Science K-5
Standard Course of Study and
Extended Content Standards with Demonstrators

Subject: Life Science	**Grade Level:** K

Competency Goal 1: Observe and describe the similarities and differences among animals including: structure, growth, changes, movement

Objectives:

1.01 Observe and describe the similarities and differences among animals including: Structure, Growth, Changes, Movement
1.02 Observe how animals interact with their surroundings.
1.03 Observe the behaviors of several common animals.
1.04 Demonstrate how to care for a variety of animals.
1.05 Observe the similarities of humans to other animals including: Basic needs, Growth and change, Movement

Extended Standard: Observe and communicate similarities and differences among animals Development (baby vs. mature); Structure and movement (4 legs vs. 2 legs, etc.); Basic needs (food, water, air, etc.)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of similarities and differences in animals (i.e., development, structure and movement, basic needs, etc.)	• Demonstrate knowledge of baby animals and mature animals • Demonstrate knowledge of basic needs of animals • Demonstrate knowledge of animals by structure and movement	• Demonstrate awareness of animals vs. non-animals • Demonstrate awareness of similarities among groups of animals

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade K, Comp 1 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Match animals to environment such as horse to pasture, bird to sky, fish to water, match food to animals • Match pictures/photos of animals and babies • Match animals to mode of movement (swim, run, fly, etc.) • Identify 1-2 similarities of humans and other animals (food, water, etc.) • Identify differences of needs of humans and other animals • Puts pictures in order that demonstrate growth sequence • Identify animal by feature(s) or attribute(s) (what flies? – bird, etc.) • Describe animal by feature(s) or attribute(s) • Produce drawing or representation that has two or more characteristics of a specific animal • Choose pictures of basic needs – relate their needs to those of animals (using pictures ; food, water, shelter) • Discriminate and select appropriate animal food from choices of various foods (human vs. fish vs. rabbit)	• Discriminate or classify animals by features: 2 legs, 4 legs, wings, fins, etc. • Match babies and mothers, then name • Indicate specific animal in response to picture book or tape (Activate appropriate switch, Voice, touch) • Indicate appropriate food for class pet when teacher says "it's time to feed the___"; (goes to get appropriate food; eye gazes toward food) • Indicate food and water resources to show basic needs of animals while participating in community based instruction to farm • Indicate food source for specific animal(s) (while on picnic, with food on ground, notes ants converging on food) • Listen to a story book and activates switch (that produces animal sound) labeled with animal photo - upon hearing or seeing animal in book • Sort animals by structure (body) and how they move	• Upon repeated exposure to multiple animal coats, demonstrates preference for specific fur or coat (tactile display, multiple animals) • Discriminate stuffed animal vs. living animal (at fair, on farm, in class, etc.) • Find an animal when given choice of animal vs. other object (vs. spoon, vs. plant, vs. stuffed animal) • Participate in care of animals (teacher draws attention to similarities between basic needs of self and animals--water, food, shelter) • Watch animal/class pet approach food source) connection between food and animal behavior) • Demonstrate awareness of an animal while teacher reads a book with pictures of animals (responds to, gestures, hits switch)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** K

Competency Goal 2: Will make observations and build an understanding of weather concepts

Objectives: 2.01 Observe and report daily weather changes throughout the year.
2.02 Identify different weather features including: Precipitation, Wind, Temperature, Cloud cover
2.03 Identify types of precipitation, changes in wind, force, direction and sky conditions.
2.04 Observe and determine the effects of weather on human activities.
2.05 Use common tools to measure weather.

Extended Standard: Explore, observe and communicate daily weather and its effects on human activities

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of weather concepts • Demonstrate understanding of appropriate apparel for various weather conditions	• Demonstrate knowledge of various weather conditions. • Demonstrate knowledge of appropriate apparel for various weather conditions	• Demonstrate awareness of various weather conditions • Demonstrate awareness of physical comfort dependent on weather conditions

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade K, Comp 2 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Match pictures of various weather conditions to existing weather • In daily morning group, indicate weather conditions and identifies associated weather symbol for display • Show photographs of children dressed for various types of weather- match with illustrations of the weather • Match pictures of weather with photos • Dress doll or bear for different types of weather • Select weather-related activities (beach, picnic, sledding, etc.) that match clothing of figures in felt board/magnetic stories or interactive computer books (sunny day, rainy, snowy) • Identify clothing (gloves, scarf) for seasonal figures (snowman) • When presented with a choice board of activities for play time, recognize and remove outside activities that cannot be done on rainy day	• Match pictures of appropriate apparel to weather conditions • Indicate verbally or with pictures specific weather conditions (rain, snow, sunny) • Indicate cold or hot (gesture for cold or hot, point to coat, use word, etc.) to teacher as a result of weather condition • Follow first-then schedule to demonstrate receptive understanding of put on sunscreen before going outside or put on coat before going outside • When presented with weather condition and prompted to pick up weather symbol ('find sunny'), will place on weather display	• Indicate cold with gesture in response to own body temperature • Indicate hot with gesture in response to own body temperature • Indicate desire for clothing or object associated with physical comfort due to weather condition (leans toward ice cube in teacher's hand on hot day, gestures for coat in cool conditions, gestures to take off sweater, reaches for sunglasses, etc.) • Gesture toward window when teacher notes weather conditions

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Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** K

Competency Goal 3: Make observations and build an understanding of the properties of common objects

Objectives: 3.01 Observe and describe the properties of different kinds of objects (clay, wood, cloth, paper, other) and how they are used.
3.02 Develop and use a vocabulary associated with the properties of materials: Color, Size, Shape, Texture
3.03 Describe how objects look, feel, smell, taste, and sound using their own senses.
3.04 Observe that objects can be described and sorted by their properties.
3.05 Identify some common objects and organisms that are considered to be natural resources in our world.

Extended Standard: Explore, observe, and communicate properties of common objects -Use of senses to describe and sort by properties (characteristics: texture, color, shape, size, smell, sound) in common objects in nature (e.g., sand, soil, water, air)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of properties of common objects	• Demonstrate knowledge through observation of properties of common objects	• Demonstrate awareness through exploration of properties of common objects

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade K, Comp 3 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Finds the item that represents a property when teacher asks, "Find the object that is ____ (rough, smooth, etc.) • Given a variety of natural objects of the same type (polished stones vs. brittle rocks vs. jagged rocks OR cotton vs. lamb's ear leaf vs. cactus, OR sand, clay, composted soil, mud, etc.) identify differing properties of texture (soft, hard, smooth, rough, sharp, slimy, shiny, dull, etc.) • Given a variety of natural objects of the same type (variety of leaves, variety of rocks, etc.), identify property of shape (round, long, short, corners, thick, thin, etc.) • Given variety of liquid options (salty water, fresh water, mud, oil, etc.), identify properties (clarity, thickness, ability to support floating objects) • When presented with natural objects (leaves, rocks, water, sand, ice, wood, etc.) placed into a container and shaken, identify which ones make noise (record on object map/chart for loud noise vs. soft noise vs. no noise) • Given a choice of up to 5 attributes that represent properties of natural objects and at least one distracter (sharp, wet, dry, hard, car), will choose 3 attributes that describe the object	• Given a variety of natural objects of the same type, sorts objects by color (green leaves, yellow leaves, red leaves) to a chart, color map, or set of containers (may retrieve items on nature walk) • Given a variety of natural objects of the same type, sorts objects by shape (maple leaves vs. birch leaves with template) • Given a variety of natural objects of the same type, sorts objects by size (big sticks vs. twigs, big pine cones vs. little pines cones)	• Activate switch to turn on fan/air moving device (hair dryer) in response to direction "Make air blow" • Activate switch or button to produce running water (faucet, water fountain) • Given a choice of two bins (sand and water) and told to find the water, indicate (puts hand in) water

