2) the <b>depth</b> of the water				
	The pond's <b>depth</b> was around five feet.				
volcanology	n. the scientific study of volcanoes and volcanic phenomena, including their origin, activity, eruption, and behavior				
	synonym: volcanic studies				
	(1) advancements in <b>volcanology</b> , (2) <b>volcanology</b> conference				
	<b>Volcanology</b> experts study the science of volcanoes and volcanic activity.				
constantly	adv. all the time synonym: continuously, always, frequently				
	(1) a <b>constantly</b> innovative enterprise, (2) a <b>constantly</b> varying mind				
	The mobile application industry is <b>constantly</b> changing.				
explore	<ul> <li>v. to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it</li> <li>synonym: analyze, delve into, examine</li> </ul>				
	(1) <b>explore</b> the world, (2) <b>explore</b> our options				
	The management must <b>explore</b> strategies to increase office				
	security.				
conquer	<i>v.</i> to bring under control by force or authority <i>synonym</i> : defeat, overpower, subdue				

	(1) <b>conquer</b> fatal disease, (2) <b>conquer</b> the world
	You must <b>conquer</b> your anxiety about driving.
rocky	<i>adj.</i> full of or abounding in rocks; of, relating to, or made of rock
	synonym: stony, boulder-strewn, rough
	(1) <b>rocky</b> terrain, (2) <b>rocky</b> relationship
	The <b>rocky</b> road made it difficult to drive on.
terrain	<i>n.</i> the physical features of a piece of land, including hills, valleys, rivers, and forests
	synonym: land, geography, topography
	(1) terrain map, (2) permafrost terrain
	The mountainous terrain was rough and rocky.
advance	<ul> <li>v. to go or move forward; to develop in a positive way</li> <li>synonym: progress, boost, come along</li> </ul>
	(1) <b>advance</b> the technology, (2) <b>advance</b> a cooperative relationship
	Scientific knowledge will <b>advance</b> significantly with the power of AI.
thermal	<ul> <li>adj. relating to heat or temperature; designed for or capable of producing or maintaining heat</li> <li>synonym: heat-related, warm, hot</li> </ul>
	(1) thermal insulation, (2) thermal energy
	The thermal imaging camera was used to detect heat
	signatures in the dark.
detect	<ul> <li>v. to find or recognize something, especially something difficult to see, hear, etc.</li> <li>synonym: catch, observe, notice</li> </ul>
	(1) <b>detect</b> a bad event, (2) <b>detect</b> smuggling across borders
	The security camera has <b>detected</b> four intruders.

subterranean	<i>adj.</i> under the ground <i>synonym</i> : underground, belowground, subsurface				
	(1) <b>subterranean</b> rooms, (2) <b>subterranean</b> motives for murder				
	Such subterranean passages span kilometers in London.				
hotspot	<ul> <li>n. a place or area, typically a location or region, that is known for having an unusually high number of a particular phenomenon, such as disease, activity, or popularity</li> <li>synonym: epicenter, cluster, outbreak</li> </ul>				
	(1) covid-19 hotspot, (2) geographic hotspot				
	The airport is a <b>hotspot</b> for tourists and travelers from around the world.				
spectrometer	<ul> <li>n. a scientific device used to measure the properties of light or other radiation, often used in chemistry and physics to analyze the composition of materials</li> <li>synonym: spectroscope, analyzer, detector</li> </ul>				
	(1) <b>spectrometer</b> measurement, (2) optical <b>spectrometer</b>				
	The infrared <b>spectrometer</b> helped identify the chemical				
	composition of the sample.				
analyze	<ul> <li>v. to think about in-depth and evaluate to discover essential features or meaning</li> <li>synonym: explore, examine, investigate</li> </ul>				
	(1) <b>analyze</b> a chemical compound, (2) <b>analyze</b> your real motives				
	The teacher attempted to <b>analyze</b> the root cause of our mistake.				
laser	<i>n.</i> a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification				
	synonym: beam, bar, ray				
	(1) <b>laser</b> printer, (2) pulse <b>laser</b>				
	The company holds patents on core components of laser jet				

printers.

precise	adj. sharply exact or accurate or delimited synonym: accurate, exact, distinct
	(1) precise analyses, (2) estimate precise costs
	The content is <b>precise</b> and informative for me.
volatile	<ul> <li>adj. likely to change rapidly or unexpectedly, or being unstable or explosive</li> <li>synonym: unstable, unpredictable, explosive</li> </ul>
	(1) highly- <b>volatile</b> elements, (2) <b>volatile</b> markets
	Their relationship was <b>volatile</b> and prone to sudden outbursts of anger.
vent	<ul> <li>n. a small opening to escape or release gas, air, liquid, etc.; activity or process that frees or expresses strong creative energy or emotion</li> <li>synonym: duct, outlet, venthole</li> </ul>
	(1) volcanic <b>vent</b> , (2) <b>vent</b> tube
	He gave <b>vent</b> to his anger by playing the guitar.

