



# TCEA Vocabulary Bee

## 8th Grade List

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| Term               | Definition   |
|--------------------|--|
| adaptation         | anything that helps an organism survive in its environment   |
| atmosphere         | the gaseous envelope surrounding the earth; the air  |
| atom               | the smallest component of an element   |
| average speed      | the total distance divided by the total time elapsed   |
| balanced forces    | when two separate forces are equal to each other, negating the whole process; making something still |
| classify           | organize or place in a certain group   |
| constellations     | stars that form patterns   |
| consumer           | an organism, usually an animal, that feed on plants or other animals                                 |
| cycle              | any complete round or series of occurrences that repeats or is repeated                              |
| cell membrane      | the semipermeable membrane that surrounds the cytoplasm  |
| cell wall          | the boundary or wall that is part of the outer structure of certain cells, such as a plant cell      |
| chloroplast        | the chemical found in plants that helps with photosynthesis, and turns the leaves green              |
| chromosomes        | a string like line of genes and DNA block carrying genetic information                               |
| circulatory system | the system of organs that help the flow of blood   |

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| condensation          | the process by which a gas or vapor changes to a liquid   |
| convection            | the transfer of heat by the circulation or movement of the heated parts of a liquid gas                               |
| decay                 | to decompose or rot   |
| decomposer            | breaks down the cells of dead plants and animals into simpler substances  |
| digestive system      | the group of organs an organism uses to digest food   |
| dominant              | main; major; chief  |
| ecosystem             | a group of populations along with biotic and abiotic that work together and rely on each other                        |
| electric circuit      | a complete path in which electricity can flow   |
| energy                | the capacity or power to do work  |
| energy of motion      | known as kinetic energy. it is the energy that allows movement  |
| erode                 | the wearing away of rock on the surface of the earth  |
| evidence              | something that makes plain or clear that which tends to prove or disprove something                                   |
| experimental question | the question you base an experiment on  |
| earthquake            | when two tectonic plates collide, shaking the earth's crust   |
| eclipse               | when the moon blocks out the sun's view   |
| element               | the base of all matter  |
| eruption              | the ejection of molten rock, steam, etc., as from a volcano or geyser   |
| food web              | all feeding relationships within an ecosystem   |
| friction              | surface resistance to relative motion, like a body sliding or rolling   |
| gravitational force   | when gravity takes effect on something, ie. a falling pencil  |
| gravity               | the fundamental force of attraction that all objects with mass attract  |
| habitat               | the natural environment in which an organism survives   |
| heat energy           | energy in the form of heat; also the difference in temperature  |
| igneous rock          | produced under conditions involving intense heat, as rocks of volcanic origin or rocks crystallized from molten magma |
| kilogram              | 1000 grams  |

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| (kg)               |  |
| kinetic energy     | the energy of movement and motion  |
| light energy       | energy in the form of light  |
| mass               | a measure of the amount of matter contained in or constituting a physical body   |
| meter (m)          | unit to measure length/distance in the metric system; equivalent to 39.37 U.S. inches  |
| motion             | the act or process of changing position or place   |
| metamorphic rock   | rock that was once one form of rock but has changed to another under the influence of heat, pressure, or some other agent without passing through a liquid phase |
| mitochondria       | an organelle in the cytoplasm of cells that functions in energy production   |
| molecule           | the smallest physical unit of an element or compound, consisting of one or more like atoms in an element and two or more different atoms in a compound           |
| producer           | an organism, usually single celled or a plant that creates its own food  |
| prey               | an organism that is hunted by a predator   |
| radiation          | the radioactive energy given off by nuclear reactions  |
| sediment           | mineral or organic matter deposited by water, air, or ice  |
| sound energy       | energy in the form of sound  |
| state of matter    | the state in which matter is taking form (solid, liquid, or gas)   |
| substance          | that of which a thing consists; physical matter or material  |
| sedimentary rock   | rock that has formed through the deposition and solidification of sediment; they are often deposited in layers and frequently contain fossils                    |
| tectonic plates    | the moving plates of the earth's crust pushed by the mantle's flow   |
| thermal energy     | energy in the form of heat   |
| wavelength         | the distance measured in the direction of propagation, between two points of the same phase in consecutive cycles of a wave                                      |
| irrational numbers | Numbers that cannot be expressed as a ratio of two integers. Their decimal expansions are non ending and non repeating.  |

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| rational numbers      | Any number that can be expressed as a fraction   |
| integers              | Positive and negative whole numbers  |
| square roots          | One of the two equal factors of a number   |
| cube roots            | One of three equal factors of a number   |
| terminating decimals  | decimals that end.   |
| repeating decimals    | decimals that never end and repeat the same digits over and over   |
| perfect squares       | A number made by squaring a whole number   |
| scientific notation   | A method of writing or displaying numbers in terms of a decimal number between 1 and 10 multiplied by a power of 10. |
| unit rate             | a rate that has a denominator of 1   |
| slope                 | Rise over run, The steepness of a line on a graph, RATE  |
| vertical              | Going straight up and down   |
| horizontal            | Going straight across from side to side  |
| intersecting          | lines that cross at one point  |
| parallel lines        | lines in the same plane that never intersect   |
| coefficient           | A number multiplied by a variable in an algebraic expression.  |
| distributive property | For any a, b, and c, $a(b + c) = ab + ac$ . For example, $10(7 + 2) = 10 \cdot 7 + 10 \cdot 2$ .                     |
| like terms            | Expressions that contain the same variables to the same power  |
| system of equations   | collection of two or more equations with a same set of unknowns  |
| linear relationship   | A type of relationship that exists between two variables whose graphed data points lie on a straight line            |
| rate of change        | describes how a quantity is changing over time, slope  |
| initial value         | starting point   |
| y-intercept           | where the line crosses the y axis, the starting point  |
| function              | A relation where each input has exactly one output   |
| vertical line test    | If any vertical line passes through more than one point of the graph, then the relation is not a function            |

