

Florida Department of Education

**COURSE DESCRIPTION - GRADES 9-12
SUGGESTED COURSE PERFORMANCE OBJECTIVES**

Subject Area:	Academics: Subject Areas
Course Number:	7920010
Course Title:	Science: 9-12
Previous Course Title:	Applied Science
Credit:	Multiple

- A. Major Concepts/Content.** The purpose of this course is to provide a general knowledge of the concepts of life science, physical science, and earth science to enable students with disabilities to function at their highest levels and prepare to participate effectively in post-school adult living and the world of work.

The content should include, but not be limited to, the following:

- life science:
 - plants and animals
 - human growth and development
- physical science:
 - matter and energy
 - force and motion
- earth science:
 - climate and weather
 - the solar system
- application of scientific knowledge

This course shall integrate the Sunshine State Standards and Goal 3 Student Performance Standards of the Florida System of School Improvement and Accountability as appropriate to the individual student and to the content and processes of the subject matter. Students with disabilities shall:

- CL.A.1.In.1 complete specified Sunshine State Standards with modifications as appropriate for the individual student.
- CL.A.1.Su.1 complete specified Sunshine State Standards with modifications and guidance and support as appropriate for the individual student.

- B. Special Note.** This entire course may not be mastered in one year. A student may earn multiple credits in this course. The particular course requirements that the student should master to earn each credit must be specified on an individual basis.

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Multiple credits may be earned sequentially or simultaneously.

This course is primarily designed for students functioning at independent and supported levels. Students functioning at independent levels are generally capable of working and living independently and may need occasional assistance. Students functioning at supported levels are generally capable of living and working with ongoing supervision and support. Three levels of functioning, independent, supported, and participatory, have been designated to provide a way to differentiate benchmarks and course requirements for students with diverse abilities. Individual students may function at one level across all areas, or at several different levels, depending on the requirements of the situation.

This course may also be used to accommodate the wide range of abilities within the population of students with disabilities. The particular benchmark for a course requirement should be selected for individual students based on their levels of functioning and their desired post-school outcomes for adult living and employment specified in the Transition Individual Educational Plan.

The level of functioning should be determined for each course requirement or performance objective. The key to determining the level is consideration of the amount of additional support and assistance that *must* be provided for the student. This support and assistance must be *beyond* what is typically provided for nondisabled individuals in performing the same type of behaviors or tasks. The following guidelines may be used to assist this process.

- For requirements/objectives mastered at the Independent Level, students are expected to be able to perform the behaviors identified for each benchmark *on their own* once they have mastered the knowledge and skills.
- For requirements/objectives mastered at the Supported Level, mastery should be determined with consideration of the amount and type of *guidance and support* necessary to the student to perform the behavior. This generally consists of some type of prompting or supervision.
 - Physical prompt—a touch, pointing, or other type of gesture as a reminder
 - Verbal prompt—a sound, word, phrase, or sentence as a reminder
 - Visual prompt—color-coding, icons, symbols, or pictures as a reminder
 - Assistive technology—an alarm, an electronic tool
 - Supervision—from occasional inspection to continuous observation
- For requirements/objectives mastered at the Participatory Level, mastery should be determined with consideration of the amount and type of *assistance* necessary to the student to participate in the performance of the behavior.
 - Physical assistance—from a person, such as full physical manipulation or partial movement assistance
 - Assistive technology—full: props, bolsters, pads, electric wheelchair;
partial: straps, lapboards, adapted utensils

The performance objectives are designed to provide teachers with ideas for short-term objectives for instructional planning. The performance objectives are not intended to be exhaustive of all the possible short-term objectives a student may need in this multiple credit course. Other objectives should be added as required by

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an individual student.

Instructional activities involving practical applications of course requirements may occur in naturalistic settings in home, school, and community for the purposes of practice, generalization, and maintenance of skills. These applications may require that the student acquire the knowledge and skills involved with the use of related technology, tools, and equipment. Laboratory activities including the use of the scientific method, measurement, laboratory apparatus, and safety are an integral part of this course.