## **Session 2: Spelling**

1.	officially dived the marriage	v.	to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss
2.	mt the ice	v.	to turn from something solid into something soft or liquid as a result of heating
3.	ane a chemical compound	v.	to think about in-depth and evaluate to discover essential features or meaning
4.	mae of power	n.	a layer of rock between the surface and the core of a planet or moon; a loose sleeveless cloak or shawl; the responsibilities of an important position or job that passes from one person to another
5.	ejt a player from a game	v.	to force someone to put out or leave a particular place or position
6.	ern control	n.	the wearing away of rock, soil, or land by natural processes such as wind or water
7.	asset on the company's bae sheet	n.	a condition in which everything has the same weight or force; something left after other parts have been taken away
8.	increase in voic activity	adj.	relating to or produced by or consisting of volcano
9.	exve device	adj.	easily able or likely to shatter violently or burst apart; sudden and loud

ANSWERS: 1. dissolve, 2. melt, 3. analyze, 4. mantle, 5. eject, 6. erosion, 7. balance, 8. volcanic, 9. explosive

10. emotional eron	n.	an instance of a sudden and violent release of lava, gas, or ash from a volcano; a sudden outburst or explosion of something
11. nuus countries	adj.	amounting to a large indefinite number
12. gut wound	n.	the sound or act of firing a gun or other firearm, usually accompanied by a loud explosion and a projectile that is propelled toward the target
13. a lot of exons	n.	a violent release induced by a chemical or nuclear reaction
14. gut residue	n.	the sound or act of firing a gun or other firearm, usually accompanied by a loud explosion and a projectile that is propelled toward the target
15. prt when she will arrive	v.	to state beforehand that something will happen in the future, mainly based on knowledge or experience
16. undnd activist	adj.	under the surface of the ground; a secret group organized to achieve a specific purpose, such as overthrowing the government or occupying a force
17. hydmal chemistry	adj.	relating to hot water or steam, especially in the Earth's crust, and the thermal energy and chemical reactions that occur as a result
18. active voo	n.	a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapor, and gas are or have been erupted from the earth's crust.

ANSWERS: 10. eruption, 11. numerous, 12. gunshot, 13. explosion, 14. gunshot, 15. predict, 16. underground, 17. hydrothermal, 18. volcano

19. incte the current trends	v. to include something as a part of a larger entity
20. harmful cond	<ul> <li>an item composed of two or more distinct elements combined; a chemica formed by the combination of two or more elements</li> </ul>
21. but market	<i>adj.</i> lighthearted and cheerful; tending to float; having a positive attitude or outlook
22. det smuggling across borders	<ul> <li>v. to find or recognize something, especially something difficult to see, hear, etc.</li> </ul>
23. muscular stth	<i>n.</i> the quality or state of being physically, or sometimes mentally, strong
24. take several inputs simsly	adv. at the same time
25. estimate pre costs	adj. sharply exact or accurate or delimited
26. subean motives for murder	adj. under the ground
27. thl insulation	<i>adj.</i> relating to heat or temperature; designed for or capable of producing o maintaining heat
28. even more unfely	adv. by bad luck; unluckily
29. the earth's crt	<ul> <li>n. a hard outer layer that forms on the surface of a liquid as it cools or on a solid as a result of exposure to air or moisture</li> </ul>
30. ade a cooperative relationship	<ul> <li>v. to go or move forward; to develop in a positive way</li> </ul>

ANSWERS: 19. incorporate, 20. compound, 21. buoyant, 22. detect, 23. strength, 24. simultaneously, 25. precise, 26. subterranean, 27. thermal, 28. unfortunately, 29. crust, 30. advance

31.	planetary gest	n.	a scientist or specialist who studies geology
32.	decision-making prs	n.	a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
33.	permafrost ten	n.	the physical features of a piece of land, including hills, valleys, rivers, and forests
34.	cor the world	v.	to bring under control by force or authority
35.	geographic hot	n.	a place or area, typically a location or region, that is known for having an unusually high number of a particular phenomenon, such as disease, activity, or popularity
36.	stand ap	adv.	on, to, or at the top
37.	acc solution	adj.	having a pH lower than 7; having characteristics of an acid, such as tasting sour or corroding metal
38.	vole markets	adj.	likely to change rapidly or unexpectedly, or being unstable or explosive
39.	chemical adon	n.	the act or process of adding something to something else; the process of adding numbers

ANSWERS: 31. geologist, 32. process, 33. terrain, 34. conquer, 35. hotspot, 36. atop, 37. acidic, 38. volatile, 39. addition

40. exe in anger	v.	to burst or break open violently and noisily; to cause something to burst or break open
41. economic bue	n.	a thin, round, and often transparent mass of gas that is surrounded by a thin layer of liquid; a state of economic or social prosperity that is unsustainable and eventually collapses
42. polar conal air	adj.	of or relating to a continent (= one of the earth's large landmasses)
43. crk an eggshell	v.	to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking
44. a stn of bacillus	n.	a force or pressure that stretches or pulls something, sometimes causing damage; (biology) a group of organisms within a species that differ in trivial ways from similar groups
45. residual quty	n.	the amount or number of something; magnitude
46. thr cloud	n.	the loud, deep sound made by air expanding along the path of a bolt of lightning; a deep, prolonged loud noise
47. pulse lar	n.	a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification
48. the evidence of the prce	n.	the fact or state that someone or something exists, occurs, or is present

ANSWERS: 40. explode, 41. bubble, 42. continental, 43. crack, 44. strain, 45. quantity, 46. thunder, 47. laser, 48. presence

49.	coe pipes	v.	to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time
50.	the deh of the water	n.	the distance between the top and bottom of something; between the top surface and a distance below it
51.	roy speaking	adv.	approximately but not precisely; with a violent manner
52.	liquid crl	n.	a solid material with many even sides that is formed naturally when the substance becomes solid and has a highly regular atomic structure; clear and colorless glass made of almost pure silica
53.	deafening thr of applause	n.	the loud, deep sound made by air expanding along the path of a bolt of lightning; a deep, prolonged loud noise
54.	look upd	adv.	toward the top or highest point, or a higher position or level; (adjective) extending or moving toward a higher place
55.	tyl leader	adj.	having the usual characteristics or traits of a specific group of things
56.	environmental detnt	n.	a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result
57.	trr inflation	v.	to make something happen suddenly; to cause something such as a device, machine, etc. to function