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Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical Science	**Grade Level:** K

Competency Goal 4: Use appropriate tools and measurements to increase their ability to describe their world

Objectives: 4.01 Describe how tools can be used to make comparisons.
4.02 Observe and describe how various tools and units of measure are useful: Scissors, Pencils, Crayons, Paper clips, Hammers
4.03 Use nonstandard units of measure to describe and compare objects.
4.04 Demonstrate the use of standard units of measure and compare with nonstandard units of measure. (Teacher demonstration)
4.05 Demonstrate that standard units of measure produce more consistent results than nonstandard units, allowing information to be shared.(Teacher demonstration)

Extended Standard: Explore, observe, and communicate uses of nonstandard and standard units of measure

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of use of appropriate tools of measurement	• Demonstrate knowledge of appropriate tools of measurement through exploration	• Demonstrate awareness of appropriate tools of measurement through exploration

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Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade K, Comp 4 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Use non-standard tools of measurement to identify length-measure room/table by counting using baseball bat, paper clips, pencils, sea shell • Identify cup as tool to measure food, ruler or yardstick as tool to measure things in room • Use balance/scale to identify heavy/light • Cut lengths of string to compare length of body parts, large and small objects, etc. • Identify thermometer at window when teacher asks what the temperature is • Look at timer to determine end of task • When given two different lengths of string and an object matching in length to one segment of string, identify which one is the same length • Identify ruler when teacher asks 'how long' an item is • Identify scale when teacher asks to see 'how heavy' an item is	• When pouring liquid, indicate need for cup or spoon instead of ruler or thermometer to measure • Stop lining up paper clips at end of book's length • Place non-standard units of weight measure (marbles) on empty side of scale • When presented with the need to pour/measure in a cooking activity and presented with a cooking spoon and a measuring spoon, choose measuring spoon • Indicate that a clock is used to tell time • Respond to bell on timer to determine end of task • Indicate ruler when teacher asks 'how long' an item is • Indicate scale when teacher asks to see 'how heavy' an item is • Indicate thermometer at window when teacher asks what the temperature is	• Fills measuring cups during cooking activities • When presented with the need to pour/measure in a cooking activity and presented with two choices - cup and block, choose cup to pour • Demonstrate awareness of bell on timer to indicate change of task • Demonstrate awareness of scale when teacher asks to see 'how heavy' an item is (eye gaze, gesture, points) • Demonstrate awareness of ruler when teacher asks 'how long' an item is (eye gaze, gesture, points) • Demonstrate awareness of a clock when teacher asks what time it is (eye gaze, gesture, point) • Demonstrate awareness of a thermometer when teacher asks what the temperature is (eye gaze, gesture, point)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Life Science	**Grade Level:** 1

Competency Goal 1: Will conduct investigations and make observations to build an understanding of the needs of living organisms

Objectives: 1.01 Investigate the needs of a variety of different plants: Air, Water, Light, Space
1.02 Investigate the needs of a variety of different animals: Air, Water, Food, Shelter, Space
1.03 Observe the ways in which humans are similar to other organisms.
1.04 Identify local environments that support the needs of common North Carolina plants and animals.
1.05 Discuss the wide variety of living things on Earth.

Extended Standard: Investigate needs of plants and animals - Air, food, water and space

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of plant and animal needs	• Demonstrate knowledge of basic needs of different animals • Demonstrate knowledge of basic needs of different plants	• Demonstrate awareness that animals have needs. • Demonstrate awareness that plants have needs

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 1, Comp 1 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Review animals and needs using class animal • Compare animal and plant (using classroom plant and animal, aquarium, pictures) • Plant the same kind of seed in a cup in various areas of the room and chart differences • Choose pictures or create drawings of animals/plants and needs (food, water etc.) create display of animal/plant corresponding needs • Identify 3-4 similarities of humans, plants and animals (food, water, shelter, warmth, air, etc.) • Identify differences of needs of humans, plants and animals • Choose pictures of what they need – relate their needs to those of animals and plants (using pictures) • Discriminate and select appropriate animal food from choices of various foods (human vs. fish vs. rabbit)	• Recognize flower from picture book by eye gaze/touch of real flower • Recognize dry soil and indicates need for water • Recognize empty water bowl for animal and indicate to add water • Indicate first-then sequence for plant care – water then seed grows (photos/pictures) • When presented with photos of animals and /or plants and needs (food, water), make poster of animal/ plant needs • Indicate appropriate care for plant when teacher says "What do we need to give the plant?" ,(goes to get water; eye gazes toward water) • Indicate food and water resources to show basic needs of animals/plants while participating in community based instruction to farm	• Participate in planting and growing plants from seed • Interact with plant and animals by demonstrating interest, care, affection, excitement • Participate in care of animals/plants (teacher draws attention to similarities between basic needs of self and animals/plants--water, food, shelter) • Observe differences in plant that has been watered vs. one that has not (eye gaze, activates switch, gestures to healthy plant)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 1

Competency Goal 2: Will make observations and use student-made rules to build an understanding of solid earth materials

Objectives: 2.01 Describe and sort a variety of earth materials based on their properties: Color, Hardness, Shape, Size
2.02 Describe rocks and other earth materials in more than one way, using student-made rules.
2.03 Observe the various components that combine to make soil.
2.04 Compare the components of soil samples from different places.
2.05 Explore where useful earth materials are found and how they are used.

Extended Standard: Develop and use student's own system to sort solid earth materials

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of solid earth material	• Demonstrate knowledge of solid earth materials	• Demonstrate awareness of properties of earth materials utilizing the senses

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 1, Comp 2 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Discriminate types of rock by color, shape, size, hardness, such as smooth rocks vs. rough • Describe earth materials (using materials & pictures or words) by attribute (red clay-soft, wet; shells – hard, large or small, sharp, etc.) • Compare earth materials by attributes (using materials & pictures, icons or words)	• When given two choices of earth materials (rock and mud) and prompted to find soft or hard, indicate correct material • Discriminate (by eye gaze, point, etc.) texture of rocks or materials (rough, smooth) • Discriminate color of rocks or materials (red clay, soil, mud) • Discriminate size of rocks or materials • Discriminate shiny rocks and crystals • Discriminate wet vs. dry earth materials • Match or sort earth materials (rocks vs. shells) • Match object to picture symbol or photo (matches rock to photo of rock)	• Indicate preference, when presented with 2 materials, for specific textures of earth materials (dirt, rock, water, shells) • When given two choices of earth materials and asked to find or touch one (rock or water), indicate correct material • When given two choices of earth materials and asked to find wet or dry (mud vs. dirt), indicate correct material

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Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical & Earth/Environmental Science	**Grade Level:** 1

Competency Goal 3: Will make observations and conduct investigations to build understanding of the properties and relationship of objects

Objectives: 3.01 Describe the differences in the properties of solids and liquids.
3.02 Investigate several ways in which objects can be described, sorted or classified.
3.03 Classify solids according to their properties: Color, Texture, Shape (ability to roll or stack), Ability to float or sink in water.
3.04 Determine the properties of liquids: Color, Ability to float or sink in water, Tendency to flow.
3.05 Observe mixtures including: Solids with solids, Liquids with liquids, Solids with liquids.

