#### Key to Abbreviations

ECHOS Unit Names		Unit Lessons	Domain Integration Activities (iCards)	
RW = Rainy Weather BB = Beginning Botanist FW = Feathered Friends BBB = Busy Buzzing Bees	DS = Discovering Shells BMU = Blocks Measure Up WP = Water Play AA = Astonishing Air MM = Magnificent Magnets	L1 = Lesson 1 L2 = Lesson 2 L3 = Lesson 3 L4 = Lesson 4	M = Mathematics iCard L = Language & Literacy iCard C = Creative Arts iCard	
For more information about ECHOS® go to <u>www.frostscience.org/echos</u>				

Scientific Inquiry	FL Early Learning Standards	Head Start Framework	ECHOS Units, Lessons, iCards
a. Investigation and Inquiry	Demonstrates the use of simple tools and equipment for observing and investigating	<ul> <li>Uses senses and tools, including technology, to gather information, investigate materials, and observe processes and relationships.</li> <li>Participates in simple investigations to form hypotheses, gather observations, draw conclusions, and form generalizations.</li> </ul>	RW L1, L2, L3, L4 BB L1, L2, L3, L4 FF L1, L2, L3, L4 BBB L1, L2, L3, L4 DS L1, L2, L3, L4 BMU L1, L2, L3, L4 WP L1, L2, L3, L4 WP L1, L2, L3, L4 AA L1, L2, L3, L4 MM L1, L2, L3, L4
	Examines objects and makes comparisons	<ul> <li>Uses senses and tools, including technology, to gather information, investigate materials, and observe processes and relationships.</li> <li>Participates in simple investigations to form hypotheses, gather observations, draw conclusions, and form generalizations.</li> </ul>	RW L1, L2, L3, L4 BMU L1, L2, L3, L4 WP L1, L2, L3, L4 AA L1, L2, L3, L4
b. Physical Science	Explores the physical properties and creative use of objects or matter	Observes and discusses common properties, differences, and comparisons among objects (Scientific skills & Method).	BMU L1, L2, L3, L4 WP L1, L2, L3, L4 AA L1, L2, L3, L4 MM L1, L2, L3, L4

		Observes, describes, and discusses properties of materials and transformation of substances (Conceptual Knowledge of the Natural & Physical World).	
c. Life Science	Explores growth and change of living things	Observes and discusses common properties, differences, and comparisons among objects (Scientific skills & Method).      Observes, describes, and discusses living things	<b>BB</b> L2, L3
	3. Identifies the characteristics of living things	<ul> <li>and natural processes.</li> <li>Observes, describes, and discusses living things and natural processes.</li> </ul>	BB L1, L2, L3, L4 FF L1, L2, L3, L4 BB L1, L2, L3, L4 DS L1
	4. Identifies the five senses and explores functions of each	Observes, describes, and discusses living things and natural processes.	RW L1, L2, L3, L4 FF L1, L2, L3, L4 BBB L1, L2, L3, L4
d. Earth and Space	Explores the outdoor environment and begins to recognize changes     (e.g., weather conditions) in the environment, with teacher support and multiple experiences over time	Observes and discusses common properties, differences, and comparisons among objects (Scientific skills & Method).	RW L1, L2, L3, L4 BB L4 AA L1, L2, L3, L4
	2. Discovers and explores objects (e.g., rocks, twigs, leaves, sea shells) that are naturally found in the environment	Observes, describes, and discusses properties of materials and transformation of substances (Conceptual Knowledge of the Natural & physical World).	BB L1, L2, L3, L4 BBB L2 DS L1, L2, L3, L4
Mathematical Think	ing		
a. Number Sense	Demonstrates understanding of one-to-one correspondence	<ul> <li>Uses one-to —one counting and subtilizing (identifying the number of objects without counting) to determine quantity.</li> </ul>	FF iCard M4 BBB iCard M1 BMU iCard L1, L3 WP iCards M2, C2, C3 AA iCards M2, M3 MM iCards M1, M2, M3, M4

	Shows understanding of how to count and construct sets      Shows understanding by participating in the comparison of quantities	Uses a range of strategies, such as counting, subtizing, or matching, to compare quantity in two sets of objects and describes the comparison with terms, such as more, less, greater than, fewer, or equal to number Relationships and Operations.	FF iCard C1 BMU iCards L1, L2, L3, L4 WP iCard M2 AA iCard M2 MM iCards M2, M4 BB iCard M2 FF iCard M4 BMU L1, L2, L3, L4 iCards M1, M2, M3 WP iCards M1, M2, BMU iCards M1, M2, BMU iCards M2, M3 AA iCards M2, M3 MM iCard M1
	4. Assigns and relates numerical representations among numerals (written), sets of objects, and number names (spoken) from zero to 10	Associates quantities and the names of numbers with written numerals.	BBB iCards M1, M2, DS iCard M1, M2, M3 AA iCards M1, M2, M3 MM iCards M1, M2, M3, M4
	5. Counts and knows the sequence of number names (spoken)	Recites numbers in the correct order understands that numbers come "before" or "after" one another.	RW iCard M1 BBB iCard M2 DS iCard M1 BMU iCards L1, L2, L3, L4 WP iCards M2, M3, C2 AA iCards M2, M3 MM iCards M1, M2, M3, M4
	6. Shows understanding of and uses appropriate terms to describe ordinal positions		<b>DS</b> iCard M4
c. Patterns and Seriation	Understands characteristics of patterns and non-patterns and begins to reproduce them with at least two elements (e.g., red/blue, red/blue versus a non-pattern like a rainbow)	<ul> <li>Sorts, classifies, and serializes (put in pattern) objects using attributes such as color, shape, or size.</li> <li>Recognizes, duplicates, and extends simple patterns.</li> </ul>	RW iCard M4 BB iCard M2 FF iCard M2 DS iCard M2 MM iCard M1
	2. Sorts, orders, compares, and describes objects according characteristics or attribute(s) (seriation)	Orders objects by size or length (Measurement and Comparison).	BB iCards M2, M2, M3 DS iCards L3, L4 BMU iCard L1, L2, L3, L4 WP iCard M2, M3, C2 MM iCard M1, M2, M3

