

Science Exploration Curriculum

Infant Through Preschool Program

Science activities encourage curiosity, observation, sensory exploration, problem solving, and early scientific thinking through hands-on learning experiences and developmentally appropriate activities.

Age Group	Activity Type	Developmental Focus	Examples of Activities	Duration	Frequency
6 Weeks-6 Months	Sensory Science Exploration	Sensory development, visual tracking	Light and shadow play, textured materials, nature sounds	5 Minutes	2-3 Times Weekly
6-12 Months	Discovery Activities	Cause and effect, curiosity	Water play, bubbles, floating toys, sensory bottles	5-10 Minutes	3 Times Weekly
12-24 Months	Hands On Science	Observation, exploration	Sink and float, weather exploration, planting seeds	10 Minutes	2-3 Times Weekly
2-3 Years	Simple Science Investigations	Problem solving, prediction skills	Magnet play, color mixing, nature walks	10-15 Minutes	3 Times Weekly
3-4 Years	Early Scientific Thinking	Observation, questioning, reasoning	Life cycles, weather charts, simple experiments	15-20 Minutes	3-5 Times Weekly

Daily Science Integration Opportunities

Routine Time	Suggested Science Experience
Outdoor Play	Nature observation and weather discussions
Sensory Play	Water exploration, scooping, pouring, and texture exploration
Mealtime	Discuss colors, textures, temperatures, and healthy foods
Outdoor Walks	Observe plants, insects, clouds, and seasonal changes
Circle Time	Simple science discussions, predictions, and observation activities
Discovery Centers	Hands on exploration with magnets, sensory bottles, and natural materials