ANSWERS: 49. corrode, 50. depth, 51. roughly, 52. crystal, 53. thunder, 54. upward, 55. typical, 56. determinant, 57. trigger

58. lade victory	n.	a large, sudden movement of a mass of rock, earth, or other material down a slope
59. higher pixel dey	n.	the quality of compactness of a substance
60. glrs move tardily	n.	a slowly moving mass of ice formed from snow on mountains or near the North Pole or the South Pole
61. strere ozone	n.	the second layer of the Earth's atmosphere, extending from about 7 to 50 kilometers above the Earth's surface, containing the ozone layer
62. dangerously unpble person	adj.	not capable of being foreseen or calculated; not regular or certain
63. und the cargo	ν.	to remove contents of something from a vehicle, ship, container, etc.
64. a gas chr	n.	a large room used for a formal, public, or particular purpose; one of the parts of a parliament
65. ten map	n.	the physical features of a piece of land, including hills, valleys, rivers, and forests
66. roy explain my idea	adv.	approximately but not precisely; with a violent manner
67. half quty	n.	the amount or number of something; magnitude
68. a grl process	adj.	happening slowly over a long period of time or distance; not steep or abrupt
69. eron alert level	n.	an instance of a sudden and violent release of lava, gas, or ash from a volcano; a sudden outburst or explosion of something

ANSWERS: 58. landslide, 59. density, 60. glacier, 61. stratosphere, 62. unpredictable, 63. unload, 64. chamber, 65. terrain, 66. roughly, 67. quantity, 68. gradual, 69. eruption

70. effects of voic eruptions	<i>adj.</i> relating to or produced by or consisting of volcano
71. be killed inly	adv. immediately
72. political equum	<i>n.</i> a state in which opposing forces or influences are balanced
73. mon lava	<i>adj.</i> in a liquid state as a result of being heated
74. maa flow	<ul> <li>molten rock that is located beneath the earth's surface and can solidify to form igneous rock</li> </ul>
75. conal divide	<ul> <li>adj. of or relating to a continent (= one of the earth's large landmasses)</li> </ul>
76. equum point	<i>n.</i> a state in which opposing forces or influences are balanced
77. sur dioxide	<ul> <li>n. (also sulphur) a chemical element with the symbol S and atomic number 16, found in many minerals and sulfur compounds, often used in the production of fertilizers, rubber, paper, and other industrial applications</li> </ul>
78. the conce of an argument	<i>n.</i> the outcome of a particular action or event, especially relative to an individual
79. a mon image	<i>adj.</i> in a liquid state as a result of being heated
80. incte technology into daily life	<ul> <li>v. to include something as a part of a larger entity</li> </ul>
81. unfely caught in a shower	adv. by bad luck; unluckily

ANSWERS: 70. volcanic, 71. instantly, 72. equilibrium, 73. molten, 74. magma, 75. continental, 76. equilibrium, 77. sulfur, 78. consequence, 79. molten, 80. incorporate, 81. unfortunately

82.	det a bad event	v.	to find or recognize something, especially something difficult to see, hear, etc.
83.	the lower chr	n.	a large room used for a formal, public, or particular purpose; one of the parts of a parliament
84.	volcanic vt	n.	a small opening to escape or release gas, air, liquid, etc.; activity or process that frees or expresses strong creative energy or emotion
85.	mil rights	n.	a solid inorganic substance occurring in nature having a definite chemical composition
86.	a conly innovative enterprise	adv.	all the time
87.	a detnt of crop yields	n.	a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result
88.	pulmonary fie	n.	a narrow opening or crack, especially in a rock or other hard substance; a division or splitting within a group or organization
89.	volgy conference	n.	the scientific study of volcanoes and volcanic phenomena, including their origin, activity, eruption, and behavior
90.	a cold cle	n.	the weather in a particular location averaged over some long period
91.	but force	adj.	lighthearted and cheerful; tending to float; having a positive attitude or outlook

ANSWERS: 82. detect, 83. chamber, 84. vent, 85. mineral, 86. constantly, 87. determinant, 88. fissure, 89. volcanology, 90. climate, 91. buoyant

92. ejt huge amounts of pollutant	v.	to force someone to put out or leave a particular place or position
93. teic valleys	adj.	relating to the structure of the Earth's crust and the large-scale processes that occur as a result of movements within it
94. marine gest	n.	a scientist or specialist who studies geology
95. ple of feathers	n.	a large feather or group of feathers worn as an ornament or a symbol of achievement or distinction, especially on a hat
96. a crk in a board	v.	to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking
97. und a dishwasher	ν.	to remove contents of something from a vehicle, ship, container, etc.
98. et air pollution	v.	to give off or send out something such as light, heat, sound, gas, etc.
99. sofy a decision	ν.	to make solid, firm, or compact; to cause to become solid
100. cor fatal disease	ν.	to bring under control by force or authority
101. sa pop	n.	a carbonated soft drink containing a sweetened syrup or flavoring, often used interchangeably with "pop" or "soda pop" in different regions of the world
102. wind ern	n.	the wearing away of rock, soil, or land by natural processes such as wind or water

ANSWERS: 92. eject, 93. tectonic, 94. geologist, 95. plume, 96. crack, 97. unload, 98. emit, 99. solidify, 100. conquer, 101. soda, 102. erosion

