

### Grade 9

Lesson: Animal Hybrids	Term	Definition
	Genetic variations	The difference in DNA sequences between individuals within a population.
	Hybridization	The offspring that results from the mating of two animals of different species.
	Meiosis	When a single cell divides twice to produce four cells containing half the original amount of genetic information.
Lesson: Sound Measurement Notation	Term	Definition
	Coordinate plane	A two-dimension surface formed by two number lines.
	Elimination	The process of eliminating a variable by adding or subtracting.
	Graphing	A visual representation or diagram that represents data or values.
	Pitch	A term that describes how high or low a sound is.
	Sound wave	Pattern of disturbance caused by the movement of energy as it moves away from the source of the sound.
	Substitution	The act of putting one thing in place of another.
	Variable	Any factor, trait, or condition that can exist in differing amounts or types.
Lesson: Oxidation of Art	Term	Definition
	Abstractions	The synthesis of facts into one general theory about something.
	Acid	A chemical substance which contains hydrogen and can react with other substances to form salts.
	Base	A chemical substance that can accept hydrogen ions in water and neutralize acid.
	Chemical reaction	A process through which new substances with new properties are formed.
	Oxidation	A chemical reaction that happens when a substance comes in contact with oxygen or other oxidizing substances.
	Species	A group of organisms that can reproduce with one another and produce fertile offspring.

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#### Grade 9

Lesson: Cost Constraints for Dance Costumes	Term	Definition
	Constant	A value or number that never changes in expression.
	Genre	A category of artistic, musical, or literary composition characterized by a particular styles, form, or content.
	Intersection	When two or more lines cross each other in a plane.
	System of Equations	A set of two or more equations with the same variables, graphed in the same coordinate plane.
Lesson: Stage Directions & Solving Equations	Term	Definition
	Distributive Property	An expression which is given in the form of A (B + C) can be solved as A x (B + C) = $AB + AC$ .
	Equation	A mathematical sentence that uses the equal sign to show that two expressions are equal.
	Properties of Equality	The relationship where two expressions, terms, or equations are related and considered to have the same values.
	Solution	A number that can be plugged in for the variable to make a true number statement.

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### Grade 10

Lesson: Evaluating Design Solutions	Term	Definition
	Design Process	A series of steps that engineers follow to find a solution to a problem.
	Space	The area where a performance takes place.
Lesson: Pythagorean Theorem Spirals	Term	Definition
	Corresponding	Objects that appear in the same place in two similar situations.
	Pythagorean theorem	A theorem contributed to Pythagoras that the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two sides; $a^2 + b^2 = c^2$
	Right triangle	A triangle in which one of the interior angles is 90°.
	Similar	When one shape can become another when resized, flipped, or turned.
Lesson: Trait Heredity Song	Term	Definition
	DNA	Material that contains genetic information about how a living thing will look/ function.
	Gene	Functional segments of DNA molecules that store genetic information.
	Proteins	An organic compound made up of small molecules called amino acids and joined together by peptide bonds.
Lesson: Graphic Design Logo Competition	Term	Definition
	Bisect	To divide something into two parts.
	Construction	The process of putting together different elements.
	Parallel	Lines that do not intersect or meet each other at any point in a plane.
	Perpendicular	Two lines that intersect at 90°.

#### Grade 10

Lesson: Congruence Choreography	Term	Definition
	Congruence	Two figures that have the same shape and size.
	Dance study	A small, informal composition with a particular focus in dance.
	Movement	The act of moving a body part or the whole body from one location to another.
	Reflection	The act of mirroring an object or another person's moves.
	Rigid motion	A movement of a set so that the distance between points does not change.
	Rotation	The circular movement of an object around a center point.
	Transformations	A process that involves moving an object from its original position to a new position.
	Translation	When a figure is moved from one location to another without changing size, shape, or orientation.

