



Arizona Water Festival Unit – Materials Needed

All physical materials and worksheets needed to do the activities are listed below. Additional digital resources and extensions for each lesson can be found on [Our Webpage](#).

Pre-Festival Lessons:

Anchor Phenomena – Intro

Materials Needed *Take some time to watch and discuss [this video](#). (pause the video at 0:55 to have the students try it for themselves. You can end the video at 2:28. Give the students a chance to think about how water moves and changes form. Ask them to write down three questions that they have about the phenomena. If you are able to give the students sticky notes - create a public board of questions to refer back to during the unit.*

- [AWF-Water-Notes-Clouds.odt](#)
- [Ten-Main-Clouds-Chart.pdf](#)
- [Cloud-Scavenger-Hunt-Arizona-Sky.pdf](#)
- [The-Four-Types-of-Clouds.pdf](#)

Lesson 1.1 - Where is the Water?

Materials Needed:

- Colored pencils/markers
- [Biome coloring sheets](#)
- [Vocabulary organizer](#)
- [Cause and Effect worksheet](#)
- [Question, Evidence, Explanation Organizer](#)
- [AWF Unit Slides Intro and Lesson 1](#)

Lesson 1.2 - Molecules in Motion

Materials Needed:

- Instructional videos demonstrating how to set up experiment ([Part 1](#) / [Part 2](#))
- 2 one-quart size glass jars
- Clear cups approximately 5 inches in height (enough for 2 for each table group)
- Rubber bands
- Popsicle sticks or wooden skewers (enough for 2 for each table group)
- Small clear vials (enough for 2 for each table group)
- Blue Food color
- Ice
- Large container of boiling water (an electric kettle or hotplate can be used)
- Large container of room temperature water
- Large container of ice-cold water
- Sticky Notes
- [Lesson 1 Molecules in Motion Simulation Worksheet](#)
- [AWF Unit Slides Intro and Lesson 1](#)



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Lesson 2 - Water Movement Between Earth Systems

Materials Needed:

- Clear plastic ziplock bag for each student.
- [Thirsty Plants Data worksheet](#)
- Transpiration Diagram (found power point slides provided below)
- Clear plastic cup for each student (could be something out of recycle bin)
- [AWF Unit Slides Lesson 2](#)

Lesson 3.1 - Watersheds Work

Materials Needed:

- Spray bottles
- 2 pieces of 8-1/2 by 11 white paper per student (scrap paper can be used if blank on one side)
- Water soluble markers (green, blue, brown, red, purple)
- Scotch Tape
- [AWF Unit Slides Lesson 3](#)

Lesson 3.2 - Understanding Urban Watersheds

Materials Needed:

Each water festival group will need:

- [Runoff & Heat Scavenger Hunt Worksheet](#) for each student (handout)
- Clipboards (one for each group if possible)
- Temperature gun
- Chalk (for outside) or 10-15 chairs (for inside option)
- Sticky notes or other materials to represent pollutants found in urban runoff
- Can or bottle labeled "chemicals" or "oil" (optional)
- [Lesson 3 Vocabulary Organizer](#)
- [AWF Unit Slides Lesson 3](#)

Post-Festival Lessons:

Lesson 4 - It All Adds Up

Materials Needed:

- Piece of flip chart paper or poster board prepared as instructed for each group
- Colored markers, pencils, or crayons
- Items representing pollution (see suggested pollution items table below)
- [Lesson 4 - Best Management Practices](#)
- [SumoftheParts_StormwaterExtension](#)
- [AWF Unit Slides Lesson 4](#)



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Lesson 5 – Groundwater Connection

Materials Needed:

- [Arizona Groundwater Videos](#)
- [Groundwater Diagram Worksheet](#)
- [AWF Unit Slides Lesson 5](#)

Lesson 6.1 – A Drop in the Bucket

Materials Needed:

- 1 Liter of water per group (or for class, if doing class demo)
- Small measuring cup of at least 30 mL per group
- Globe or world map
- 100 mL measuring cup or container per group
- 10 mL measuring cup or container per group
- Eye dropper (optional) per group
- Metal Bucket or small bowl per group
- [Calculations Worksheet and Background](#)
- [AWF Unit Slides Lesson 6](#)

Lesson 6.2 – Water Web

Materials Needed:

- [Direct and Indirect Water Use worksheet](#)
- [Arizona Water Resources and Users](#)
- Copy of [Water Users Cards](#) (enough for each group)
- 2 – one-gallon empty milk jugs filled with water – label one “groundwater” and one “surface water” tied together with yarn.
- 1 ball of yarn
- Enough Dixie cups for one per student
- [AWF Unit Slides Lesson 6](#)

Lesson 6.3 – My Water Footprint

Materials Needed:

- 2 sheets of 8^{1/2} x 11 paper per student
- Pencils and optional art supplies (markers, colored pencils, crayons)
- Scissors
- Daily Use Meter [Worksheet](#)
- Cut out Copy page – [Water Use Roles](#) (enough for one per student)
- [Teacher Lesson Resources](#) pages
- [Student Water Sustainability Worksheets](#)
- [Teacher Water Sustainability WS Answers](#)
- [AWF Unit Slides Lesson 6](#)