- C. Course Requirements.** These requirements include, but are not limited to, the benchmarks from the Sunshine State Standards for Special Diploma that are most relevant to this course. Benchmarks correlated with a specific course requirement may also be addressed by other course requirements as appropriate. Some requirements in this course are not fully addressed in the Sunshine State Standards for Special Diploma.

After successfully completing this course, the student will:

- 1. Use the scientific method and general science skills to solve problems (e.g., making observations, using scientific tools, conducting experiments, using safe procedures).**

CL.B.4.In.1 identify problems and examine alternative solutions.

CL.B.4.In.2 implement solutions to problems and evaluate effectiveness.

CL.B.4.Su.1 identify problems found in functional tasks—with guidance and support.

CL.B.4.Su.2 implement solutions to problems found in functional tasks—with guidance and support.

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt

___ verbal prompt

___ visual prompt

___ assistive technology

___ supervision

___ other: _____

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- 1.1. Identify characteristics of major elements of the scientific process. (CL.B.4.In.1, CL.B.4.Su.1)

Specify: ___ using methods and tools of observation and measurement

___ experimenting and reproducing results

___ controlling conditions

___ testing hypotheses and investigating

___ determining cause and effect and making inferences

___ drawing conclusions based on observations

___ other: _____

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- 1.2. Identify basic apparatus and equipment used for scientific study.
Specify: _____ beakers, test tubes, pipette
_____ microscope, magnifying glass, thermometer
_____ scales, other measurement devices
_____ other: _____
- 1.3. Identify and follow safety practices and considerations needed when conducting scientific activities.
Specify: _____ wear protective goggles, clothing, gloves
_____ use and store chemicals appropriately
_____ handle materials and animals appropriately
_____ use equipment, including gas and electrical devices, safely
_____ identify hazards and potentially dangerous situations—
flame, fumes, broken glass, poisons
_____ respond effectively to emergency situations
_____ other: _____
- 1.4. *Select correct tools and equipment for assigned task. (Social and Personal C 24: IV)*
- 1.5. *Use proper care and maintenance of tools and materials. (Social and Personal C 29: V)*
- 1.6. *Use safety equipment and procedures when necessary. (Social and Personal C 32: VI)*
- 1.7. *Safely handle potentially harmful objects and materials (Social and Personal D 34: IV)*
- 1.8. *Identify procedures for seeking assistance in unfamiliar or emergency situations. (Social and Personal D 35: V)*
- 1.9. *Demonstrate understanding of safety and warning signs in the environment. (Social and Personal D 37: V)*
- 1.10. Follow a systematic approach using scientific concepts and processes to solve problems in accomplishing functional tasks (e.g., predicting what will happen if I put too much air in a bicycle tire, testing which type of battery will last longer in a portable CD player). (CL.B.4.In.1, CL.B.4.In.2, CL.B.4.Su.1, CL.B.4.Su.2)
Specify: _____ determine the question to be answered
_____ select subjects, conditions, and treatments
_____ make reasonable hypothesis
_____ apply treatment or procedures to obtain result
_____ check results for accuracy and reliability
_____ explain results
_____ other: _____

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2. Use skills to locate information and present ideas regarding knowledge about science and its application to personal life and the community.

- CL.B.1.In.1 identify and locate oral, print, or visual information for specified purposes.
- CL.B.1.In.2 interpret and use oral, print, or visual information for specified purposes.
- CL.B.1.In.3 organize and retrieve oral, print, or visual information for specified purposes.
- CL.B.1.Su.1 identify and locate oral, print, or visual information to accomplish functional tasks—with guidance and support.
- CL.B.1.Su.2 interpret and use oral, print, or visual information to accomplish functional tasks—with guidance and support.
- CL.B.2.In.1 prepare oral, written, or visual information for expression or presentation.
- CL.B.2.In.2 express oral, written, or visual information for specified purposes.
- CL.B.2.Su.1 prepare oral, written, or visual information for expression—with guidance and support.
- CL.B.2.Su.2 express oral, written, or visual information to accomplish functional tasks—with guidance and support.

