

Pre K – Approaches to Learning: Inquiry, Exploration, Reasoning, and Problem Solving

Stage 1 Desired Results		
<p>ESTABLISHED GOALS:</p> <p><u>Competencies:</u></p> <ul style="list-style-type: none"> Students will demonstrate the ability to experiment and problem solve in order to plan, evaluate, and adjust the plan as necessary. <p><u>Framework descriptors:</u></p> <p>Inquiry and Exploration</p> <ul style="list-style-type: none"> Observe, wonder, and/or ask questions, make guesses, and explore hypotheses Use senses and tools/technology to aid in investigation Sometimes use imaginative thinking, showing misunderstanding of cause and effect Continue to experiment with cause and effect Engage in repeated actions to make something happen <p>Reasoning and Problem Solving</p> <ul style="list-style-type: none"> Talk about own ideas, predictions, and plans, building on prior experiences either self-initiated or guided by adult Can figure out more than one solution to a problem if the first one doesn't work 	Transfer	
	<i>Students will be able to independently use their learning to persevere when solving a problem.</i>	
	Meaning	
	<p>ENDURING UNDERSTANDINGS</p> <p><i>Students will understand that...</i></p> <ul style="list-style-type: none"> there is more than one solution to a problem. experiments help us collect data to explore hypotheses. there are steps in order to perform an experiment. 	<p>ESSENTIAL QUESTIONS</p> <ul style="list-style-type: none"> Is there only one way to solve a problem? Why are experiments important?
Acquisition		
<p><i>Students will know...</i></p> <ul style="list-style-type: none"> that experiments help us answer questions. that there are multiple solutions to problems. that cause and effect are related. <p><u>vocabulary:</u> problem, solution, experiment, prediction, investigate, imagination, observe, hypothesize, 5 senses, tools, cause and effect</p>	<p><i>Students will be skilled at...</i></p> <ul style="list-style-type: none"> asking questions. observing. making guesses and hypotheses. participating in experiments. experimenting with cause and effect. using imaginative thinking. using their senses to aid in investigation. using tools/technology to aid in investigation. trying different solutions until they are able to solve their problem. discussing the process of problem solving (guided by an adult). using prior knowledge and experiences to problem solve. 	
Content Area Literacy Standards		
<ul style="list-style-type: none"> NOT APPLICABLE 		
21st Century Skills		
<ul style="list-style-type: none"> <i>Creativity and Innovation</i> <i>Critical Thinking and Problem Solving</i> <i>Communication</i> <i>Collaboration</i> 		