103. simsly affected	adv.	at the same time
104. trr a biochemical response	v.	to make something happen suddenly; to cause something such as a device, machine, etc. to function
105. aquatic cond	n.	an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements
106. inly cope with	adv.	immediately
107. lar printer	n.	a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification
108. population dey	n.	the quality of compactness of a substance
109. major paradigm sht	n.	a slight transition in position, direction, or trend
110. Doppler sht	n.	a slight transition in position, direction, or trend
111. prevent a lade	n.	a large, sudden movement of a mass of rock, earth, or other material down a slope
112. prt the future	ν.	to state beforehand that something will happen in the future, mainly based on knowledge or experience
113. soft cy ground	n.	a natural, earthy material that is made up of very small particles of minerals and can be molded when wet and then fired to produce ceramics

ANSWERS: 103. simultaneously, 104. trigger, 105. compound, 106. instantly, 107. laser, 108. density, 109. shift, 110. shift, 111. landslide, 112. predict, 113. clay

114. vitamin and mils	n.	a solid inorganic substance occurring in nature having a definite chemical composition
115. fie in the relationship	n.	a narrow opening or crack, especially in a rock or other hard substance; a division or splitting within a group or organization
116. sur mine	n.	(also sulphur) a chemical element with the symbol S and atomic number 16, found in many minerals and sulfur compounds, often used in the production of fertilizers, rubber, paper, and other industrial applications
117. crl analyses	n.	a solid material with many even sides that is formed naturally when the substance becomes solid and has a highly regular atomic structure; clear and colorless glass made of almost pure silica
118. volcanic maa	n.	molten rock that is located beneath the earth's surface and can solidify to form igneous rock
119. perfect mie	n.	a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties
120. resle action	adj.	answerable or accountable for something within one's power, control, or management

ANSWERS: 114. mineral, 115. fissure, 116. sulfur, 117. crystal, 118. magma, 119. mixture, 120. responsible

121. stn our eyes	n.	a force or pressure that stretches or pulls something, sometimes causing damage; (biology) a group of organisms within a species that differ in trivial ways from similar groups
122. roy terrain	adj.	full of or abounding in rocks; of, relating to, or made of rock
123. the bae of power	n.	a condition in which everything has the same weight or force; something left after other parts have been taken away
124. gll terrain	adj.	relating to or resembling a glacier (= a slowly moving mass of ice) or the process of glaciation; characterized by an extremely slow or gradual pace or movement
125. his majestic prce	n.	the fact or state that someone or something exists, occurs, or is present
126. bue in the champagne glass	n.	a thin, round, and often transparent mass of gas that is surrounded by a thin layer of liquid; a state of economic or social prosperity that is unsustainable and eventually collapses
127. unpble outcome	adj.	not capable of being foreseen or calculated; not regular or certain
128. conion of armaments	n.	the ability to focus all your time and energy on one thing without thinking about anything else.
129. ple of smoke	n.	a large feather or group of feathers worn as an ornament or a symbol of achievement or distinction, especially on a hat

ANSWERS: 121. strain, 122. rocky, 123. balance, 124. glacial, 125. presence, 126. bubble, 127. unpredictable, 128. concentration, 129. plume

130. strere layer	n.	the second layer of the Earth's atmosphere, extending from about 7 to 50 kilometers above the Earth's surface containing the ozone layer
131. geological ligy	n.	the study of the physical and chemical properties of rocks and geological formations
132. a grl change	adj.	happening slowly over a long period of time or distance; not steep or abrupt
133. molten Ia	n.	molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
134. et a gamma ray	v.	to give off or send out something such as light, heat, sound, gas, etc.
135. ade the technology	ν.	to go or move forward; to develop in a positive way
136. stth of the economy	n.	the quality or state of being physically, or sometimes mentally, strong
137. resle for a customer service	adj.	answerable or accountable for something within one's power, control, or management
138. a_h tree	n.	the powdery residue left after the burning of a substance, typically containing minerals and other impurities; the solid remains of a dead person after cremation
139. cy animation	n.	a natural, earthy material that is made up of very small particles of minerals and can be molded when wet and then fired to produce ceramics

ANSWERS: 130. stratosphere, 131. lithology, 132. gradual, 133. lava, 134. emit, 135. advance, 136. strength, 137. responsible, 138. ash, 139. clay

140. sth along the coast	v.	to make or be capable of making anything longer or broader without hurting or breaking
141. sit ap a stack of books	adv	on, to, or at the top
142. subean rooms	adj.	under the ground
143. an exve personality	adj.	easily able or likely to shatter violently or burst apart; sudden and loud
144. exe in popularity	v.	to burst or break open violently and noisily; to cause something to burst or break open
145. thI energy	adj.	relating to heat or temperature; designed for or capable of producing or maintaining heat
146. site of the exon	n.	a violent release induced by a chemical or nuclear reaction
147. vt tube	n.	a small opening to escape or release gas, air, liquid, etc.; activity or process that frees or expresses strong creative energy or emotion
148. exe the world	v.	to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
149. effects of cle change	n.	the weather in a particular location averaged over some long period
150. roy relationship	adj.	full of or abounding in rocks; of, relating to, or made of rock
151. bureau of gey	n.	a science that deals with the history of the earth as recorded in rocks

ANSWERS: 140. stretch, 141. atop, 142. subterranean, 143. explosive, 144. explode, 145. thermal, 146. explosion, 147. vent, 148. explore, 149. climate, 150. rocky, 151. geology