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
___ assistive technology ___ supervision ___ other: _____

2.1. Identify general sources of information about science that are reliable and accurate to complete school assignments and functional tasks (e.g., looking up information about a type of fish, gathering information about local recycling efforts, investigating public issues). (CL.B.1.In.1, CL.B.1.Su.1)

Specify: ___ newspapers ___ magazines ___ television
 ___ radio ___ people ___ Internet
 ___ other: _____

2.2. Identify types of information related to science in reference books or resources on science (e.g., descriptions and diagrams of scientific concepts, results of research, definitions). (CL.B.1.In.1, CL.B.1.Su.1)

Specify: ___ textbooks ___ encyclopedias ___ reference books
 ___ other: _____

2.3. Locate and use information related to science from various types of books and resources. (CL.B.1.In.1, CL.B.1.In.2, CL.B.1.Su.1, CL.B.1.Su.2)

Specify: ___ newspapers ___ magazines ___ television
 ___ radio ___ people ___ Internet
 ___ textbooks ___ encyclopedias ___ reference books
 ___ other: _____

2.4. *Identify the appropriate source to obtain information (e.g., dictionary, encyclopedia, atlas) on a specific topic. (Reading F 28: VII)*

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2.5. Evaluate the correctness and accuracy of information in materials used in science (e.g., Does this information match other sources? Does this information appear to make sense?). (CL.B.1.In.2, CL.B.1.Su.2)

2.6. *Distinguish between facts and opinions in paragraphs. (Reading E 21: VII)*

2.7. Use strategies to relate and integrate new information about science with own previous experiences. (CL.B.1.In.2, CL.B.1.Su.2)

Specify: _____ identify common elements or events
_____ distinguish what is different
_____ relate new information to concepts already understood
_____ other: _____

2.8. *Determine a logical conclusion or generalization for a paragraph or passage. (Reading D 18: VII)*

2.9. Communicate information about science in an accurate, complete, and objective manner using written or verbal formats (e.g., tell another what you have learned, write a report for school, write a summary describing a field trip, write a description of the results of an experiment for the school's webpage). (CL.B.2.In.1, CL.B.2.Su.1)

Specify: _____ notes _____ summaries _____ reports
_____ other: _____

2.10. Document activities or experiments performed accurately to accomplish functional tasks (e.g., keep an accurate record of observations, keep an accurate journal, keep track of daily measurements). (CL.B.2.In.1, CL.B.2.Su.1)

2.11. Organize information about science based on intended use. (CL.B.1.In.3)

Specify: _____ by date _____ by classification
_____ by categories _____ by topics or events
_____ by characteristics _____ by size
_____ other: _____

3. Demonstrate knowledge of plants and animals (e.g., interdependency of plants and animals, interaction with environment).

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
___ assistive technology ___ supervision ___ other: _____

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3.1. Identify major characteristics of living organisms.

- Specify: _____ basic needs and habitats—relation to environment
_____ major functions—birth, growth and development, reproduction, and death
_____ major structures—cells, tissues, organs, and systems
_____ major groups and classifications—species, phylum, class
_____ other: _____

Plant Life

3.2. Identify characteristics of plant life.

- Specify: _____ basic needs—air, water, light, and habitats
_____ parts of a plant—cell, root, stem, leaf, flower, cone, fruit, seed
_____ major types of plants—flowering, leafy, pine, cactus
_____ characteristics and types of plants in the local environment
_____ other: _____

3.3. Identify events in the life cycle of a plant and the process of plant reproduction.

3.4. Identify ways that humans or animals use plants for food, medicines, clothing, tools, building materials, and other types of products.

3.5. Identify how plants adapt structurally to their environment, including the effects of variations in the amount of water, heat, and light on plant growth.

3.6. Identify various structures and reactions of plants for survival (e.g., thorns, fold-up leaves, protective odor, bitter taste).

3.7. Identify common plants that are poisonous to humans and what to do when exposed to such plants (e.g., poinsettia, poison ivy, mistletoe, poison oak, poison sumac, toadstool, oleander).