Extended Standard: Explore, observe, communicate, and investigate properties of solids, liquids and mixtures • Buoyancy (float or sink) • The ability to roll or stack • The tendency to flow *Connects with Earth/Environmental: goal includes concepts within both disciplines

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of properties of solids, liquids, and mixtures	• Demonstrate knowledge through observation of properties of solids, liquids, and mixtures	• Demonstrate awareness through exploration of properties of solids, liquids, and mixtures

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Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 1, Comp 3 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Given a variety of solid objects and water, identify which will sink or float (cork, wood, ice, rock, etc.) • Given a group of round and flat objects (paper, books, balls, marbles, cans, etc.) identify which will stack and which will roll • Given a set of materials (molasses, water, syrup, oil, glue, pudding, etc.), identify rate of flow (fast or slow) • Identify solids (jello powder/congealed jello), liquids (hot water), and mixtures (jello powder and water) in following recipe for making jello • Identify which combinations of materials creates a mixture (oil and water don't mix vs. water and salt, sugar and water, etc.) • Given a mixture of chex cereal/pretzels/cheese crackers and 5 separate containers of materials (chex, marshmallows, marbles, cheese crackers and pretzels), identify which materials are in mixture	• Given a set of cylinders (soup cans, soda cans, etc.) indicate how to stack and/or how to roll • Given two containers of water, sorts objects that sink in one container and objects that float in another • Recognize what will 'flow' by actions: pouring liquids, scooping thick mixtures (pudding), picking up solids • Given water and powder mix, indicate which is solid and which is liquid. • Indicate a combination of solids with liquids leads to a new liquid (mix kool-aid powder with water and get kool-aid) • Indicate toward solid or liquid when presented with 2 examples and requested to "find the solid; find the liquid" • Given a mixture of peanuts and raisins and 3 separate containers of materials (peanuts, marbles, raisins), indicate which materials are in mixture	• Recognize what will 'flow' by actions: pouring liquids vs. picking up solids • Position cylinders to stack • Position cylinders to roll • Given two materials, will pour both into bowl to make mixture (kool-aid, raisin/m&m mixture, etc.) • Given combined materials, will stir to make a mixture (stir butter, cheese, noodles to make macaroni and cheese or stir instant pudding and milk to make pudding)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical Science	**Grade Level:** 1

Competency Goal 4: : Will make observations and conduct investigations to build understanding of balance, motion and weighing of objects

Objectives: 4.01 Describe different ways in which objects can be moved.
4.02 Observe that movement of an object can be affected by pushing or pulling.
4.03 Investigate and observe that objects can move steadily or change direction.
4.04 Observe and describe balance as a function of position and weight.
4.05 Describe and observe systems that are unstable and modify them to reach equilibrium.

Extended Standard: Explore, observe, and communicate balance, motion, and weight

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of a balanced system (equilibrium) • Communicate understanding of weight and measurement	• Demonstrate knowledge through observation of balance with objects	• Demonstrate awareness through exploration of balance with objects

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Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 1, Comp 4 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Use scale to balance weight of objects (number of marbles to match weight of large block) • Predict effect of adding object to one side of scale/balance in balanced and unbalanced states • Using a board balanced on a fulcrum, predict effect of adding weight to one end when in balanced and unbalanced states (box on each end – add light object to one end when balanced, add heavy object to high end when unbalanced) • Predict effects of rolling heavy and light objects (roll tennis ball or marble into pins vs. bowling ball) • Stack blocks to support balance of tower (starts with large block and uses smaller blocks in sequence to get taller tower)	• Put appropriate item on empty side of scale to balance preset item (match items from distractors) • Place non-standard units of weight measure (marbles) on empty side of scale to move scale • Choose blocks to balance on tower (rejects round objects for square blocks) • Choose wide balance beam over narrow balance beam to walk specific distance, to walk and carry heavy objects, etc.	• Add items to either side of scale to move balance • Roll ball to knock down pins • Choose heavy ball to knock down bowling pins (given two choices – big ball and styrofoam ball) • Add block to broad base to stack blocks

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Life Science	**Grade Level:** 2

Competency Goal 1: Will conduct investigations and build an understanding of animal life cycles

Objectives: 1.01 Describe the life cycle of animals including: Birth, Developing into an adult, Reproducing, Aging and death
1.02 Observe that insects need food, air and space to grow.
1.03 Observe the different stages of an insect life cycle.
1.04 Compare and contrast life cycles of other animals such as mealworms, ladybugs, crickets, guppies or frogs.

Extended Standard: Explore and communicate stages of animal life

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of life cycles	• Demonstrate knowledge of relationship of animal life stages	• Demonstrate awareness of animals at any life stage

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 2, Comp 1 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Given an incomplete visual presentation of 3 stages of an animal, will fill in the missing life stage • Puts 3-4 pictures in order that demonstrate growth sequence • Identify attributes of animal at different life stages (butterfly flies, caterpillar crawls, etc.) • Produce drawing or representation that shows life stages of an animal • Sequence picture cards of animals in correct order of life cycle • Match vocabulary to different stages of life cycle	• Given a life stage and a distracter object (egg and bottle), indicate life stage of chicken • Discriminate and connect type of egg to animal – chicken egg to chicken, vs. frog egg to frog • Categorize life stages: sort eggs vs. mature • While on nature walk or visiting zoo (watching nature video), indicate animals and indicate life stages of animals • Indicate life stage of an animal while teacher reads a book with pictures of animals (responds to, gestures, activates switch) • Shows 'first-then' in sequence with – cocoon/ butterfly, tadpole/frog, egg/chicken • Indicate which 'baby' leads to 'adult' animal	• Upon repeated exposure to various life stages of animals, demonstrate tactile preference for animal • Indicate the adult animal when given choice of animal vs. other stage (chicken vs. egg , frog vs. egg,) • Participate in care of animals at various life stages (feeding caterpillar, feeding butterfly, keep egg warm, feed chick, providing water at different levels, etc.)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 2

Competency Goal 2: Will conduct investigations and use appropriate technology to build an understanding of changes in weather

Objectives: 2.01 Investigate and describe how moving air interacts with objects.
2.02 Observe the force of air pressure pushing on objects.
2.03 Describe weather using quantitative measures of: Temperature, Wind Direction, Wind speed, Precipitation.
2.04 Identify and use common tools to measure weather: Wind vane and anemometer, Thermometer, Rain gauge.
2.05 Discuss and determine how energy from the sun warms the land, air and water.
2.06 Observe and record weather changes over time and relate to time of day and time of year.