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| input                     | A number in the domain of a relation  |
| output                    | A number in the range of a relation   |
| linear function           | A function whose graph is a straight line.  |
| non-linear function       | a function (equation) whose graph is NOT a straight line  |
| translations              | A Slide of a figure. Up/Down - Left/Right Both orientation and congruency stays the same.   |
| rotations                 | A transformation in which an object "spins" a specified number of degrees around a designated point (normally counterclockwise, sometimes clockwise). |
| reflections               | To flip a figure over a line  |
| line of reflection        | A line that a figure is flipped across to create a mirror image of the original figure  |
| center of rotation        | A fixed point around which shapes move in a circular motion to a new position.  |
| congruent                 | Having the same size and shape  |
| similarity                | has the same shape but is proportional in size  |
| dilations                 | a transformation that grows or shrinks a polygon by a given proportion  |
| exterior angles           | angles on the outside of parallel lines cut by a transversal  |
| interior angles           | angles on the inside of parallel lines cut by a transversal   |
| alternate interior angles | angles between 2 lines and on opposite sides of a transversal   |
| vertical angles           | A pair of opposite congruent angles formed by intersecting lines  |
| adjacent angles           | Two angles that share a common side and have the same vertex  |
| supplementary angles      | Two angles whose sum is 180 degrees   |
| complementary angles      | Two angles whose sum is 90 degrees  |
| corresponding             | angles or sides in the same place but on different figures  |

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| scale factor           | A factor by which a figure is enlarged or reduced.   |
| transversal            | a line that intersects two or more lines   |
| right triangle         | A triangle that has a 90 degree angle.   |
| hypotenuse             | the longest side of a right triangle, opposite the right angle   |
| legs                   | the two sides of a right triangle that meet to form the right angle  |
| Pythagorean Theorem    | $a^2+b^2=c^2$  |
| cone                   | a 3-D shape that has one circular base and whose sides meet at a point   |
| cylinder               | A solid composed of two congruent circles in parallel planes, their interiors, and all the line segments parallel to the axis with endpoints on the two circles. |
| sphere                 | A solid shape that is perfectly round like a ball. No faces, edges, or vertices.   |
| radius                 | A straight line from the center to the circumference of a circle or sphere.  |
| volume                 | Amount of space occupied by an object  |
| height                 | The measurement associated with an object's top-to-bottom dimension.   |
| bivariate data         | Consists of two variables, an explanatory and a response variable, usually quantitative.   |
| scatter plot           | A graph with points plotted to show a possible relationship between two sets of data.  |
| clustering             | Data values occurring close together   |
| linear association     | An association between two variables that would, if represented in a scatter plot, conform to a general pattern of a straight line                               |
| non-linear association | When data points do not lie close to a line.   |
| outliers               | Numbers that are much greater or much less than the other numbers in the set   |
| positive association   | as one set of values increases, the other set tends to increase  |
| negative association   | as one set of values increases, the other set tends to decrease  |
| categorical data       | Data that consists of names, labels, or other non numerical values   |
| two-way table          | A frequency table that displays two categorical variables.   |
| relative frequency     | the fraction or percent of the time that an event occurs in an experiment  |

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| volume of a cone     | $\frac{1}{3} \pi r^2 h$  |
| volume of a cylinder | $V = \pi r^2 h$  |
| volume of a sphere   | $V = \frac{4}{3} \pi r^3$  |
| Implied              | You have to make an inference to understand what the poet, author, playwright is trying to tell the reader. An example would be a metaphor in the poem or a symbol within a novel. |
| Explicit             | the author, poet, playwright tells us exactly what he/she means.   |
| Symbol               | an idea that represents something else.  |
| Idiom                | a group of words that cannot be taken literally.   |
| Sarcasm              | Using harsh or bitter words that are meant to hurt or make fun of another person   |
| Text                 | Written words including poems, fiction and non-fiction   |
| Context Clues        | Clues in the text that can help the reader discovered the meanings of words and phrases  |
| Puns                 | a joke exploiting the different possible meanings of a word or the fact that there are words that sound alike but have different meanings.   |
| Simile               | A comparison that uses like or as  |
| Metaphor             | A comparison that does not use like or as  |
| Alliteration         | Using the same beginning sounds  |
| Repetition           | Repeating of a line or word  |
| Tone                 | The writer or speaker's attitude toward the subject  |
| Recurring            | Occurs over and over   |
| Motif                | Object that recurs over and over in a work of fiction; for example, the color pink or an oak tree.   |
| Irony                | The tension between what is expected and what really happens.  |
| Dramatic Irony       | When the reader or audience knows what's going to happen but the character does not  |
| Situational Irony    | Something happens that you would not expect  |
| Verbal Irony         | the opposite of what is said is meant  |
| Convey               | to explain   |