Animal Life

3.8. Identify characteristics of animal life.

- Specify: _____ basic needs—air, water, food
_____ habitats—water, land
_____ parts of an animal—cells, tissues, organs, systems
_____ major types of animals—vertebrates and invertebrates
 vertebrates—mammals, birds, reptiles, amphibians, fish
 invertebrates—insects, sponges, corals, amoebae, tapeworms
_____ characteristics and types of animals in the local environment
_____ other: _____

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- 3.9. Identify events in the life cycle of an animal and the process of animal reproduction.
Specify: _____ reproduction processes—cell division, eggs, live births
 _____ developmental stages
 _____ metamorphosis
 _____ other: _____
- 3.10. Identify ways that humans use animals for food, medicines, clothing, work, and pets.
- 3.11. Identify how animals are adapted to their environments (e.g., white fur on polar bears, camouflage color on snakes).
- 3.12. Identify various structures and reactions of animals for survival (e.g., coloring, poison, speed, teeth, horns, barbs, protective odor, bitter taste).
- 3.13. Identify common animals that may be dangerous to humans and what to do when exposed to such animals (e.g., poisonous snakes, insects, or sea life; animals with rabies or other diseases).
- 3.14. Identify ways that changes in the environment due to human activity can negatively impact animal life.
- 3.15. Demonstrate awareness that some animals are endangered and of ways that humans can protect them (e.g., sea turtles, spotted owls).

Aquatic Life

- 3.16. Identify characteristics of aquatic life.
Specify: _____ saltwater and freshwater habitats
 _____ mammals, fish, and other aquatic animals
 _____ algae, kelp, seaweed, and other aquatic plants
 _____ types of aquatic life and environments in the local environment
 _____ other: _____
- 3.17. Identify ways that humans use aquatic life and environments for food, medicines, other products, recreation, and pets.
- 3.18. Identify ways that human activity can negatively impact aquatic life.
- 4. Demonstrate knowledge of growth and development of human body systems and their functions relevant to personal needs (e.g., adolescence and adulthood, disease, reproduction, nutrition).**

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
___ assistive technology ___ supervision ___ other: _____

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- 4.1. Demonstrate knowledge of major body systems including their structures and functions (e.g., cells, tissues, and organs).
Specify: _____ circulatory _____ respiratory _____ digestive
 _____ excretory _____ reproductive _____ nervous
 _____ skeletal _____ muscular _____ other: _____
- 4.2. *Identify body parts and gender. (Social and Personal D 39: III)*
- 4.3. Demonstrate knowledge of how the various systems of the body are related to each other.
- 4.4. Demonstrate knowledge of concepts of human growth and maturation.
Specify: _____ major stages of growth—infancy, childhood, adolescence, adulthood, old age
 _____ physical, mental, and emotional changes of humans
 _____ other: _____
- 4.5. Demonstrate knowledge of concepts of heredity and reproduction.
Specify: _____ development of the reproductive system—males and females
 _____ process of fertilization and stages of pregnancy
 _____ birth
 _____ individual responsibilities in family planning
 _____ risks of diseases and tobacco, alcohol, and other drug abuse to the fetus
 _____ knowledge of heredity; i.e., characteristics that are inherited from parents
 _____ other: _____
- 4.6. *Identify body functions and recognize personal responsibility for human sexuality. (Social and Personal E 44: V)*
- 4.7. Identify basic physical needs of the human body, including food, air, shelter, exercise, and rest. (IF.A.1.In.2, IF.A.1.Su.2)
- 4.8. Identify the effects of various diseases on systems of the human body.
(IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ common communicable diseases and symptoms
 _____ life-threatening diseases—cancer, heart disease, emphysema
 _____ sexually transmitted diseases, including HIV/AIDs
 _____ other: _____
- 4.9. Demonstrate knowledge of the effects of nutrition on systems of the human body.
(IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ using the Food Guide Pyramid for a balanced diet
 _____ identifying common effects of malnutrition
 _____ distinguishing nutrient-dense from nutrient-poor foods
 _____ identifying the impact of emotional problems on nutrition
 _____ other: _____
- 4.10. *Discriminate food items from nonfood items. (Social and Personal A 10: III)*

