

NDAA2 Fourth Grade Science Performance Level Descriptors

Novice Students

- identify changes that occur in nature.
- identify scientific tools.
- recognize a statement that is a question.
- identify an example of a solid and a liquid.
- recognize if an object is being pushed or pulled.
- identify items that create sound.
- identify an organism.
- distinguish between living and nonliving.
- identify weather.
- identify Earth's materials.
- identify a star.
- identify technology.
- identify germs.
- identify the meaning of recycling.
- identify the meaning of science.

Partially Proficient Students

- identify changes that repeat themselves in nature.
- match scientific tools to its function.
- identify scientific investigation question.
- classify objects as a solid or liquid.
- identify items attracted to magnets.
- recognize sound variations.
- match the appropriate part to the organism.
- identify the characteristics of organisms.
- recognize weather instruments.
- identify materials as man-made or from the Earth.
- identify that stars generate light.
- identify uses of technology.
- recognize the impact of germs.
- identify materials that can be recycled.
- identify that everyone uses science.

NDAA2 Fourth Grade Science Performance Level Descriptors

Proficient Students

- identify a cycle in nature.
- identify an appropriate tool for scientific investigations.
- recognize an appropriate question for a given scientific investigation.
- identify the properties of a solid/liquid.
- identify the characteristics of items that are attracted to magnets.
- identify sources of vibration.
- identify a given part of the organism.
- identify the needs of living things.
- recognize weather instruments and their uses.
- identify uses for Earth's materials.
- recognize that the sun is a star.
- identify problems that can be solved using technology.
- identify ways to prevent the spread of germs.
- identify ways recycling helps the environment.
- identify ways that science is used in one's daily life.

Advanced Proficient Students

- identify the stages of a specific cycle.
- identify tools to record scientific observations.
- identify ways to record information collected in a scientific investigation.
- identify a difference between a solid and a liquid.
- recognize that magnets can repel or attract each other.
- identify that vibrations create sounds.
- identify functions of a given part of an organism.
- distinguish between needs and wants of an organism.
- recognize measurable weather conditions.
- identify properties of Earth's materials.
- identify that distance is the factor that makes the sun appear larger than other stars.
- choose appropriate technology given a situation.
- identify ways that germs spread.
- identify the differences between recycling, reusing and reducing.
- identify careers that use science.

NDAA2 Eighth Grade Science Performance Level Descriptors

Novice Students

- identify a model.
- recognize a body system.
- recognize a form found on an organism.
- identify charts, graphs & tables.
- recognize objects that require energy.
- identify an organism.
- recognize that living things are made of cells.
- recall that organisms reproduce.
- recall that temperatures affect climate.
- recognize animals that migrate or hibernate.
- identify examples of earth's resources.
- identify technology.
- recall ways that diseases can be spread.
- identify that an organism has a role in its environment.
- identify a career in science.

Partially Proficient Students

- identify a model illustrating a scientific principle.
- recognize a component in a system.
- select a function for a given form.
- identify data from a scientific investigation.
- recognize an energy source.
- recognize that organisms have unique characteristics.
- recognize living systems.
- recognize that organisms reproduce in different ways.
- identify a single factor that affects climate.
- recognize that some organisms change behaviorally with the seasons.
- define renewable and nonrenewable resources.
- identify uses of technology.
- recognize ways that prevent the spread of diseases.
- identify a predator/prey relationship in an environment.
- identify an example of accurate record keeping.

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Proficient Students

- recognize the use of a model illustrating a scientific principle.
- match a single component to the appropriate system.
- identify the relationship between form and function.
- use data from a scientific investigation.
- identify which energy source is used in a given situation.
- identify the kingdoms of life.
- recognize living systems are made of specialized cells.
- identify characteristics of reproduction.
- identify climate characteristics.
- identify an organism's behavior by seasons.
- classify Earth's resources as renewable or nonrenewable.
- choose appropriate technology given a situation.
- identify factors that affect personal health.
- identify an organism's role and its population's impact on its environment.
- identify examples of scientific reasoning.

Advanced Proficient Students

- predict a scientific principle based on a model.
- identify multiple components to the appropriate system.
- classify forms to similar functions.
- interpret data from a scientific investigation.
- identify an energy transformation.
- classify organisms into their appropriate kingdom.
- identify cells that are part of a specific system (e.g. tissues, organs and systems).
- identify characteristics of asexual and sexual reproduction.
- identify climate characteristics at different latitudes.
- predict an organism's behavior by seasons.
- identify Earth's resources as renewable or nonrenewable.
- identify ways that technology has affected society.
- recognize advancements in science that affect personal health.
- predict a change in an organism's population given a change in its environment.
- select appropriate human qualities and practices of a scientist.

NDAA2 11th Grade Science Performance Level Descriptors

Novice Students

- identify a model.
- distinguish between a system and a component.
- recognize a form.
- recognize an observation in a scientific inquiry.
- recognize properties of matter.
- recognize the motion of an object from a reference point.
- recognize examples of matter and energy.
- identify an example of a wave.
- identify a component of an electrical circuit.
- differentiate between plant and animal cells.
- recall cells contain DNA.
- recognize offspring inherit traits from parents.
- group related fossils.
- identify a geologic feature.
- identify a use of technology.
- recognize healthy food choices.
- recognize that a theory is developed from an idea.

Partially Proficient Students

- identify a model illustrating a scientific principle.
- recall a component of a system.
- select a function for a given form.
- identify a variable in a scientific inquiry.
- recognize phases of matter.
- recognize that a net force causes an object to move.
- identify an energy transfer or transformation.
- recognize the crest and the trough of a wave.
- specify between open and closed series circuits.
- identify that organisms are made up of specialized cells.
- recognize that cells divide.
- identify inherited traits.
- recognize an adaptation resulting from natural selection.
- match geologic features to physical process.
- recognize a scientific principle.
- recognize healthy lifestyle choices.
- recognize how a theory is developed.

NDAA2 11th Grade Science Performance Level Descriptors

Proficient Students

- recognize the use of a model illustrating a scientific principle.
- label the basic components of a system in equilibrium.
- identify the relationship between form and function.
- recall processes necessary to do scientific inquiry.
- group substances according to chemical and physical properties.
- recognize the components of Newton's Laws.
- recall the Law of Conservation of Matter and Energy.
- label parts of a mechanical wave.
- identify series or parallel circuits.
- identify specialized cells in an organism.
- recall that meiosis and mitosis are forms of cell reproduction.
- recognize the role of DNA resulting in inherited traits.
- recognize evidence of natural selection.
- identify physical processes that shape the Earth.
- match a scientific principle with common technologies.
- relate personal health to fitness, substance abuse, sexual activity, and nutrition.
- recognize that views and attitudes of society have influenced the development of theories over time.

Advanced Proficient Students

- predict a scientific principle based on a model.
- predict changes in the equilibrium of a system as a result of a component change.
- classify forms to similar functions.
- analyze data found in tables, charts, and graphs to formulate conclusions in a scientific inquiry.
- identify a chemical or physical change in matter.
- match the motion of an object to one of Newton's Laws of motion.
- predict outcomes of chemical and physical changes based on the Law of Conservation of Matter and Energy.
- differentiate electromagnetic and mechanical waves.
- differentiate series and parallel circuits.
- identify specialized cells in an organism and their function.
- differentiate between meiosis and mitosis.
- differentiate between dominant and recessive traits.
- relate natural selection to its evolutionary consequences.
- predict the long-term and short-term effects of physical processes on the environment.
- predict a use for a scientific technology.
- recognize advancements in science that affect personal health.
- identify views and attitudes of society that have influenced the development of theories.