Extended Standard: Explore and/or communicate the ways in which weather is measurable

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of the changes in weather • Demonstrate recognition of weather instruments as related to changes in weather	• Demonstrate knowledge of changes in weather • Demonstrate recognition of weather instruments as related to changes in weather	• Demonstrate awareness of hot and cold, wet and dry

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 2, Comp 2 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Match weather vocabulary to pictures • Read thermometer and record temperature on a graph/chart • Count how many days sunny, cloudy, rainy, etc • Use calendar to record weather on series of days • Record temperatures on chart (color code with temperature range – blue/cold, gray/cool, yellow/warm, red/hot) for series of days • Record temperatures on chart (color code with temperature range – blue/cold, gray/cool, yellow/warm, red/hot) during course of day (morning, midday, end of day) • With same chart and weather symbol (sunny day, snowy day), identify verbally or gesturally that sun caused temperature change during day, clouds kept temperature cold, etc. • Track and describe temperatures on chart (color code with temperature range – blue/cold, gray/cool, yellow/warm, red/hot) for series of days • Uses expected temperature on chart to determine what will wear tomorrow • Create seasons book with pictures/words of activities and places in different seasons	• Record temperatures on chart (color code – blue/cold, gray/cool, yellow/warm, red/hot) for series of days • Recognize if-then with weather: if it is cold outside, wear a coat, if it is raining, wear a raincoat, etc. • Indicate that thermometer measures temperature • Indicate that rain gauge collects rain • When presented with weather condition, will choose appropriate weather symbol and place on weather display	• Indicate cold with gesture in response to given material (ice, cold pack, cold drink) • Indicate hot with gesture in response given material (hot pack, hot cup/drink, microwaved wash cloth) • Indicate wet with gesture in response given material • Indicate dry with gesture in response given material • Indicate (puts on, requests, gestures for) that weather related objects such as raincoat, umbrella, winter coat, scarf, gloves sunglasses, and visor are related to immediate weather conditions

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical & Earth/Environmental Science	**Grade Level:** 2

Competency Goal 3: Will observe and conduct investigations to build an understanding of changes in properties

Objectives: 3.01 Identify three states of matter: Solid, Liquid, Gas
3.02 Observe changes in state due to heating and cooling of common materials.
3.03 Explain how heat is produced and can move from one material or object to another.
3.04 Show that solids, liquids and gases can be characterized by their properties.
3.05 Investigate and observe how mixtures can be made by combining solids, liquids or gases and how they can be separated again.
3.06 Observe that a new material is made by combining two or more materials with properties different from the original material.

Extended Standard: Explore and/or communicate changes in states of matter (liquids, solids, and gases)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of changes in the properties of solids, liquids, and gases	• Demonstrate knowledge through observation of solids, liquids, and gases	• Demonstrate awareness through exploration of solids, liquids, and gases

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 2, Comp 3 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Predict what will happen when putting a pot of water on the stove • Identify and describe sequence of steps for freezing (puts pictures in order, states sequence, predicts outcome) • Predict effect of putting ice cream in warm area • Predict changing colors as a result of mixing kool-aid powder and water • Identify steps in making ice cream as a result of completing that recipe • Identify effect of heat on rate of flow (hot and cold syrup and molasses) • Identify solids (jello powder/congealed jello), liquids (hot water), and mixtures (jello powder and water) in following recipe for making jello • Identify which combinations of materials creates a mixture (oil and water don't mix vs. salt and water or water and sugar) • Identify effects of heat and cooling on solids with photos in sequence after experiment (note shape of chocolate chip, melt, cool, then note new solid shape)	• Indicate putting a pot of water on the stove leads to steam • Indicate a combination of solids with liquids leads to a new liquid (mix kool-aid powder with water and get kool-aid) • Indicate solid or liquid when presented with 2 examples and requested to "find the solid; find the liquid" • Match frozen shape to appropriate container used for freezing (ice cube tray vs. small container vs. mold of specific shape) • Given classroom experiments and a consistent process (put in refrigerator), complete a first-then photo sequence to show knowledge of change (jello mix –refrig.-congealed jello/ melted butter-refrig.-congealed butter/ melted candy–refrig–solid candy, etc. • Given classroom experiments and a consistent process (put on stove), complete a first-then photo sequence to show knowledge of change (ice–stove-water/ chocolate chips-stove-melted chocolate, etc.)	• Given water in pot and shown the counter and the stove after experiment and the request to make steam, will indicate stove to make steam • Given an ice cube and two options (hair dryer or bowl) and the request to melt the ice cube, will indicate hair dryer to melt ice cube • Given an ice cube tray and shown the freezer and the drawer and the request to make ice cubes, will indicate freezer to make ice cubes • After experiment, presented with water in container and kool-aid powder, and given a direction "Let's make kool-aid," pours powder into water

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical Science	**Grade Level:** 2

Competency Goal 4: Will conduct investigations and use appropriate technology to build an understanding of the concept of sound

Objectives: 4.01 Demonstrate how sound is produced by vibrating objects and vibrating columns of air.
4.02 Show how the frequency can be changed by altering the rate of the vibration
4.03 Show how the frequency can be changed by altering the size and shape of a variety of instruments.
4.04 Show how the human ear detects sound by having a membrane that vibrates when sound reaches it.
4.05 Observe and describe how sounds are made by using a variety of instruments and other "sound makers" including the human vocal cords.

Extended Standard: Explore, observe, and communicate how different sounds are produced and how sound is detected - Note which part of body detects sound, proximity

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of sound	• Demonstrate knowledge through observation of sound	• Demonstrate awareness through exploration of sound

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 2, Comp 4 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Using a line graph (line depicting soft to loud sounds with or without numbers), will correctly place icons representing 2-4 specific sound on the line to denote different volumes of sound • Using a line graph (line depicting low to high pitch sounds with or without numbers), will correctly place icons representing 2-4 specific sound on the line to denote different pitch of sound • Adjust amount of water in glasses to create different pitches of sound (taps rims with stick to create, etc.) and predicts pitch from adjustment • Identify sound as result of vibration (describes or identifies vibration of voice in throat, membrane, fork, etc.) • Identify differences in sound traveling in air vs. water (after exploration, describes that sound is louder when noise maker is activated in air vs. water) • Identify and describes that sound travels through objects (wall, floor, etc.) and notes differences in sound in air vs. through solids • Identify connection between vibration and sound - that vocal chords vibrate to produce sound, that membrane vibrates as result of sound, that tuning fork vibrates as produces sound	• Place paper clip on drum after striking drum to demonstrate vibration of membrane • Place tuning fork in water after striking to demonstrate vibration of sound in water • Demonstrate knowledge that we hear sounds with our ears (puts on headphones to hear music, puts ear up to tuning fork or soft sound, etc.) • Put hand on throat to feel vibration produced by sound upon hearing sound produced – demonstrates knowledge that vibration is produced by sound	• Indicate pitch and pattern of sound as related to a specific activity – turn, anticipate, and prepare for activity upon hearing specific pitch and pattern (3 high frequency bell tones means time to move from wheelchair to changing table, 2 low frequency bell tones means time to eat, etc.) • Use an implement or hand to create sound (use mallet to hit drum, use a switch to create a desired sound, shakes maraca, hits piano key, etc.) • Produce sound to obtain a desired effect (specific vocalization to obtain physical attention)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Life Science	**Grade Level:** 3

Competency Goal 1: Will conduct investigations and build an understanding of plant growth and adaptations

Objectives: 1.01 Observe and measure how the quantities and qualities of nutrients, light, and water in the environment affect plant growth.
1.02 Observe and describe how environmental conditions determine how well plants survive and grow in a particular environment.
1.03 Investigate and describe how plants pass through distinct stages in their life cycle including. Growth, Survival, Reproduction.
1.04 Explain why the number of seeds a plant produces depends on variables such as light, water, nutrients, and pollination.
1.05 Observe and discuss how bees pollinate flowers.
1.06 Observe, describe and record properties of germinating seeds.