152. highly-vole elements	adj.	likely to change rapidly or unexpectedly, or being unstable or explosive
153. gll movements	adj.	relating to or resembling a glacier (= a slowly moving mass of ice) or the process of glaciation; characterized by an extremely slow or gradual pace or movement
154. voo alert level	n.	a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapor, and gas are or have been erupted from the earth's crust.
155. acc taste	adj.	having a pH lower than 7; having characteristics of an acid, such as tasting sour or corroding metal
156. mie of emotions	n.	a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties
157. ane your real motives	v.	to think about in-depth and evaluate to discover essential features or meaning
158. lemon-lime sa	n.	a carbonated soft drink containing a sweetened syrup or flavoring, often used interchangeably with "pop" or "soda pop" in different regions of the world
159. speter measurement	n.	a scientific device used to measure the properties of light or other radiation, often used in chemistry and physics to analyze the composition of materials

ANSWERS: 152. volatile, 153. glacial, 154. volcano, 155. acidic, 156. mixture, 157. analyze, 158. soda, 159. spectrometer

160. sofy a bond	v.	to make solid, firm, or compact; to cause to become solid
161. demonstrate an upd trend	adv.	toward the top or highest point, or a higher position or level; (adjective) extending or moving toward a higher place
162. mae of the presidency	n.	a layer of rock between the surface and the core of a planet or moon; a loose sleeveless cloak or shawl; the responsibilities of an important position or job that passes from one person to another
163. soda a_h	n.	the powdery residue left after the burning of a substance, typically containing minerals and other impurities; the solid remains of a dead person after cremation
164. coe steel drums	v.	to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time
165. a teic earthquake	adj.	relating to the structure of the Earth's crust and the large-scale processes that occur as a result of movements within it
166. advancements in volgy	n.	the scientific study of volcanoes and volcanic phenomena, including their origin, activity, eruption, and behavior
167. glr retreat	n.	a slowly moving mass of ice formed from snow on mountains or near the North Pole or the South Pole
168. dive the sugar	v.	to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss

ANSWERS: 160. solidify, 161. upward, 162. mantle, 163. ash, 164. corrode, 165. tectonic, 166. volcanology, 167. glacier, 168. dissolve

169. deh camera	n.	the distance between the top and bottom of something; between the top surface and a distance below it
170. mae amounts	adj.	enormous amount; very heavy and solid
171. pre analyses	adj.	sharply exact or accurate or delimited
172. mae stars	adj.	enormous amount; very heavy and solid
173. local gey	n.	a science that deals with the history of the earth as recorded in rocks
174. exe our options	v.	to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
175. hydmal vents	adj.	relating to hot water or steam, especially in the Earth's crust, and the thermal energy and chemical reactions that occur as a result
176. a conly varying mind	adv.	all the time
177. optical speter	n.	a scientific device used to measure the properties of light or other radiation, often used in chemistry and physics to analyze the composition of materials
178. prs improvement	n.	a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products

ANSWERS: 169. depth, 170. massive, 171. precise, 172. massive, 173. geology, 174. explore, 175. hydrothermal, 176. constantly, 177. spectrometer, 178. process

179. as nuus as the sand	adj.	amounting to a large indefinite number
180. mt down gold	ν.	to turn from something solid into something soft or liquid as a result of heating
181. sth a story	ν.	to make or be capable of making anything longer or broader without hurting or breaking
182. Ia flow	n.	molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
183. paleo-ligy	n.	the study of the physical and chemical properties of rocks and geological formations
184. fairly tyl symptoms	adj.	having the usual characteristics or traits of a specific group of things
185. crt formation	n.	a hard outer layer that forms on the surface of a liquid as it cools or on a solid as a result of exposure to air or moisture
186. adon of vectors	n.	the act or process of adding something to something else; the process of adding numbers
187. mot a hill	ν.	to increase, go up, or advance gradually or continuously; to prepare and supply with the necessary equipment for execution or performance; to ride on something or someone
188. water flowing undnd	l adj.	under the surface of the ground; a secret group organized to achieve a specific purpose, such as overthrowing the government or occupying a force

ANSWERS: 179. numerous, 180. melt, 181. stretch, 182. lava, 183. lithology, 184. typical, 185. crust, 186. addition, 187. mount, 188. underground

189. covid-19 hot	n.	a place or area, typically a location or region, that is known for having an unusually high number of a particular phenomenon, such as disease, activity, or popularity
190. mot a counterattack	v.	to increase, go up, or advance gradually or continuously; to prepare and supply with the necessary equipment for execution or performance; to ride on something or someone
191. his research area of conion	n.	the ability to focus all your time and energy on one thing without thinking about anything else.
192. unintended conces	n.	the outcome of a particular action or event, especially relative to an individual

ANSWERS: 189. hotspot, 190. mount, 191. concentration, 192. consequence

## Session 3: Fill in the Blanks

- 1. The rock's \_\_\_\_\_\_ suggests it was formed under high pressure and temperature.
- *n.* the study of the physical and chemical properties of rocks and geological formations
- 2. It's notoriously challenging to \_\_\_\_\_ birth rates.
- v. to state beforehand that something will happen in the future, mainly based on knowledge or experience
- 3. The country experienced a \_\_\_\_\_\_ increase in population.
- adj. happening slowly over a long period of time or distance; not steep or abrupt
- 4. In \_\_\_\_\_\_ private corporations provide healthcare services.
- *n.* the act or process of adding something to something else; the process of adding numbers
- 5. The loud \_\_\_\_\_\_ startled the wildlife in the nearby forest.
- *n.* the sound or act of firing a gun or other firearm, usually accompanied by a loud explosion and a projectile that is propelled toward the target
- 6. The saltwater can \_\_\_\_\_ metal over time if not properly maintained.
- *v.* to destroy or eat away slowly by chemical action; to gradually wear away, weaken, or disintegrate over time
- 7. The volcanic \_\_\_\_\_\_ caused widespread destruction and left the area covered in ash.
- *n.* an instance of a sudden and violent release of lava, gas, or ash from a volcano; a sudden outburst or explosion of something