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- 4.11. Demonstrate awareness of the effects of drugs and other chemicals on systems of the human body. (IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ use of prescription and over-the-counter drugs
 _____ allergic drug reactions
 _____ impact of tobacco and alcohol
 _____ relation of emotional and social problems with alcohol and other drug abuse
 _____ other: _____
- 4.12. *Recognize the health risks associated with substance abuse. (Social and Personal E 42: V)*
- 4.13. *Identify appropriate storage and use of medications. (Social and Personal E 41: V)*
- 4.14. *Recognize those illnesses and injuries which require a doctor's or dentist's attention. (Social and Personal E 40: IV)*
- 4.15. Demonstrate knowledge of the effects of exercise and rest on systems of the human body. (IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ benefits of a regular exercise program—weight control, stamina
 _____ types of exercise—aerobic, strength-conditioning
 _____ use of exercise to relieve stress
 _____ importance of sleep and rest in maintaining body's functions
 _____ impact of chronic fatigue on body's functions
 _____ other: _____
- 4.16. Demonstrate knowledge of the effects of emotional and social factors on systems of the human body. (IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ effects of positive outlook and social relationships on health and illness
 _____ negative impacts of emotional and social factors—eating disorders, digestive disorders, addictions
 _____ impact of positive and negative role models and peer pressure
 _____ other: _____
- 4.17. Demonstrate knowledge of the importance of maintaining good personal hygiene. (IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ acceptable personal hygiene habits
 _____ acceptable personal appearance
 _____ importance to physical health
 _____ importance to social relationships
 _____ other: _____
- 4.18. *Demonstrate appropriate behavior while coughing, sneezing, or blowing nose. (Social and Personal D 38: III)*
- 4.19. *Identify appropriate use of personal hygiene products (e.g., deodorant, shampoo, toothpaste). (Social and Personal A 6: IV).*

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- 4.20. Demonstrate awareness of first aid techniques. (IF.A.1.In.2, IF.A.1.Su.2)
Specify: _____ stopping bleeding and applying bandages
_____ taking care of burns, poisons, and wounds
_____ using cardiopulmonary resuscitation (CPR)
_____ getting help when needed
_____ other: _____
- 4.21. *Demonstrate or indicate knowledge of basic first aid principles.*
(*Social and Personal E 45: VI*)
- 4.22. Identify sources of medical assistance and emergency help (e.g., doctors, dentists, nutritionists, hospital, clinic, support groups, fitness centers, health care agencies, rehabilitation centers, 911, police, fire department, emergency centers). (IF.A.2.In.1, IF.A.2.Su.1)

5. Demonstrate knowledge of the ecology of natural resources and the importance of protection of the natural systems on Earth (e.g., recycling, human responsibility for the environment).

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
___ assistive technology ___ supervision ___ other: _____

- 5.1. Identify characteristics of the physical environment of the Earth.
Specify: _____ composition of land—soil, sand, rocks, minerals
_____ composition of the ocean and other bodies of water
_____ physical features of the earth’s surface—topography of land and sea
_____ forces that change the surface of the earth—weather, man, earthquake, erosion
_____ other: _____
- 5.2. Demonstrate knowledge of the water cycle and its impact on water resources (e.g., relation to climatic patterns, renewal of water supplies).
- 5.3. Identify the importance of the food chain and the global food web and their impact on resources.
Specify: _____ producers, consumers, decomposers
_____ effects of human activity on food chains
_____ other: _____
- 5.4. Demonstrate knowledge of how the surface of the Earth changes.
Specify: _____ slow processes—erosion
_____ fast processes—earthquakes, landslides
_____ other: _____
- 5.5. Demonstrate knowledge of the effects of human activity on various habitats, the physical environment, and the need for environmental protection.

