

We Skoolhouse



Ready-Made Curriculum: Water Exploration



A Practical Guide for Exploration

Each unit offers a suggested flow of experiences designed to support deep, meaningful learning through play. You'll notice intentional repetition—this is purposeful. Repeating activities builds memory, mastery, confidence, attention, and focus, forming the foundation for long-term learning.

The experiences are open-ended & process-driven, focusing on how children learn rather than what they produce. This allows for a range of learning styles & encourages exploration at each child's unique pace.

Flexibility Matters

Each unit includes a suggested daily activity guide to support your planning—but it's not meant to be followed rigidly or completed in a set order:

- **Follow the children's lead:** If they're deeply engaged, slow down. If interest fades, it's okay to pause and return later. Some children need time to warm up to new ideas—don't move on too quickly. Repeating an invitation over several days can spark richer engagement.
- **Move at your own pace:** Stretch a week into two, repeat activities as long as needed, and allow units to grow over time.
- **Revisit, don't rush:** There's no need to introduce a new unit each month. Returning to a familiar concept—like revisiting water after exploring texture or paint—deepens understanding and strengthens memory. Revisiting isn't starting over—it's going further.

This guide is about making space for curiosity, experimentation, and meaningful learning. Use it as a springboard—trust yourself, trust the children, and allow learning to unfold naturally.



Unit: Water Exploration

Water play invites preschoolers into a world of exploration, encouraging deeper thinking, creativity, and connection. Through pouring, mixing, freezing, splashing, and experimenting, preschoolers strengthen early science concepts, problem-solving skills, and expressive language—all through active, joyful discovery. Repeating experiences builds a foundation for critical thinking, memory development, and growing confidence.

Domain	How Water Play Supports Development
Physical	Develops hand-eye coordination and muscular control through more complex tool use (funnels, tubing, sponges). Fine motor refinement supports pre-writing and self-care skills.
Cognitive	Strengthens higher-order thinking skills like hypothesizing, measuring, sequencing, and comparing. Children explore foundational concepts in physics (flow, force) and volume measurement.
Language	Fosters narrative development and explanatory language as children articulate their process ("I'm making a river"). Group water play promotes conversation turn-taking and negotiation skills.
Social-Emotional	Builds empathy, collaboration, and emotional resilience. Children manage materials together, resolve conflicts, and learn to wait, share, and adapt—all essential self-regulation and social navigation skills.

Unit: Water Exploration

Focus: Hands-on water discovery, critical thinking, observation, experimentation, fine motor development, and practical life skills.

Books: Hey, Water! by Antoinette Portis, Water by Frank Asch, Who Sank the Boat by Pamela Allen

Songs: "Rain, Rain, Go Away! "Row, Row, Row Your Boat" & Itsy Bitsy Spider

Vocabulary: Water, evaporate, absorb, transparent, reflection, ripple, current, surface, temperature, flow, density, volume, gravity, condensation, cycle, saturation, displacement, buoyancy, drizzle, translucent

Week 1: Introduction to Water

Focus Concept: What Do We Know and Wonder About Water?

Day	Activity	Prompt/Focus
Monday	Group Discussion + Free Water Play (sensory bins, pouring, scooping)	"What do you know about water? What do you wonder about water?"
Tuesday	Free Water Play (repeat) + Introduce New Tools (funnels, pipettes)	What else can we do with water?
Wednesday	Water Movement Play (sponges, turkey basters)	How does water move?
Thursday	Bubble Play in Water Bins	"What happens when air meets water?"
Friday	Water Play Reflection (draw or tell)	"What did we discover about water this week?"

Week 2: Introduction to Water Sink or Float Investigations

Focus Concept: How Do Things Act in Water?

Day	Activity	Prompt/Focus
Monday	General Sink or Float Exploration (random objects)	"What do you predict will happen?"
Tuesday	Focus on Sinking Objects (stones, metal spoons, coins)	"What do sinking objects have in common?"
Wednesday	Focus on Floating Objects (leaves, corks, plastic lids)	"Why do these objects float?"
Thursday	Make Predictions Before Testing (chart guesses)	Can you guess what will happen?
Friday	Free Water Play + New Prediction Items	What new items can we test today?



Week 3: Water & Color

Focus Concept: How Does Water Change Things?

Day	Activity	Prompt/Focus
Monday	Painting with Watercolors	"What happens when colors mix with water?"
Tuesday	Painting with Watercolors (revisit)	"What happens when colors mix with water?"
Wednesday	Colored Ice Painting	"What does color temperature do to water?"
Thursday	Ice Excavation (freeze small toys)	"How can we rescue what's frozen?"
Friday	Revisit Preferred Water Activity	What do you recall about this experience? What's something new you've discovered?



Week 4: Water in Practical Life

Focus Concept: How Do We Use Water?

Day	Activity	Prompt/Focus
Monday	Washing Dishes or Clothes Station	"How do we use water to clean?"
Tuesday	Washing Baby Dolls with Bubbles	"How do we use water for self-care?"
Wednesday	Washing Baby Dolls with Bubbles	"How do we use water for self-care?"
Thursday	Pouring and Transferring Practice (small pitchers, cups)	"How do we move water carefully?"
Friday	Revisit Preferred Water Activity	What do you recall about this experience? What's something new you've discovered?



Integrating Water Exploration Across Centers

Integrating elements of your investigation across the centers gives children repeated opportunities to explore and deepen their understanding in diverse ways. When materials and provocations connected to the broader topic appear throughout the environment, children can build, imagine, experiment, and express ideas across contexts. This natural repetition strengthens memory, supports flexible thinking, and invites children to transfer and expand their knowledge. Rather than isolating learning to one area, weaving the investigation through the classroom honors how young children learn best—through play, exploration, and meaningful, ongoing connections.

- **Dramatic Play Area**

- Add real watering cans, spray bottles, buckets, and umbrellas for open-ended weather play.
- Utilize cardboard boxes to spark imagination and transform into machines that go above and below the water (boats or submarines).
- Offer photos or postcards of oceans, rivers, and lakes as quiet provocations to inspire storytelling.

- **Blocks and Construction**

- Provide blue fabrics, stones, & driftwood for children to create rivers, ponds, & oceans.
- Invite bridge and boat building challenges using natural and recycled materials.
- Include aquatic animal toys for children to create enclosures or aquariums for.



Integrating Water Exploration Across Centers (Cont'd)

- **Science and Discovery Center**

- Offer water bins with a variety of natural materials (leaves, rocks, shells) for free exploration & testing.
- Set up magnifying glasses alongside trays of water droplets to observe closely.
- Display real-world images of water phenomena (rivers, waterfalls) to encourage dialogue & wonder.

- **Art Studio**

- Set out watercolors & invite painting with brushes, droppers, feathers, & natural tools.
- Provide absorbent & resistive papers (coffee filters, wax paper) for experimentation.
- Include real images of various types of oceans, rivers, lakes to inspire sketching and art work.

- **Sensory Table**

- Keep a base of water with changing natural additions (petals, stones, shells) for continual exploration.
- Rotate in elements like ice, bubbles, water beads, or floating objects to change the sensory experience.
- Incorporate aquatic animal toys in water bins to embrace small world play and imagination.

- **Outdoor Exploration**

- Set up sprinklers, hoses, buckets, and gutters for free water movement and large motor exploration.
- Invite observational drawings of puddles, wet surfaces, or reflections on water.
- Offer painting with water on sidewalks, fences, and rocks, watching the marks change and disappear.

