NATIONAL STANDARDS AND BENCHMARKS FOR GRADES 3–5	LESSON 1	LESSON 2	LESSON 3	ACTIVITIES
SCIENCE				
Understands atmospheric processes and the water cycle				
Knows that the Sun provides the light and heat necessary to maintain the temperature of the Earth	•			
Understands relationships among organisms and their physical environment				
Knows the organization of simple food chains and food webs (e.g., green plants make their own food with sunlight, water, and air; some animals eat the plants; some animals eat the animals that eat the plants)	•			
Knows that all organisms (including humans) cause changes in their environments, and these changes can be beneficial or detrimental	•			
Understands the nature of scientific knowledge				
Knows that good scientific explanations are based on evidence (observations) and scientific knowledge			•	•
Understands the nature of scientific inquiry				
Knows that scientists use different kinds of investigations (e.g., naturalistic observation of things or events, data collection, controlled experiments), depending on the questions they are trying to answer	•		•	•
Plans and conducts simple investigations (e.g., formulates a testable question, makes systematic observations, develops logical conclusions)			•	•
LANGUAGE ARTS				
Uses the general skills and strategies of the writing process				
Editing and Publishing: Uses strategies to edit and publish written work (e.g., edits for grammar, punctuation, capitalization, and spelling at a developmentally appropriate level; uses reference materials; considers page format [paragraphs, margins, indentations, titles]; selects presentation format according to purpose; incorporates photos, illustrations, charts, and graphs; uses available technology to compose and publish work)			•	
Writes autobiographical compositions (e.g., provides a context within which the incident occurs, uses simple narrative strategies, and provides some insight into why this incident is memorable)			•	
Gathers and uses information for research purposes				
Uses a variety of strategies to plan research (e.g., identifies possible topic by brainstorming, listing questions, using idea webs; organizes prior knowledge about a topic; develops a course of action; determines how to locate necessary information)			•	
Uses electronic media to gather information (e.g., databases, Internet, CD-ROM, television shows, cassette recordings, videos, pull-down menus, word searches)			•	
Uses strategies to gather and record information for research topics (e.g., uses notes, maps, charts, graphs, tables, and other graphic organizers; paraphrases and summarizes information; gathers direct quotes; provides narrative descriptions)			•	•
Uses strategies to compile information into written reports or summaries (e.g., incorporates notes into a finished product; includes simple facts, details, explanations, and examples; draws conclusions from relationships and patterns that emerge from data from different sources; uses appropriate visual aids and media)			•	
Uses the general skills and strategies of the reading process				
Establishes a purpose for reading (e.g., for information, for pleasure, to understand a specific viewpoint)	•		•	
Uses reading skills and strategies to understand and interpret a variety of informational texts				
Uses reading skills and strategies to understand a variety of informational texts (e.g., textbooks, biographical sketches, letters, diaries, directions, procedures, magazines)	•		•	
Uses prior knowledge and experience to understand and respond to new information	•		•	
MATHEMATICS				
Uses basic and advanced procedures while performing the processes of computation				
Multiplies and divides whole numbers		•		
Performs basic mental computations (e.g., addition and subtraction of whole numbers)		•		
Solves real-world problems involving number operations (e.g., computations with dollars and cents)		•		
Understands and applies basic and advanced concepts of statistics and data analysis				
Organizes and displays data in simple bar graphs, pie charts, and line graphs	•			
Understands the general nature and uses of mathematics				
Understands that numbers and the operations performed on them can be used to describe things in the real world and predict what might occur		•		

Source: Mid-continent Research for Education and Learning (McREL).