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### Grade 11

Lesson: Carbon Cycle Choreography	Term	Definition
	Algae	A type of plant with no stems or leaves that grows in water or on damp surfaces.
	Atmosphere	The layers of gasses surrounding a planet.
	Carbon	A chemical element that forms strongly bonded compounds. All living things contain carbon.
	Carbon dioxide	A colorless, odorless gas.
	Choreography	The art of arranging movements, steps, and patterns of dancers.
	Decompose	To break down.
	Photosynthesis	The process in which green plants use sunlight to make their own food.
	Respiration	The process in which cells of an organism obtain energy by combining oxygen and glucose, resulting in the release of carbon dioxide, water, and ATP.
Lesson: Music Royalty Statistics	Term	Definition
	Intellectual property	Creations of the human mind that are non-physical in nature.
	Performing artist	Actors, musicians, dancers, singers, those who creatively express artistic sentiments through performance.
	Royalties	An amount of money paid by a third part to an owner of a product for the use of that product.
	Songwriter	Someone who composes words or music for songs.
Lesson: Statistics of Billboard Top Hits	Term	Definition
	Beats per minute	The tempo, or speed, of a given piece of music.
	Chord progression	The order in which chords are played in a piece of music.
	Кеу	The major or minor scale around which a piece of music revolves.
	Line of best fit	A line through a scatter plot that best expresses the relationship between those points.

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### Grade 11

Lesson: Family Function Dance	Term	Definition
	Equation	A mathematical sentence that uses the equal sign to indicate that two expressions are equal.
	Function	The relationship between an input and an output.
	Parent functions	An equation in the simplest form of a family of functions.
	Relation	A collection or ordered pairs containing one object from each set.
Lesson: Calder Mobiles of Organism Functions	Term	Definition
	Excretion	The process in which biological organisms use to expel or eliminate the waste products produced by their metabolisms.
	Function	Life processes of nutrition, movement, growth, reproduction, respiration, sensitivity, and excretion.
	Growth	Irreversible increase of an organism's size over a given time.
	Movement	When a living organism moves a body part(s) without a change in position.
	Nutrition	The process in which the body nourishes itself by transforming food into energy and body tissues.
	Organism	Any living biological entity, such as an animal, plant, fungus, or bacteria.
	Reproduction	The process of producing offspring that are biologically or genetically similar to the parent organism.
	Respiration	The process in which cells of an organism obtain energy by combining oxygen and glucose, resulting in the release of carbon dioxide, water, and ATP.

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### Grade 12

Lesson: Force and Energy Soundtracks	Term	Definition
	Electric and magnetic field	Invisible areas of energy, often referred to as radiation.
	Force	A push or pull on an object resulting from the object's interaction with another object.
	Intent	A specific purpose or meaning.
	Interaction	An action that occurs when two or more objects have an effect on each other.
Lesson: Laws of Sines & Todd Chilton Artwork	Term	Definition
	Law of Sines	The ratio of the side length of a triangle to the sine of the opposite angle, which is the same for all three sides.
	Oblique triangle	Any triangle that is not a right triangle.
	Sine	The length of the side opposite the angle divided by the length of the hypotenuse.
Lesson: Sinusoidal Models	Term	Definition
	Amplitude	The measure of a sound wave's height.
	Frequency	The number of waves that pass a fixed point in unit time.
	Maximum value	The place where a function reaches its highest point on a graph.
	Minimum value	The place where a function has its lowest point on a graph.
	Period	The distance between two repeating points on the graph function.
	Pitch	A term that describes how high or low a sound is.
	Sinusoidal wave	Relating to, or shaped like, a sine curve or sine wave.
	Sound waves	Pattern of disturbance caused by the movement of energy as it moves away from the source of the sound.



#### Grade 12

Lesson: Infographic Design: Causation vs. Correlation	Term	Definition
	Causation	The capacity of one variable to influence another.
	Correlation	A statistic measure that expresses the extend to which two variables are linearly related.
	Design process	A series of steps that engineers follow to find a solution to a problem.
Lesson: Space Art	Term	Definition
	Field	A region in which each point is affected by force.
	Force	The push or pull on an object with mass that causes it to change its velocity.
	Gravity	The force of attraction by which a planet draws objects toward its center.
	Mass	A dimensionless quantity that represents the amount of matter in a particle or an object.
	Newton's Third	For every action in nature, there is an equal and opposite reaction.
	Orbit	A regular, repeating path that one object in space takes around another.
	Planet	A large, round object in space that moves around a star.
	Satellite	A moon, planet, or machine that orbits a planet or star.
	Solar system	A group of planets or other bodies that revolve around a star.