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- 5.6. Demonstrate knowledge of major types of renewable and nonrenewable natural resources and the need for conservation measures.
- 5.7. Demonstrate knowledge of major types of pollution and related means of prevention or control.
- 5.8. Identify techniques and benefits of recycling various kinds of materials.
Specify: _____ paper _____ glass _____ cans _____ plastic
 _____ other: _____
- 5.9. Identify techniques and legal requirements related to the disposal of certain hazardous waste materials.
Specify: _____ oil and gas _____ cleaning products _____ paints and polishes
 _____ batteries _____ fluorescent bulbs _____ aerosol cans
 _____ other _____

6. Demonstrate knowledge of the application of concepts of matter and energy, force, and motion as they relate to daily living and the workplace (e.g., properties of matter; forms of energy; relationships among energy, force, and work; simple machines; gravity).

Indicate guidance and support necessary for mastery at supported level:

- ___ physical prompt ___ verbal prompt ___ visual prompt
___ assistive technology ___ supervision ___ other: _____
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- 6.1. Demonstrate knowledge of different states of matter—solids, liquids, and gases.
- 6.2. Demonstrate knowledge of types of changes in states of matter and how these changes occur and relate to loss of heat (energy).
Specify: _____ physical—breaking down, freezing, boiling, vaporizing
 _____ chemical—rust, decomposing, burning
- 6.3. Identify the concepts of and relationships among energy, force, and work.
- 6.4. Identify characteristics of the major forms of energy—sound, heat, mechanical.
- 6.5. Demonstrate knowledge of different sources of energy and the forces that are derived by them (e.g., solar, water, wind, nuclear, fossil fuels).
- 6.6. Demonstrate knowledge of the importance of conservation of energy resources.

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- 6.7. Demonstrate knowledge of electricity as a type of energy.
Specify: _____ static and current electricity
 _____ types of circuits—series and parallel
 _____ conductors and nonconductors of electricity
 _____ uses of electricity in daily activities and work
 _____ sources of electrical power—circuits, batteries
 _____ potential safety hazards—overloaded circuits, exposed wires, fire
 _____ other: _____
- 6.8. Demonstrate knowledge of the properties of magnetism.
Specify: _____ magnetic and nonmagnetic materials
 _____ uses of magnetism in daily activities and work
 _____ other: _____
- 6.9. Demonstrate knowledge of the properties of gravity.
Specify: _____ nature of gravity on earth and in space
 _____ effects of gravity
 _____ other: _____
- 6.10. Demonstrate knowledge of simple machines and their relation to work.
Specify: _____ concept and purpose
 _____ types of simple machines—lever, pulley, inclined plane
 _____ uses of simple machines in daily activities and work
 _____ other: _____
- 6.11. Demonstrate knowledge of the effects of force on motion.
Specify: _____ friction, gravity, and inertia
 _____ identify types of movement used for work—pushing, pulling, lifting
 _____ other: _____
- 6.12. Demonstrate knowledge of the concept of light.
Specify: _____ properties of light including the color spectrum
 _____ natural and artificial light
 _____ transparent, translucent, opaque
 _____ how the eye uses light to see
 _____ potential hazards of bright lights
 _____ other: _____
- 6.13. Demonstrate knowledge of the concept of sound.
Specify: _____ properties of sound waves and vibration
 _____ how the ear uses sound to hear
 _____ potential hazards of loud noises
 _____ other: _____

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7. Demonstrate knowledge of the solar system in relation to the environment and daily living (e.g., relationships among planets and stars, time, Earth’s place in the universe).

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
 ___ assistive technology ___ supervision ___ other: _____

7.1. Demonstrate knowledge of the Earth and its place in the universe.

Specify: ___ sun, moon, and Earth
 ___ other major celestial bodies—planets, stars, galaxies
 ___ functions of manmade satellites and rockets
 ___ other: _____

7.2. Demonstrate knowledge of the Earth’s movement in the solar system, including its effect on day, night, month, year, and seasons.

7.3. Demonstrate knowledge of the Earth’s relation to the sun, including the sun’s effect on seasonal changes in the weather by providing heat and light.

7.4. Demonstrate knowledge of the cause of the eclipse of the sun and moon.

7.5. Demonstrate knowledge of current activities related to exploration and investigation of space and their impact on life on Earth.

8. Demonstrate knowledge of climate and weather patterns and predictions relevant to daily living (e.g., weather measurements, preparation for storms).

