



WATER DISCOVERY CHALLENGE | *Make a splash!*

FOR THIS ADVENTURE, EXPLORE WATER

This challenge is designed to safely introduce your child to the magic of water in our environment—whether it's a creek, a pond, or a lake shore. They will learn to observe how water moves and supports life, laying the groundwork for understanding science and conservation.

WHY EXPLORE WATER?

Water exploration is key to early development!

- **Hands-On Science:** Observing what floats and sinks or how water moves is the foundation of scientific thinking and prediction.
- **Sensory Input:** The sounds, temperatures, and feelings of water are calming and help children focus and regulate their emotions.
- **Counting and Math:** Water play naturally involves scooping, pouring, filling, and measuring, which builds early mathematical understanding.

Indoor Access Note: *Don't have a creek nearby? Visit an indoor water experience, like an aquarium with a touch pool. Public splash pads and swimming pools are also great places to learn about water. Focus on the details.*

● CRITICAL SAFETY WARNINGS ●

Water is fun, but requires careful attention. Please follow these safety rules at all times:

- **NEVER** leave a child unattended near water, even for a moment.
- **Fast Water:** Keep children away from fast-moving creeks or rivers, especially during spring runoff. The current can be deceptively strong.
- **Wear a Life Jacket:** When near deep water, on a dock, or in a boat, your child must wear a correctly fitted life jacket. Many state parks offer free loaner programs.

WHAT FLOATS, WHAT SINKS? (WATER'S EDGE OR BRIDGE)

What To Do

At the safe edge of water (creek, puddle) or from a safe spot on a pedestrian bridge: Help your child gently drop small natural items they find (a leaf, a small stick, a rock, a pinecone) into the water.

Learning Goal

Develops **scientific thinking** by encouraging prediction. It builds early **math skills** (counting and comparison: "This is heavy, this is light"). Before dropping each item, ask: "What do you think will happen? Will it float or sink?"





THE RIPPLES AND REFLECTIONS

What To Do

Find a safe spot by the water and be very quiet. Use your eyes to look for anything that moves! Can you spot **fish, a frog, water bugs skimming the surface, or birds?**

Notice how creatures move, like the way a swallow swoops to catch a bug!

Draw a picture in the sand or on a page showing the wildlife you saw. If you see two ducks, draw two dots on your page.

Learning Goal

Improves focus and observation skills by asking them to be still and quiet.

Trusted Adults: If you don't know the name of the creature, use a wildlife app like **iNaturalist** to find out! Helps children learn new words about water animals and the homes they build near the water.

LOOKING AT LIFE BELOW THE SURFACE

What To Do

Use a tool: Bring a small, clear container (like a clear plastic bucket or jar) to the water's edge. Gently submerge the container near the edge, or fill it with clear water. Look through the side of the container. Can you spot any tiny plants, shadows of fish, or interesting underwater rocks?

Learning Goal

Develops **scientific thinking** by using a tool to investigate a hidden place. Encourages *patience and focus* while searching the underwater environment. Helps children *think closely* about life underwater, strengthening their observation skills.

LITERACY CONNECTION

Trusted Adults: Boost the underwater fun by looking for a picture book at your library!

You can start with these titles and get more recommendations from your librarian:

- [Over and Under the Pond](#) by Kate Messner
- [Beyond the Pond](#) by Joseph Kuefler
- [The Little Raindrop](#) by Joanna Gray
- [At The Pond \(Paws, Fins, Feathers, Claws\)](#) by David Elliott





WATER ADVENTURE CHALLENGE | *Hit the water and cool down all across Utah*

FOR THIS ADVENTURE, EXPLORE WATER

The water is a great place to cool off during Utah's hot summers. It is also a precious resource in our state. Explore and protect Utah's waterways!

Be Safe - Learn vital skills to be safe in and around water. Visit the [Utah Drowning Prevention Coalition](#) for more.

Visit your local Water Park - There are several free water parks throughout Utah. Check out your city's Parks and Recreation website for more information.