ANSWERS: 1. lithology, 2. predict, 3. gradual, 4. addition, 5. gunshot, 6. corrode, 7. eruption

- 8. This exam requires excellent \_\_\_\_\_\_ to pass.
- *n.* the ability to focus all your time and energy on one thing without thinking about anything else.
- 9. A vast \_\_\_\_\_ chandelier glittered brightly above us.
- *n*. a solid material with many even sides that is formed naturally when the substance becomes solid and has a highly regular atomic structure; clear and colorless glass made of almost pure silica
- 10. The security camera has \_\_\_\_\_\_ four intruders.
- v. to find or recognize something, especially something difficult to see, hear, etc.
- 11. This artwork is \_\_\_\_\_ of her work.
- adj. having the usual characteristics or traits of a specific group of things
- 12. The mobile application industry is \_\_\_\_\_\_ changing. *adv.* all the time
- 13. This study indicates \_\_\_\_\_\_ activity affects global warming.
- adj. relating to or produced by or consisting of volcano
- 14. The roaring \_\_\_\_\_\_ was so loud that it woke me from sleep.
- *n.* the loud, deep sound made by air expanding along the path of a bolt of lightning; a deep, prolonged loud noise
- 15. In southward, the average annual water \_\_\_\_\_\_ increases.
- *n.* the amount or number of something; magnitude
- 16. He that would eat the kernel must \_\_\_\_\_ the nut.
  - v. to break or cause to break without dividing into separate parts; (noun) a line on the surface of something along which it has separated without breaking

ANSWERS: 8. concentration, 9. crystal, 10. detected, 11. typical, 12. constantly, 13. volcanic, 14. thunder, 15. quantity, 16. crack

- 17. The \_\_\_\_\_\_ emissions from the nearby factory caused the rotten egg smell.
- *n*. (also sulphur) a chemical element with the symbol S and atomic number 16, found in many minerals and sulfur compounds, often used in the production of fertilizers, rubber, paper, and other industrial applications
- 18. The \_\_\_\_\_ in the rock was too narrow to squeeze through.
- *n.* a narrow opening or crack, especially in a rock or other hard substance; a division or splitting within a group or organization
- 19. The treatments were done but, \_\_\_\_\_\_ were unsuccessful. *adv.* by bad luck; unluckily
- 20. The bird had a beautiful \_\_\_\_\_ on its head.
- *n.* a large feather or group of feathers worn as an ornament or a symbol of achievement or distinction, especially on a hat
- 21. Many people worry that the current real estate market is a \_\_\_\_\_ that could burst soon.
- *n*. a thin, round, and often transparent mass of gas that is surrounded by a thin layer of liquid; a state of economic or social prosperity that is unsustainable and eventually collapses
- 22. The eagle perched \_\_\_\_\_ the tallest tree in the forest.

adv. on, to, or at the top

- 23. The pond's \_\_\_\_\_ was around five feet.
  - *n.* the distance between the top and bottom of something; between the top surface and a distance below it
- 24. The ozone layer, which protects us from harmful UV radiation, is in the
- *n*. the second layer of the Earth's atmosphere, extending from about 7 to 50 kilometers above the Earth's surface, containing the ozone layer

ANSWERS: 17. sulfur, 18. fissure, 19. unfortunately, 20. plume, 21. bubble, 22. atop, 23. depth, 24. stratosphere

- 25. You must \_\_\_\_\_ your anxiety about driving.
- v. to bring under control by force or authority
- 26. A broken gas pipe triggered the \_\_\_\_\_
- *n.* a violent release induced by a chemical or nuclear reaction
- 27. The paint was a \_\_\_\_\_\_ of different pigments to achieve the desired color.
  - *n.* a combination of different elements, substances, or entities, usually in non-uniform proportions, resulting in a homogeneous or heterogeneous blend of physical or chemical properties
- 28. The airport is a \_\_\_\_\_\_ for tourists and travelers from around the world.
  - *n.* a place or area, typically a location or region, that is known for having an unusually high number of a particular phenomenon, such as disease, activity, or popularity
- 29. The committee's decision helped to \_\_\_\_\_\_ the rules of the game.
- v. to make solid, firm, or compact; to cause to become solid
- 30. Five miles is \_\_\_\_\_\_ similar to eight kilometers.
- *adv.* approximately but not precisely; with a violent manner
- 31. These economic activities had disastrous environmental \_\_\_\_\_\_.
- *n.* the outcome of a particular action or event, especially relative to an individual
- 32. During the unloading, the container box \_\_\_\_\_ a clicking sound.
- *v.* to give off or send out something such as light, heat, sound, gas, etc.
- 33. The company holds patents on core components of \_\_\_\_\_ jet printers.
  - *n.* a device that emits powerful and narrow light that can be used as a tool to cut metal through a process of optical amplification

ANSWERS: 25. conquer, 26. explosion, 27. mixture, 28. hotspot, 29. solidify, 30. roughly, 31. consequences, 32. emits, 33. laser