Extended Standard: Investigate and communicate growth and development of plants• Measuring plant growth • Effects of environment • Life stages of plants

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding that seeds grow into plant • Demonstrate understanding of effect of light and water on plant growth • Demonstrate understanding of stages of plant growth	• Demonstrate knowledge of environmental effects on plants • Demonstrate knowledge of relationship of seed to plant • Demonstrate ability to recognize plant growth	• Demonstrate awareness of plants • Demonstrate awareness that plants change

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 3, Comp 1 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Plant seeds in differing mediums (sand, wet paper towel, red clay, rocks, etc.) and compare germination rates • Use varying amounts of light, water, soil to report effects on growth • Match pictures, vocabulary words to appropriate plant parts • Measure growth of plant and graph over time • Put 4-5 picture cards in sequence to show plant growth • Create visual/written product (picture book, story, computer sequence) with at least three facts about plant growth • Given an incomplete visual presentation of 3-4 stages of a plant, will fill in the missing growth stage	• Organize "first-then" sequence to indicate plant growth • Indicate characteristics of healthy plant vs. unhealthy plant • Given an array of various items (leaves, seeds, dirt, petals, buds, macaroni, buttons, rocks, paper pieces, etc.), use items related to plants to make a visual representation of a plant • Identify effect of environment on plant (sun/no sun, rain/no rain, cold/hot weather) or lack of effect (noise/no noise, happy/sad) • Categorize life stages: sorts seeds vs mature plant	• Given soil and non-soil (packing peanuts, flour, rice, etc.), indicate (eye gaze, gesture, switch activation) appropriate medium to plant • Participates in care of plants (fertilize, providing water, placing in or out of sun, etc.) • Indicate preference of plants though touch, sight or smell • Given an array of items related to plants (leaf, seed, dirt, buds, etc.), use direct or indirect selection to choose an item that becomes a topic to write about. When choice is made select items from a separate array related to the topic chosen (such as **leaf**: live leaf, dead leaf, green leaf, red leaf, **soil:** worm, mud, dry soil, sand, etc.)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 3

Competency Goal 2: Will conduct investigations to build an understanding of soil properties

Objectives: 2.01 Observe and describe the properties of soil: Color, Texture, Capacity to hold water.
2.02 Investigate and observe that different soils absorb water at different rates.
2.03 Determine the ability of soil to support the growth of many plants, including those important to our food supply.
2.04 Identify the basic components of soil: Sand, Clay, Humus
2.05 Determine how composting can be used to recycle discarded plant and animal material.
2.06 Determine the relationship between heat and decaying plant matter in a compost pile.

Extended Standard: Explore, observe, communicate and investigate an understanding of soil properties

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of soil properties through one or more senses	• Demonstrate knowledge of soil.	• Demonstrate awareness of soil vs. non-soil

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 3, Comp 2 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• When presented with three pots of soils (sand, red clay, and potting soil) pour equal amount of water in each, identify which absorbs most or least water • When presented with three pots of soils (sand, red clay, and potting soil) pour equal amount of water in each, identify the rate (fast/slow) at which soil absorbs water • Describe soil properties using materials & pictures or words (color, texture, capacity to hold water) • Compare soil properties (color, texture capacity to hold water) • When given different soil types, name one component of soil content (decayed matter, crushed rock) • Match different plants to a soil type conducive to plant growth (cactus to sand; flower to potting soil)	• When given two choices of soil (sand vs mud; red clay vs potting soil) prompt to find given property (color, texture, capacity to hold water) • Discriminate (by eye gaze, point, etc.) texture of soil (heavy/light) • Discriminate color of soil (red clay, black potting soil, white sand) • Discriminate wet vs dry soil, using touch and/or visual indicator • Match object to picture symbol or photo (matches sand to photo of sand)	• Indicate preference, when presented with 2 materials, for specific textures of soil (clay vs sand) • When given two choices of soil and asked to find or touch one (mud vs sand), indicate correct material • When given two choices of soil and asked to find wet or dry (mud vs. dirt), indicate correct material • When given two choices, soil and non-soil (dirt and packing peanuts) indicate which is soil.

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 3

Competency Goal 3: Will make observations and use appropriate technology to build an understanding of the earth/moon/sun system

Objectives: 3.01 Observe that light travels in a straight line until it strikes an object and is reflected and/or absorbed.
3.02 Observe that objects in the sky have patterns of movement including: Sun, Moon, Stars
3.03 Using shadows, follow and record the apparent movement of the sun in the sky during the day.
3.04 Use appropriate tools to make observations of the moon.
3.05 Observe and record the change in the apparent shape of the moon from day to day over several months and describe the pattern of changes.
3.06 Observe that patterns of stars in the sky stay the same, although they appear to move across the sky nightly.

Extended Standard: Explore, observe, communicate and investigate the relationships and patterns of movement of the earth, moon and sun

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of earth, moon, & sun systems. • Communicate understanding of how light travels	• Demonstrate knowledge of earth, moon and sun. • Demonstrate knowledge through observation how light travels	• Demonstrate awareness of moon and sun • Demonstrate awareness through exploration of how light travels

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 3, Comp 3 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Given an lit oblong shaped light bulb, piece of black paper with a pinhole, and a screen, record results (that the image of the bulb is upside down on the screen) • Create a chart that shows the changing shape of the moon over a period of days • Identify phases of the moon: new, full, half • Demonstrate through use of mirror and a light source that light is reflected • Demonstrate through use of opaque objects (black paper, etc.) and a light source that light travels in a straight line (cannot go around an object) • Create a chart that shows the movement of the sun across the sky during the day	• Given an oblong shaped light bulb, piece of black paper with a pinhole, and a screen, indicate the path of light from the bulb onto the screen (straight line) • Indicate sources of light: sun, various light bulbs, candles, flashlight, etc. • Direct a light source to shine on specific objects (indicates knowledge of how light travels) • When directed to make a big shadow or a little shadow, direct a light source to create shadows of various sizes	• Track light to source to activate or de-activate light • Indicate the sun and/or moon is in the sky • Use hand or object to block light source • Remove object or obstruction blocking light

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical Science	**Grade Level:** 3

Competency Goal 4: Will conduct investigations and use appropriate technology to build an understanding of the form and function of the skeletal and muscle systems

Objectives: 4.01 Identify the skeleton as a system of the human body.
4.02 Describe several functions of bones: Support, Protection, Locomotion
4.03 Describe the functions of different types of joints: Hinge, Ball and socket, Gliding
4.04 Describe how different kinds of joints allow movement and compare this to the movement of mechanical devices.
4.05 Observe and describe how muscles cause the body to move.

Extended Standard: Investigate structures of the human body and how they enable movement • Bones • Muscles • Joints

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of human body and how it moves.	• Demonstrate knowledge of varied movement of human bodies.	• Demonstrate awareness of varied movement of human bodies.