IF.B.2.In.3 respond effectively to unexpected events and potentially harmful situations.

IF.B.2.Su.3 respond effectively to unexpected events and potentially harmful situations—
 with guidance and support.

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
 ___ assistive technology ___ supervision ___ other: _____

8.1. Demonstrate knowledge of characteristics of major types of climate (e.g., tropical, moderate, arctic).

8.2. Demonstrate knowledge of characteristics of major types of weather.

Specify: ___ temperature, precipitation, wind, clouds
 ___ seasonal changes in the weather
 ___ other: _____

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8.3. Identify methods used to measure the weather and how that information is used.

Specify: _____ temperature, precipitation, wind
_____ meteorology and weather predictions
_____ other: _____

8.4. Demonstrate knowledge of the impact of climate on human activity (e.g., economic activity, social activity, leisure activity).

8.5. Demonstrate knowledge of the impact of weather on humans.

Specify: _____ need to select suitable clothing based on the weather
_____ effects on moods and emotions
_____ effects on activities
_____ effects on economy
_____ other: _____

8.6. Identify characteristics of types of adverse weather.

Specify: _____ thunderstorms, tornadoes, hurricanes, floods, blizzards
_____ other: _____

8.7. Identify appropriate responses to adverse weather conditions.

Specify: _____ heeding warnings, evacuation, following recommended procedures
_____ other: _____

8.8. *Recognize dangerous situations in the environment. (Social and Personal D 33: III)*

9. Demonstrate knowledge of the application of scientific concepts and processes in personal life, the community, and the world of work (e.g., use of senses and tools to obtain information, importance of accuracy, understanding patterns of events).

CL.C.1.In.1 use knowledge of occupations and characteristics of the workplace in making career choices.

CL.C.1.Su.1 recognize expectations of occupations and characteristics of the workplace in making career choices—with guidance and support.

Indicate guidance and support necessary for mastery at supported level:

___ physical prompt ___ verbal prompt ___ visual prompt
___ assistive technology ___ supervision ___ other: _____

Science Occupations

9.1. Identify general characteristics of the career cluster related to science (e.g., technical knowledge and expertise, related support positions). (CL.C.1.In.1, CL.C.1.Su.1)

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- 9.2. Identify specific jobs associated with the career cluster related to science (e.g., health services, agriculture, horticulture, meteorology, engineering). (CL.C.1.In.1, CL.C.1.Su.1)
Specify: _____ entry level _____ technical support positions
 _____ advanced level _____ professional positions
 _____ other: _____
- 9.3. Identify advantages and disadvantages of specified occupations in career cluster related to science (e.g., advantages—jobs are widely available, many different levels of jobs are available; disadvantages—many positions require extensive training). (CL.C.1.In.1, CL.C.1.Su.1)
- 9.4. Identify interests and skills generally needed to fulfill performance requirements for specific jobs within the career cluster related to science (e.g., problem solving, making careful observations). (CL.C.1.In.1, CL.C.1.Su.1)
- 9.5. Identify trends in the local job market for specific jobs within the career cluster related to science (e.g., involvement with technology). (CL.C.1.In.1, CL.C.1.Su.1)
- 9.6. Identify educational and training requirements for jobs within the career cluster related to science (e.g., technical training, degree programs, on-the-job training). (CL.C.1.In.1, CL.C.1.Su.1)
- 9.7. Identify career advancement opportunities for jobs within the career cluster related to science. (CL.C.1.In.1, CL.C.1.Su.1)

Using Science in Everyday Life

- 9.8. Demonstrate knowledge that scientific study is one way of answering questions and explaining the natural world.
- 9.9. Demonstrate knowledge that science and technology have improved many aspects of daily living, including transportation, health, sanitation, and communication.
- 9.10. Demonstrate knowledge that changes in scientific knowledge occur as a result of investigation, experimentation, and chance events.
- 9.11. Demonstrate knowledge that natural events are predictable and occur in patterns (e.g., tides, seasons of the year, life cycle).
- 9.12. Identify situations in daily life when scientific laws and principles are applied (e.g., laws of force and motion—magnetism, velocity, aerodynamics, gravity).