- 34. The \_\_\_\_\_\_ for applying for a visa can be lengthy and complicated.
- *n.* a series of actions or operations performed to achieve a particular outcome or goal; a systematic procedure or approach used to accomplish a specific task or objective; a method of treating milk to make it suitable for consumption or use in other dairy products
- 35. The robust economy of the country is based on its \_\_\_\_\_ resources.
- *n.* a solid inorganic substance occurring in nature having a definite chemical composition
- 36. The mountainous \_\_\_\_\_\_ was rough and rocky.
- *n.* the physical features of a piece of land, including hills, valleys, rivers, and forests
- 37. Do you know the \_\_\_\_\_ of the population in Hong Kong?
- *n.* the quality of compactness of a substance
- 38. \_\_\_\_\_ chambers are large underground reservoirs where molten rock is stored before an eruption.
- *n.* molten rock that is located beneath the earth's surface and can solidify to form igneous rock
- 39. The island was formed by a \_\_\_\_\_ millions of years ago.
  - *n.* a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapor, and gas are or have been erupted from the earth's crust.
- 40. These descriptions are based on a number of \_\_\_\_\_\_ assumptions.
- adj. amounting to a large indefinite number

ANSWERS: 34. process, 35. mineral, 36. terrain, 37. density, 38. Magma, 39. volcano, 40. numerous

- 41. The weather in this region is often \_\_\_\_\_\_ with sudden rainstorms and strong winds.
- *adj.* not capable of being foreseen or calculated; not regular or certain
- 42. Health and \_\_\_\_\_ are, above all, gold.
- *n.* the quality or state of being physically, or sometimes mentally, strong
- 43. \_\_\_\_\_ experts study the science of volcanoes and volcanic activity.
- *n.* the scientific study of volcanoes and volcanic phenomena, including their origin, activity, eruption, and behavior
- 44. She's a \_\_\_\_\_\_ pet owner who ensures her dog gets enough exercise and a healthy diet.
- *adj.* answerable or accountable for something within one's power, control, or management
- 45. We will attempt to \_\_\_\_\_\_ some of your suggestions into our future strategy.
- *v.* to include something as a part of a larger entity
- 46. Scientific knowledge will \_\_\_\_\_\_ significantly with the power of AI.
- v. to go or move forward; to develop in a positive way
- 47. Could you help me \_\_\_\_\_ some furniture?
- *n.* a slight transition in position, direction, or trend
- 48. Her resistance \_\_\_\_\_ under his persuasion.
  - v. to turn from something solid into something soft or liquid as a result of heating

ANSWERS: 41. unpredictable, 42. strength, 43. Volcanology, 44. responsible, 45. incorporate, 46. advance, 47. shift, 48. melted

49. I remembered that person \_\_\_\_\_ and never forgot.

adv. immediately

- 50. The teacher attempted to \_\_\_\_\_\_ the root cause of our mistake.
- *v.* to think about in-depth and evaluate to discover essential features or meaning
- 51. The management must \_\_\_\_\_\_ strategies to increase office security.
- v. to travel to or penetrate an area or a country to learn about it; to thoroughly examine a subject or a possibility to learn more about it
- 52. One \_\_\_\_\_\_ of success is having a positive attitude and a strong work ethic.
- *n.* a factor, circumstance, or condition that contributes to the shaping, influencing, or determining of a particular outcome or result
- 53. The volcano's eruption caused a \_\_\_\_\_ river to flow down the mountainside.
- *n.* molten rock that has been extruded from a volcano and solidified; a highly fluid, highly heated substance or material
- 54. Some herds have been observed to \_\_\_\_\_ hundreds of kilometers.
  - v. to make or be capable of making anything longer or broader without hurting or breaking
- 55. \_\_\_\_\_ and weather have an impact on every part of our lifestyles.
- *n.* the weather in a particular location averaged over some long period
- 56. His \_\_\_\_\_\_ personality helped lift the spirits of everyone in the room.
- *adj.* lighthearted and cheerful; tending to float; having a positive attitude or outlook

ANSWERS: 49. instantly, 50. analyze, 51. explore, 52. determinant, 53. lava, 54. stretch, 55. Climate, 56. buoyant

- 57. The \_\_\_\_\_\_ plates shifted, causing an earthquake.
- *adj.* relating to the structure of the Earth's crust and the large-scale processes that occur as a result of movements within it
- 58. The soil in this region is too \_\_\_\_\_ for most crops to grow well.
- *adj.* having a pH lower than 7; having characteristics of an acid, such as tasting sour or corroding metal
- 59. Having \_\_\_\_\_\_ parking has been very beneficial throughout the winter.
- *adj.* under the surface of the ground; a secret group organized to achieve a specific purpose, such as overthrowing the government or occupying a force
- 60. The \_\_\_\_\_\_ of the ice age have shaped Fjord.
  - *n.* a slowly moving mass of ice formed from snow on mountains or near the North Pole or the South Pole
- 61. The infrared \_\_\_\_\_\_ helped identify the chemical composition of the sample.
- *n.* a scientific device used to measure the properties of light or other radiation, often used in chemistry and physics to analyze the composition of materials
- 62. The \_\_\_\_\_ pace of the negotiations frustrated both parties.
- *adj.* relating to or resembling a glacier (= a slowly moving mass of ice) or the process of glaciation; characterized by an extremely slow or gradual pace or movement
- 63. The \_\_\_\_\_\_ of the coastline has accelerated due to rising sea levels.
- *n.* the wearing away of rock, soil, or land by natural processes such as wind or water

ANSWERS: 57. tectonic, 58. acidic, 59. underground, 60. glaciers, 61. spectrometer, 62. glacial, 63. erosion