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 3, Comp 4 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Identify how the skull acts like a helmet to protect the brain (manipulates a model of the brain and skull, shows how a helmet protects the head and brain) • Identify bones that protect other parts of the body (ribs protect lungs, skull protects brain, breastbone protects heart) • Identify specific joints as places where bones come together and how this helps us move (manipulates model and indicates same joints on own body – moving own joints like model of joint – knee, elbow, ankle, etc.) • Identify muscles in own body (bicep, muscles in face by changing expression, muscles in legs, etc.)	• Indicate body parts (arms, legs, hands, knee, shoulder, finger, etc.) • Indicate what body parts do (arms lift, hand holds or picks up, leg helps you walk, leg makes you run, knee helps you bend leg, etc. – show me what you use to run, what you use to pick up a block, etc.) • Imitate physical actions involving movement (clap, stomp, pat legs, pat table, touch toes, etc.	• Uses hand and arm to reach out and grab a desired object just at the edge of reach • Adjust body by moving torso to reach an object that is just out of reach • Imitate simple physical actions involving movement and desired objects (push object, pull object, activate switch in imitation, grasp, etc.) • Demonstrate awareness of body movement by following request from teacher to move a body part

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Life Science	**Grade Level:** 4

Competency Goal 1: Will make observations and conduct investigations to build an understanding of animal behavior and adaptation

Objectives: 1.01 Observe and describe how all living and nonliving things affect the life of a particular animal including: Other animals, Plants, Weather, Climate.

1.02 Observe and record how animals of the same kind differ in some of their characteristics and discuss possible advantages and disadvantages of this variation.

1.03 Observe and discuss how behaviors and body structures help animals survive in a particular habitat.

1.04 Explain and discuss how humans and other animals can adapt their behavior to live in changing habitats.

1.05 Recognize that humans can understand themselves better by learning about other animals.

Extended Standard: Explore, observe, communicate and investigate how animals are suited to their environments (adaptation)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Understand behavior and characteristics of various animals that allow for adaptation	• Demonstrate knowledge of characteristics and behavior of various animals that allow for adaptation	• Demonstrate awareness of animal adaptations

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 4, Comp 1 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Identify features of meat-eating animals that help hunting • Identify features of plant-eating animals that help eating • Identify features of fish and marine mammals that help movement in water • Compare features of animals related to environments (land vs. water) • Identify how animals benefit from color, appearance and change in appearance for protection and survival (chameleon, arctic hare, praying mantis, cats arching back to look bigger, etc.) • Compare and contrast (meat-eating vs. plant-eating, arctic animals vs. jungle animals, physical attributes: beaks vs. tongues, feathers vs. hair, etc)	• Indicate when given two choices what attributes of animal help them eat (giraffe's long neck or eyes to reach leaves, pelican's beak or feet to catch fish, etc.) • Match animals to habitats (ocean vs. land) • Indicate body features related to eating and drinking behaviors while on field trip to farm, looking at pictures, watching video, etc. • Sort animals by structure (body) and how they move • Demonstrate recognition of a specific animal to their environment while teacher reads a book with pictures of animals (responds to, gestures, activates switch)	• Given an array of items related to animals (desert animals, arctic animals, rain forest animals, etc.), use direct or indirect selection to choose an animal that becomes a topic to write about. When choice is made, select items from a separate array related to the topic chosen (such as polar bear: heavy fur, claws, white, snow, fish, seals, monkey**:** bananas, trees, long tail, etc.) • Indicate environment (land, water, sky), when given animal attributes (feathers, fur and scales) by eye gaze, gesture, touch

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 4

Competency Goal 2: The learner will conduct investigation and use appropriate technology to build an understanding of the composition and uses of rocks and minerals

Objectives: 2.01 Describe and evaluate the properties of several minerals.
2.02 Recognize that minerals have a definite chemical composition and structure, resulting in specific physical properties including: Hardness, Streak color, Luster, Magnetism.
2.03 Explain how rocks are composed of minerals.
2.04 Show that different rocks have different properties.
2.05 Discuss and communicate the uses of rocks and minerals.
2.06 Classify rocks and rock-forming minerals using student-made rules.
2.07 Identify and discuss different rocks and minerals in North Carolina including their role in geologic formations and distinguishing geologic regions.

Extended Standard: Explore, observe, communicate and investigate mineral properties, rock composition and the uses of rocks and minerals

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of the uses of rocks and minerals • Classify rocks by student made rules	• Demonstrate knowledge of rocks. • Classify rocks by one or more rules • Demonstrate recognition of the uses of rocks	• Demonstrate awareness of rocks vs. non-rocks

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 4, Comp 2 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Match printed vocabulary to photo/picture by hardness, streak color, luster, or magnetism (minerals and rocks) • Identify uses and non-uses for rocks and minerals (building, jewelry, food, mirrors, tools) • Identify, report and match uses of rocks and minerals (glass from sand; pencil lead from graphite) • Identify and report attributes of rocks (hardness, streak color, luster, magnetism) • Sort/classify by student identified rules (using concepts of hardness, streak color, luster, magnetism) and report how rocks are classified • Create an illustration, display, or journal depicting where rocks and minerals can be found in NC • When given a set of rocks and a magnet, identify and classify rocks that are attracted by magnet • When given a set of rocks and a tool to judge hardness (knife, nail, brick hammer), identify and classify rocks by hardness	• Discriminate (by eye gaze, point, etc.) texture of rocks or materials (rough, smooth) • Sort rocks by texture (rough, smooth) • Discriminate (by eye gaze, point, etc.) size of rocks or materials (small, large) • Sort rocks by size (e.g., rule is rocks are different sizes) • Match/sort rocks by one attribute (color, shiny, smooth, weight, etc.) • Match object to picture symbol or photo (matches rock to photo of rock) • Create a display of rocks sorted by attribute • Use rocks in building project	• When given two choices (rock and cotton ball) and asked to find rock, indicate correct material • When given two choices and asked to find or touch one (rock or water), indicate correct material • When given two choices (large balloon and small rock) and asked to find rock, indicate correct material • Adds chosen rocks to class rock display

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical Science	**Grade Level:** 4

Competency Goal 3: The learner will make observations and conduct investigations to build an understanding of magnetism and electricity

Objectives: 3.01 Observe and investigate the pull of magnets on all materials made of iron and the pushes or pulls on other magnets.
3.02 Describe and demonstrate how magnetism can be used to generate electricity.
3.03 Design and test an electric circuit as a closed pathway including an energy source, energy conductor, and an energy receiver.
3.04 Explain how magnetism is related to electricity.
3.05 Describe and explain the parts of a light bulb.
3.06 Describe and identify materials that are conductors and nonconductors of electricity.
3.07 Observe and investigate that parallel and series circuits have different characteristics.
3.08 Observe and investigate the ability of electric circuits to produce light, heat, sound, and magnetic effects.
3.09 Recognize lightning as an electrical discharge and show proper safety behavior when lightning occurs.