Take Swimming Lessons - Check out city and county parks and recreation programs for affordable swimming lessons. Already know how to swim? Try learning a new stroke or extend the length of time you can tread or float.

Visit a Local Swimming Pool - Utah has many public swimming pools, with outdoor pools open during warm months and indoor pools available year-round. City and county parks offer low-cost access to swimming pools. If you live in Salt Lake County, check out the free ["My County Rec Pass"](#) for kids ages 0-18.

Explore Utah Waterways - There are so many fun places to play in the water in Utah. Find a local lake or river, or take a picnic to a new site.

Try Paddleboarding - Learn to paddle on a stand-up paddleboard (SUP). Learn to balance, paddle, and steer your board. This activity builds strength and confidence while having fun on the water. Remember your personal flotation device (PFD) for safety!

Try Out Other Watercraft - Try rowing a boat, learning to sail, or paddling a canoe. Each of these watercraft allows you to explore. If you love fishing, try doing it from a watercraft! Follow all local safety guidelines, including wearing a personal flotation device (PFD).

Water Exploration - Explore your local stream, pond, or river from the shore to learn about the plants, animals, and ecosystems that thrive there. Identify species of fish, birds, and aquatic plants, and understand their role in maintaining healthy waters. Practice responsible behavior by respecting wildlife, avoiding pollution, and following "Leave No Trace" principles. This is a great way to get your Observe Wildlife and Plant Discovery badges as well!

WATER STEM ACTIVITIES

Float or Sink? - Fill up a bucket or kiddie pool with water. Gather some items from the backyard, a nearby park, or around the house, such as rocks, feathers, shells, leaves, flowers, and more. Guess whether each item will sink or float. Then test your guesses!

Design a boat - Using materials around the house, like tinfoil, cardboard, or plastic, design a small boat. Then, test how many pennies each design can hold. Which materials and shapes can carry the most pennies?

Rain Gauge - Set up a simple rain gauge in your yard. You will need a ruler, a clear container, and a waterproof marker. Use the ruler and marker to write measurements on the outside of the container in inches up to 4 inches. Then, place your rain gauge on a flat surface in an open area to collect rain. Record your measurements in your Nature Journal.

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TAKE IT UP A NOTCH!

Where Does Your Water Come From? - Find out where your local water comes from and the work being done to keep it clean.

Water Conservation - Look around your home. Are there places where you could save water? Find one way to save water and help your family implement it.

Great Salt Lake - Learn more about Utah's most famous lake. Choose an action you will take to help preserve it.

Capsize Drills - Practice what to do if you capsize in a kayak, canoe, or paddleboard. Learn how to safely get back on your watercraft in calm conditions.

Emergency Response - Understand basic emergency response skills such as how to call for help, stay calm, and perform simple self-rescue techniques.

Water Navigation with a Map and Compass - Learn how to use a map and compass for water navigation. Practice identifying landmarks and finding your way around local lakes or rivers while building your map reading and navigation skills.

Group Water Relay - Have fun with a water relay race! Organize a race where you paddle, row, or sail through various checkpoints. This team challenge is perfect for practicing water skills and having fun with friends or family.

Fishing from a Watercraft - Try fishing from a kayak, canoe, or paddleboard! Learn the basics of casting and balancing while enjoying a peaceful day on the water. Explore fish habitats and discover different fishing techniques.

Float Challenge for Older Kids - For a more advanced challenge, experiment with creating something that can float and hold a heavy object, like a rock. Use materials like plastic, sticks, or paper to craft a floating object strong enough to support the weight of the rock. Test your creation in water and adjust your design until it works.

Riparian Habitats - Riparian habitats are areas along streams, rivers, or lakes that many species depend on for food and shelter. Can you notice a difference in plant and animal life along a water source compared to drier areas? Nature Journaling: Document how the land, plants, and animals change near a water source. Write about your observations or draw a picture of a riparian habitat.

Learning to Sail - Experience the basics of sailing! Learn to control a small boat using the wind to guide your sails. Master the techniques of tacking, jibing, and steering while enjoying the thrill of moving with the wind.