- 64. The \_\_\_\_\_\_ breakfast at the hotel was included with the room.
- *adj.* of or relating to a continent (= one of the earth's large landmasses)
- 65. Our immune system can \_\_\_\_\_ disease germs from the body.
- *v.* to force someone to put out or leave a particular place or position
- 66. The \_\_\_\_\_ road made it difficult to drive on.
- *adj.* full of or abounding in rocks; of, relating to, or made of rock
- 67. Such \_\_\_\_\_\_ passages span kilometers in London. *adj.* under the ground
- 68. Their relationship was \_\_\_\_\_\_ and prone to sudden outbursts of anger.
- adj. likely to change rapidly or unexpectedly, or being unstable or explosive
- 69. The surgeon made an incision in the \_\_\_\_\_ of the patient's heart.
  - *n.* a large room used for a formal, public, or particular purpose; one of the parts of a parliament
- 70. Two students answered the teacher's question \_\_\_\_\_\_.
- *adv.* at the same time
- 71. He gave \_\_\_\_\_ to his anger by playing the guitar.
- *n.* a small opening to escape or release gas, air, liquid, etc.; activity or process that frees or expresses strong creative energy or emotion
- 72. The \_\_\_\_\_\_ activity in this area creates a unique environment for marine creatures.
- *adj.* relating to hot water or steam, especially in the Earth's crust, and the thermal energy and chemical reactions that occur as a result

ANSWERS: 64. continental, 65. eject, 66. rocky, 67. subterranean, 68. volatile, 69. chambers, 70. simultaneously, 71. vent, 72. hydrothermal

- 73. The \_\_\_\_\_ layer on Mars is much thinner than on Earth.
- *n.* a layer of rock between the surface and the core of a planet or moon; a loose sleeveless cloak or shawl; the responsibilities of an important position or job that passes from one person to another
- 74. The sculptor carefully molded the \_\_\_\_\_ into the desired shape.
- *n.* a natural, earthy material that is made up of very small particles of minerals and can be molded when wet and then fired to produce ceramics
- 75. These issues baffled \_\_\_\_\_\_ for many years.
- n. a scientist or specialist who studies geology
- 76. The incident \_\_\_\_\_\_ a political controversy.
- *v.* to make something happen suddenly; to cause something such as a device, machine, etc. to function
- 77. The bread's \_\_\_\_\_ was golden brown and crispy.
- *n.* a hard outer layer that forms on the surface of a liquid as it cools or on a solid as a result of exposure to air or moisture
- 78. He had to \_\_\_\_\_\_ the merchandise before the Black Friday bargain.
- v. to remove contents of something from a vehicle, ship, container, etc.
- 79. The \_\_\_\_\_\_ imaging camera was used to detect heat signatures in the dark.
- *adj.* relating to heat or temperature; designed for or capable of producing or maintaining heat
- 80. The path to a solid online \_\_\_\_\_\_ necessitates a high technical ability.
- *n.* the fact or state that someone or something exists, occurs, or is present

ANSWERS: 73. mantle, 74. clay, 75. geologists, 76. triggered, 77. crust, 78. unload, 79. thermal, 80. presence

- 81. He was a visiting \_\_\_\_\_ professor at the University of Tokyo.
- *n.* a science that deals with the history of the earth as recorded in rocks
- 82. Dictators of the past often had the erroneous idea of a pure racial \_\_\_\_\_.
  - *n.* a force or pressure that stretches or pulls something, sometimes causing damage; (biology) a group of organisms within a species that differ in trivial ways from similar groups
- 83. I'm craving a cold \_\_\_\_\_ to quench my thirst.
- *n.* a carbonated soft drink containing a sweetened syrup or flavoring, often used interchangeably with "pop" or "soda pop" in different regions of the world
- 84. The old building \_\_\_\_\_ in a fiery inferno.
  - v. to burst or break open violently and noisily; to cause something to burst or break open
- 85. The \_\_\_\_\_ metal was poured into the mold.
  - *adj.* in a liquid state as a result of being heated
- 86. This container stores an \_\_\_\_\_\_ substance.
- *adj.* easily able or likely to shatter violently or burst apart; sudden and loud
- 87. Common salt is a sodium and chlorine \_\_\_\_\_.
- *n.* an item composed of two or more distinct elements combined; a chemical formed by the combination of two or more elements
- 88. The recent economic downturn has resulted in \_\_\_\_\_ layoffs.
- adj. enormous amount; very heavy and solid

ANSWERS: 81. geology, 82. strain, 83. soda, 84. exploded, 85. molten, 86. explosive, 87. compound, 88. massive

- 89. They \_\_\_\_\_\_ pictures on the paper in preparation for the birthday card.
  - v. to increase, go up, or advance gradually or continuously; to prepare and supply with the necessary equipment for execution or performance; to ride on something or someone
- 90. The company adjusted the revenue \_\_\_\_\_.
- *adv.* toward the top or highest point, or a higher position or level; (adjective) extending or moving toward a higher place
- 91. The content is \_\_\_\_\_ and informative for me.
  - adj. sharply exact or accurate or delimited
- 92. The massive \_\_\_\_\_\_ buried the small village under a thick layer of rock and dirt.
- *n.* a large, sudden movement of a mass of rock, earth, or other material down a slope
- 93. The political party \_\_\_\_\_\_ after much internal fighting.
- *v.* to be or cause to be absorbed by a liquid to form a part of the solution; to close down or dismiss
- 94. The volcanic \_\_\_\_\_ covered the island after the eruption.
  - *n.* the powdery residue left after the burning of a substance, typically containing minerals and other impurities; the solid remains of a dead person after cremation
- 95. The company struggled to maintain an \_\_\_\_\_\_ between its profits and social responsibilities.
- *n.* a state in which opposing forces or influences are balanced

ANSWERS: 89. mounted, 90. upward, 91. precise, 92. landslide, 93. dissolved, 94. ash, 95. equilibrium

- 96. Try to keep a \_\_\_\_\_ between work and off.
  - *n.* a condition in which everything has the same weight or force; something left after other parts have been taken away

ANSWERS: 96. balance