Extended Standard: Explore, observe, communicate and investigate magnetism and electricity • The effects of magnets on different materials • Conductors and insulators • Evidence of a complete circuit (items turned on and off) • Safety and use of electricity • Changing electricity into other forms of energy (heat, light, sound, work, etc.) • Lightning and safety

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of magnetism and electricity	• Demonstrate knowledge through observation of magnetism and electricity.	• Demonstrate awareness through exploration of magnetism and electricity

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 4, Comp 3 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Given a variety of materials (some made of iron/steel and some of various other material – cotton, fabric, plastic, paper, etc.), predict, demonstrate and record which are attracted to a magnet • Demonstrate how to use two magnets to attract each other and how to use them to repel each other through actions • Identify safety rules in operating electrical appliances – keep fingers away from prongs of plug, indicates danger of water around electricity, keeps flammable objects away from stove • Identify that damaged plugs or wires can cause fire, shock, injury • Demonstrate how to arrange batteries within toys, flashlight, etc., using + and – to arrange batteries in device • Use a bulb, wires and batteries to successfully close a circuit • Given a variety of materials (string, copper wire, aluminum wire, fabric, etc.), identify which ones will conduct electricity • Identify safety rules regarding lightning and storms	• Demonstrate knowledge of magnetism by use of magnetic letters or other magnetic object to hold item on metal surface • Use magnets to find objects that attract (magna doodle, any magnetic toys) • Demonstrate knowledge that batteries are needed to operate toys – indicates where batteries go, requests assistance in replacing batteries in preferred toys • Indicate to teacher to plug in appliance in order to operate • Sort pictures of safe/non-safe situations during a storm/lightning (standing under a tree vs. being in the house)	• Demonstrate awareness of electricity through use of switch to activate desired outcome • Use light switch to demonstrate ability to use power to illuminate room • Use light switch to turn off lights • Open and close doors, drawers, etc. that have magnetic attachments • Use a magnet to attract desired object • During an actual storm or visual demonstration, provide student with an opportunity to observe elements of a storm w/lightning

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Life Science	**Grade Level:** 4

Competency Goal 4: The learner will conduct investigation and use appropriate technology to build an understanding of how food provides energy and materials for growth and repair of the body

Objectives: 4.01 Explain why organisms require energy to live and grow.
4.02 Show how calories can be used to compare the chemical energy of different foods.
4.03 Discuss how foods provide both energy and nutrients for living organisms.
4.04 Identify starches and sugars as carbohydrates.
4.05 Determine that foods are made up of a variety of components:

Extended Standard: Explore, observe, communicate and investigate that bodies require a variety of foods to remain healthy

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of how a variety of foods contribute to healthy body	• Demonstrate knowledge of healthy food	• Demonstrate awareness of healthy versus non-healthy food

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 4, Comp 4 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Identify foods that build strong bones • Identify importance of keeping bones strong so they don't break • Identify that vegetables and fruits contain vitamins that support a healthy body • Identify foods by category: meats/fish/poultry, vegetables, fruits, milk products, sweets/fats/oils, breads/grains using a food pyramid • Use a food pyramid to identify amounts we should eat of certain foods to be healthy • Use a food pyramid to identify how different food groups help our bodies (grains for energy, vegs./fruits for vitamins and minerals, meats/dairy for protein and calcium, etc.)	• Sort foods (things you drink, things you eat) • Indicate foods that go in refrigerator vs. on shelf in pantry • Demonstrate understanding of first-then photo or object system (finish foods on plates to get dessert) • Indicate things you eat vs. things you do not eat (plants outside, etc.) • Sort foods by category: meats/fish/poultry, vegetables, fruits, milk products, sweets/fats/oils, breads/grains using a food pyramid	• Respond (eye gaze, reach, etc) to choice of preferred food vs. non-preferred food item • Initiate action to obtain preferred food item vs. non –preferred food item • Reject non-food item at meal time • Demonstrate awareness of first-then object system: eat healthy food (determined by parent/teacher discussion) to get treat

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Life Science	**Grade Level:** 5

Competency Goal 1: Will conduct investigations to build an understanding of the interdependence of plants and animals

Objectives: 1.01 Describe and compare several common ecosystems (communities of organisms and their interaction with the environment).
1.02 Identify and analyze the functions of organisms within the population of the ecosystem: Producers, Consumers, Decomposers.
1.03 Explain why an ecosystem can support a variety of organisms.
1.04 Discuss and determine the role of light, temperature, and soil composition in an ecosystem's capacity to support life.
1.05 Determine the interaction of organisms within an ecosystem.
1.06 Explain and evaluate some ways that humans affect ecosystems: Habitat reduction due to development, Pollutants, Increased nutrients.
1.07 Determine how materials are recycled in nature.

Extended Standard: Explore, observe, communicate and investigate how living (plants and animals) and non-living things are connected (climate, geography, amount of food/food chains, roles within ecosystems)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of the differences in various ecosystems • Demonstrate understanding that living things need air, water, and light • Demonstrate understanding of the role of living things within a food chain	• Demonstrate knowledge that plants and animals interact within an environment • Demonstrate knowledge of air, water, sunlight as they are needed by living organisms	• Demonstrate awareness that plants and animals exist together within an environment

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 5, Comp 1 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Complete a visual display showing the sequence of elements of a food chain: worm, soil, plants as food, animals, dead animals • Fill in a missing element in a food chain • Create a Venn diagram that shows needs of plants/needs of animals (carbon dioxide, oxygen, sun, water) • Sort animals and plants by ecosystems: ocean, forest, desert, etc. • Identify living and non-living things within ecosystem	• Indicate where animal lives within an ecosystem (bird in tree vs. mouse in ground) • Indicate relationship between sun (or water or air) and plant (indicates that sun makes plant grow) • Given an array of various items (frog, turtle, fish, flies, pond, water plants, etc.), indicate animals and plants that are connected while making a visual representation of an ecosystem • Indicate pictures of plants and animals that can be eaten	• Indicate where specified animal lives (fish goes in an aquarium with plants or in a box, etc.) • While in garden, indicate grapes on vine are good to eat, indicate pulled carrots are good to eat • In classroom, indicate beans from plant as good to eat • Chooses between living/non-living items to be included in a terrarium • Given an array of items related to an ecosystem (forest, aquarium, rain forest, etc.), use direct or indirect selection to choose an environment that becomes a topic to write about. When choice is made, select items from a separate array related to the topic chosen (such as forest: tree, flower, bird, mouse, deer / aquarium**:** fish, snail, plant, etc.**)**

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 5

Competency Goal 2: The learner will make observations and conduct investigations to build an understanding of landforms

Objectives: 2.01 Identify and analyze forces that cause change in landforms over time including: Water and ice, Wind, Gravity.
2.02 Investigate and discuss the role of the water cycle and how movement of water over and through the landscape helps shape land forms.
2.03 Discuss and consider the wearing away and movement of rock and soil in erosion and its importance in forming: Canyons, Valleys, Meanders, Tributaries.
2.04 Describe the deposition of eroded material and its importance in establishing landforms including: Deltas, Flood Plains
2.05 Discuss how the flow of water and the slope of the land affect erosion.
2.06 Identify and use models, maps, and aerial photographs as ways of representing landforms.
2.07 Discuss and analyze how humans influence erosion and deposition in local communities, including school grounds, as a result of: Clearing land, Planting vegetation, Building Dams.

