

EIGHTH GRADE
SCIENCE
CORRELATION GUIDE (SPIs)

FIRST NINE WEEKS

Interactions Between Living Things and Their Environment

8.2spi. 1	Distinguish among commensalism, parasitism, and mutualism.
8.2spi. 2	Identify the earth's major biomes.
8.2spi. 3	Choose the appropriate biome for an organism, given a description.
8.2spi. 4	Identify biotic and abiotic factors in a biome.

Heredity and Reproduction

8.4spi. 1	Differentiate between complete and incomplete metamorphosis.
8.4spi. 2	Distinguish between sexual and asexual methods of reproduction.
8.4spi. 3	Differentiate between dominant and recessive traits.
8.4spi. 4	Predict the genotypes of offspring in a monohybrid cross using a Punnett Square.
8.4spi. 5	Select models or illustrations that are representations of DNA.
8.4spi. 6	Associate a change in a DNA molecule with a mutation.
8.4spi. 7	Identify types of genetic engineering (i.e., gene splicing and cloning) and evaluate the impact of genetic engineering on society.

Diversity and Adaptation Among Living Things

8.5spi. 1	Identify similarities and differences among organisms.
8.5spi. 2	Classify plants and animals into groups according to their features.
8.5spi. 3	Infer the relatedness of different organisms.
8.5spi. 4	Use a simple classification key to identify an unknown organism.
8.5spi. 5	Determine the genus and species of an organism using a dichotomous key.

SECOND NINE WEEKS

Forces and Motion

8.11spi. 1	Recognize that forces cause changes in speed and/or the direction of motion.
8.11spi. 2	Identify simple machines.
8.11spi. 3	Recognize the relationship between mass, force, and acceleration.
8.11spi. 4	Identify the relationship between the mass of objects, the distance between them, and the amount of gravitational attraction.
8.11spi. 5	Choose the most appropriate simple machine to use for a specific task.
8.11spi. 6	Identify Newton's three laws of motion and relate the first two laws to the concepts of inertia and momentum.
8.11spi. 7	Solve problems pertaining to distance, speed, velocity, and time, given illustrations, diagrams, graphs, or scenarios.

Interactions of Matter

8.13spi. 1	Distinguish between physical and chemical changes.
8.13spi. 2	Identify a substance as an acid or base, given its pH.

THIRD NINE WEEKS

Earth Features

8.9spi. 1	Label a cross section of the earth.
8.9spi. 2	Identify the major plates of the world.
8.9spi. 3	Recognize the relationship between continental drift and plate tectonics.
8.9spi. 4	Deduce plate movements as the major cause of geological events.

Interactions of Matter

8.13spi. 3	Recognize that the mass of the reactants is the same as the mass of the products, given simple chemical equations.
8.13spi. 4	Determine how temperature and concentration might affect the rate of a chemical reaction.
8.13spi. 5	Classify a reaction as exothermic or endothermic.

FOURTH NINE WEEKS

Earth Resources

8.10spi. 1	Identify factors that cause rocks to break down.
8.10spi. 2	Distinguish between renewable and nonrenewable resources.
8.10spi. 3	Identify various energy sources.
8.10spi. 4	Distinguish among sedimentary, igneous, and metamorphic rocks and interpret a simple rock cycle diagram.
8.10spi. 5	Infer that human activities may be helpful or harmful to the environment.
8.10spi. 6	Identify rocks and minerals given a table of physical properties.