d. Geometry	Understands various two- dimensional shapes, including circle, triangle, square, rectangle, oval, and other less common shapes (e.g., trapezoid, rhombus)	Recognizes and names common shapes, their parts, and attributes.	FF iCard M1 BMU iCards L1, L2, L3, L4 WP iCards M1
e. Spatial Relations	Demonstrates understanding of spatial relationships and uses position words (e.g., in front of, behind, between, over, through, under)	Understands directionality, order, and position of objects, such as up, down, in front, and behind.	AA iCards L1, L3 BB iCard M2 DS iCards M1, L1, L2, L3, AA iCards M2, C2, L1, L4
	4. Uses directions to move through space and find places in space (e.g., obstacle courses, Simon Says, Mother May 1?, hop scotch, giving simple directions)		WP iCard C3 AA iCards M1, M3
f. Measurement	Engages in activities that explore measurement		BB iCardM4 DS iCard M4 BMU iCards L1, L2, L3, L4 WP iCards M2, M3, C2, C3 AA iCards M2, M3, M4
	2. Compares continuous quantities using length, weight, and height	<ul> <li>Compares objects using attributes of length, weigh, and size (bigger, longer, taller, heavier).</li> <li>Uses nonstandard and standard techniques and tools to measure and compare.</li> </ul>	WP iCards M1, M2, M3, C3 AA iCard M3
	3. Represents and analyzes data	Collects and describes, and records information through discussions, drawings, maps, and charts (Scientific Skills & Method)	BB iCard M4 WP iCard M4 BMU iCard L2, L3 MM iCards M2, M3
	4. Predicts the results of a data collection, with teacher support and multiple experiences over time		RW iCard M2 DS iCard L4 WP iCard M4 AA iCard M3

A. Eagerness and Curiosity	Shows curiosity and is eager to learn new things and have new experiences	<ul> <li>Demonstrates flexibility, imagination, and inventiveness in approaching task and activities.</li> <li>Demonstrates eagerness to learn and discuss a range of topics ideas, and tasks.</li> </ul>	All nine ECHOS Units ALL ECHOS iCards
B. Persistence	Attends to tasks for a brief period and seeks help when needed	Maintains interest in a project or activity until completed.	All nine ECHOS Units ALL ECHOS iCards
C. Creativity	Approaches daily activities     with creativity		All nine ECHOS Units ALL ECHOS iCards
D. Planning and Reflection	Shows initial signs of planning and learning from their experiences	<ul> <li>Plans initiates, and completes learning activities with peers.</li> <li>Joins in cooperative play with others and invites others to play.</li> <li>Models or teaches peers.</li> <li>Helps, shares, and cooperates in a group.</li> </ul>	All nine ECHOS Units ALL ECHOS iCards
Language, Comm	nunication, and Emergent Literacy	,	
A. Listening and Understanding	Increases knowledge through listening	Attends to language during conversations, songs, stories, or other learning experiences.	All nine ECHOS Units ALL ECHOS L1 and L2 iCards All ECHOS Story Books
	2. Follows multi-step directions		All nine ECHOS Units ALL ECHOS L1 and L2 iCards
C. Vocabulary	Shows an understanding of words and their meanings	Comprehends increasingly complex and varied vocabulary.	All nine ECHOS Units
	Shows increased vocabulary to describe many objects, actions, and events	Uses increasingly complex and varied vocabulary	All nine ECHOS Units All ECHOS L1 and L2 iCards ALL ECHOS picture walk iCards
	T. Control of the con		All nine ECHOS Units

F. Emergent Reading	4. Demonstrates comprehension of text read aloud	•	Asks and answers questions and makes comments about print materials (Book Appreciation and Knowledge).	All Read Aloud activities and Picture Walk iCards L3
Creative Expression	Through the Arts	•		
a. Visual Arts	1. Explores visual arts	•	Represents people, places, or things trough drawings, movement, and three-dimensional objects (Logic & Reasoning: Symbolic representation).	BB iCards C2, C3, C4 BBB iCards C1, C2, C3, C4 DS iCards C1, C2, C3, C4 BMU iCards C1, C2, C3, C4 WP iCards C1, C2, C3, C4 AA iCard C1 MM iCards C2, C3
b. Music	1. Explores music	•	Participates I music activities such as listening, singing, or performing.	All ECHOS units Sing Along iCards L2
c. Creative Movement and Dance	Explores creative movement     and dance	•	Moves to different patterns of beat and rhythm in music.	All ECHOS units Sing Along and Finger play iCards L1, L2 RW iCard C3 FF iCard C3 WP iCard C2, C3 MM iCard C1
	Creates creative movement     and dance to communicate an     idea	•	Moves to different patterns of beat and rhythm in music.	FF iCard M3 BBB iCards L4, BBB C4