

DOMAIN 1: APPROACHES TO LEARNING AND COGNITIVE DEVELOPMENT			
SUB-DOMAIN: COGNITION AND COGNITIVE PROCESSES			
REASONING AND LOGIC			
GOAL 8: CHILDREN DEMONSTRATE AWARENESS OF CAUSE AND EFFECT RELATIONSHIPS.			
Age Range	Developmental Growth	Child Indicators	Caregiver Strategies
<p>First, Second, and Third Grades</p>	<p>Uses knowledge of causal relationships to inform behavior and to initiate increasingly complex explorations of objects and relationships.</p>	<ul style="list-style-type: none"> ▪ Uses rule-based testing of social situations (e.g. "That's not fair!" "We can't go in the gym until a teacher is with us." "In the cafeteria, the first graders sit at the first table, then we sit at the bigger tables."). ▪ Uses scientific thinking including conjecture, hypothesizing, and guessing. ▪ Uses if/then hypotheses and explanations. 	<ul style="list-style-type: none"> ▪ Use scaffolding, thinking by asking questions, or posing hypotheses (e.g. "Are you wondering about the rule?" "Is it safe?"). ▪ Clarify problem so that child can solve (e.g. "What happens next?" "What do you think will happen if..." "What happened the last time? Do you think things are the same or different this time?"). ▪ Provide opportunities for multi-step experiments, both indoors and outside. ▪ Integrate causality with scientific thinking. ▪ Provide a variety of open-ended materials for experimentation. ▪ Provide opportunities and suggestions for scientific exploration. ▪ Help develop lists and steps for complex activities (cooking, event planning, and experiments). ▪ Make materials such as writing utensils, art supplies, musical instruments, and internet available for documenting findings.