Extended Standard: Explore, observe, communicate and investigate the forces that shape landforms (water/ice, wind and gravity)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate understanding of various landforms • Demonstrate understanding of various forces that shape landforms	• Demonstrate knowledge of various landforms • Demonstrate knowledge of various forces that shape landforms	• Demonstrate awareness of the forces that affect landforms

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 5, Comp 2 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Identify landforms: mountains, rivers, tributaries, glaciers, volcanoes, sand dunes, canyons, meanders, valleys, etc. • Identify forces: water, ice, wind, gravity • Given a model of landforms and forces of water, earthquake, wind, identify effects of forces on different landforms • Identify and report effects of different amounts of water or wind in erosion	• Match photos of landforms: rivers, mountains, etc. • Match photos of forces: ice, water, etc. • Demonstrate force of water by using hose to wash off surface, by using bucket of water to rinse off area, etc. • Demonstrate force of water by using hose to erode soil surface, etc. • Demonstrate force of wind by blowing through a straw, by using fan to move light objects vs. heavy objects, etc. • Demonstrate force of wind by blowing sand, by blowing models of trees, by blowing on surface of water, etc.	• Given a demonstration of the force of wind on sand or model trees, indicate the force causing the changes (looks at the fan) • Given a demonstration of the force of water on a soil surface, indicate the force causing the changes (looks at the hose) • After teacher demonstration of using fan to move objects, activate the fan to demonstrate change in light objects • After teacher demonstration of using hose to move objects, activate a hose to demonstrate washing away dirt or material

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Earth/Environmental Science	**Grade Level:** 5

Competency Goal 3: Will conduct investigations and use appropriate technology to build an understanding of weather and climate

Objectives: 3.01 Investigate the water cycle including the processes of: Evaporation, Condensation, Precipitation, Run-off.
3.02 Discuss and determine how the following are affected by predictable patterns of weather: Temperature, Wind direction and speed, Precipitation, Cloud cover, Air pressure.
3.03 Describe and analyze the formation of various types of clouds and discuss their relation to weather systems.
3.04 Explain how global atmospheric movement patterns affect local weather.
3.05 Compile and use weather data to establish a climate record and reveal any trends.
3.06 Discuss and determine the influence of geography on weather and climate: Mountains, Sea breezes, Water bodies.

Extended Standard: Observe, communicate and investigate patterns of weather over time (climate)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Demonstrate the use of weather instruments. • Demonstrate understanding of the weather in various locations over time	• Demonstrate knowledge of weather changes in different locations over time • Demonstrate knowledge of use of weather instruments	• Demonstrate awareness of weather changes in different locations over time

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 5, Comp 3 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• After marking the level of a container of water and measuring marks on container on multiple days, record drop in water level (some of water becomes water vapor in the air) • Use pictures or photos to identify how water changes from vapor to liquid to ice • Chart temperature from thermometer over a period of days • Measure and chart rainfall from rain gauge over a period of days • Given a model of cloud formation identify that clouds are made of water droplets • Given a model for condensation identify that sunlight warms water to create water droplets in the air • Use pictures to identify different biomes on the earth: Tropical Rain Forest, Grassland, Desert, Deciduous Forest, Taiga, Tundra • Identify different weather patterns related to a biome: more rain in rain forest than in desert, colder in tundra than in deciduous forest, etc.	• After marking the level of a container of water and making marks on container on multiple days, indicate that some of water becomes water vapor in the air • Determine appropriate clothes to wear due to weather changes • Chart rainfall from rain gauge over a period of days • After wind, ice or snow storm, indicate damage (broken branches, power outage, etc.) is a result of storm (picture sequence, etc.) • Use a classroom thermometer (by degrees or color coding) to track and chart temperature variations over a period of days	• Indicate if water has evaporated from a surface (verbal response, activate switch, eye gaze) • Indicate clouds in the sky • Indicate that rain comes from clouds • Indicate when weather is hot or cold

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).

Subject: Physical Science	**Grade Level:** 5

Competency Goal 4: Will conduct investigations and use appropriate technology to build an understanding of forces and motion in technological designs

Objectives: 4.01 Determine the motion of an object by following and measuring its position over time.
4.02 Evaluate how pushing or pulling forces can change the position and motion of an object.
4.03 Explain how energy is needed to make machines move, Moving air, Gravity.
4.04 Determine that an unbalanced force is needed to move an object or change its direction.
4.05 Determine factors that affect motion including: Force, Friction, Inertia, Momentum
4.06 Build and use a model to solve a mechanical design problem: Devise a test for the model, Evaluate the results of test.
4.07 Determine how people use simple machines to solve problems.

Extended Standard: Explore, observe, communicate, and investigate forces and motion • Measurement of motion • Gravity as a force that causes motion • Balanced and unbalanced forces • Other factors that affect motion (e.g., force, friction, inertia, momentum) • Simple machines and how they help us (Note: inclined planes, ramps, wheels, pulleys, screws, levers, etc.)

Symbolic Access Points	Early Symbolic Access Points	Pre-symbolic Access Points
• Communicate understanding of forces and motion	• Demonstrate knowledge through observation of forces and motion	• Demonstrate awareness through exploration of forces and motion

Communicate or Demonstrate Understanding: At this level, the student is actively demonstrating understanding of the concept through actions or words. The student manipulates materials with a understanding of properties (e.g., chooses metal materials that will attach to a magnet, acts to prevent exposure of electronic equipment to water, engages in safe practice such as turning off stove to prevent burns or fire, etc.). The student will use the concept with familiar materials and situations and begins to apply the concept in a new situation.

Demonstrate Knowledge: Demonstrating knowledge requires more active and functional manipulation of the materials. Does the student demonstrate the ability to predict an action or to connect related objects or materials through a concept (e.g., connect baby to mature animal, note that burner will boil water, put on coat when sees snow or ice outside, etc.)? Demonstrating knowledge implies acting with some knowledge of a concept (e.g., knowing to touch a baby animal gently, pointing to the sky when student sees a picture of the moon, noting that a plastic bottle goes in a recycle bin through eye gaze. etc.).

Demonstrate Awareness: Note that demonstrating awareness is consistently used as the simplest way that a student can demonstrate competence. Through repeated exposure to materials and their use at a functional level, does the student demonstrate familiarity or expectation of a specific result with the materials through eye gaze and attention, through movements, or through expression?

Grade 5, Comp 4 Symbolic Demonstrators	Early Symbolic Demonstrators	Pre-Symbolic Demonstrators
• Given models of slopes with different substances to reduce friction, predict which is faster and identify where friction is stronger • Identify gravity as the force that moves objects down a slope • Identify how wind is a force (uses model of ramp and fan to propel object down ramp or to slow object moving down ramp – hold fan in front of object going down ramp) • Given a series of objects, predict force needed to move heavier objects vs. light objects	• Indicate that light ball will travel farther than heavy ball when hit with paddle or bat • Indicate which of two objects (small car with small wheels vs. heavy truck with large wheels) will travel farther when pushed down incline or ramp • Operate a fan to demonstrate which object wind can push (cotton ball vs. ball, etc.) • Choose an object or tool that will move another object farther (chooses paddle to hit ball instead of cardboard tube, etc.)	• Push object or toy to activate • Pull string (directly or on pulley) to obtain a desired object or toy • Move or indicate to move toy to top of ramp to push down ramp (push toy car, etc.) • Seek assistance to move object that is too heavy • Use an object to produce motion in another object (hits a ball with a paddle, etc.)

Identify: The student generates response independently and communicates the response in their mode of communication (verbal, eye gaze, switch, picture communication, etc).

Indicate: The student chooses from an array of responses (concrete objects, pictures, etc) via the student's mode of communication (verbal, eye gaze, switch, picture communication, etc).