



*Presented by:  
Science Museum Oklahoma  
Oklahoma Museum Network*

**CONFERENCE  
ACTIVITIES  
MASTER SUPPLY LIST**

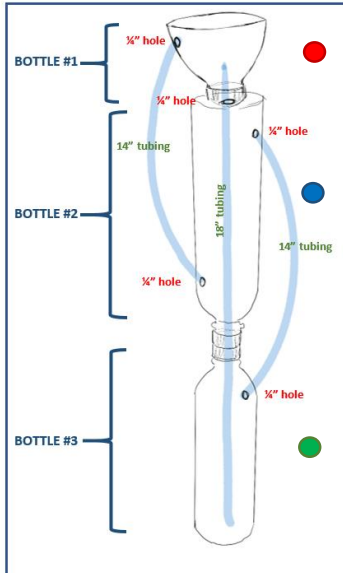
# Activity Sessions Master Supply List

Blue shading indicates teacher supplied - item not included in

## STUDENT ACTIVITIES

Materials per Class Pack (supplies for 30 students working in pairs)

### STUDENT ACTIVITY



### Heron's Fountain

- 15 Bottle #1 ● (12 oz water bottle, 1 hole 1/2 way down bottle)
- 15 Bottle #2 ● (1 liter bottle, center hole in bottom, hole near top, hole near bottom)
- 15 Bottle #3 ● (1 liter bottle, hole near top)
- 45 lids with 1/4" center hole
- 15 pieces 4 ft. 1/4" tubing
- 15 pieces assorted tub tints
- 15 10ml syringes
- hot glue gun/ glue
- scissors
- water
- Optional: drill or soldering iron for making holes

### STUDENT ACTIVITY

### Water Drop Challenge

- 15 8 oz. bottles with lids
- 15 paper plates
- 15-20 coffee filters
- 15 pieces craft foam
- 5 trash bags
- 30 Pipe cleaners
- 30 Rubber bands
- 50 straws
- 60 Craft sticks
- ball of yarn
- 30 twist ties
- paper clips
- water
- scissors
- Optional – kiddie pool or tarp to catch water spills
- Optional – tape or hot glue

### BREAKOUT ACTIVITY PART #1

### GROUNDWATER – MODEL AQUIFER

- 15 shoe boxes
- 15 bottle pumps
- 15 small rubber bands
- 1 knee high hose sock
- 15 pieces craft foam
- 1 roll duct tape
- 15 Straws
- 5 gal bucket of coarse sand
- water
- scissors

<b>BREAKOUT ACTIVITY PART #2</b>	<b>GROUNDWATER CONTAMINATION &amp; RESTORATION</b>
	15 tub tints
	1 ½ cups charcoal
	1 ½ cups sand
	30 coffee filters
	15 cups with dome lids
	2 oz cup with colored baking soda
	test tube of oil with pipette
	test tube of dish liquid with pipette
	water
<b>HALL OF RESEARCHERS ACTIVITY: (Erin Oliver)</b>	<b>Winogradsky Column</b>
	15 1 liter bottles (no lids)
	15 rubber bands
	1 clear plastic bag
	3 cups Shredded paper pulp
	1 cup Crushed oyster shells
	1 cup Epsom salts
	1 cup Plaster of Paris
	bucket or tub and a shovel or trowel to collect a sediment sample
	container for water
mixing bowl	
<b>HALL OF RESEARCHERS ACTIVITY: (Aisha Sam)</b>	<b>Soil Your Underwear - Soil Microbe Test</b>
	9 pairs cotton briefs
	9 utility marking flags
	shovel
	smart phone
soil challenge record card or notebook	
<b>HALL OF RESEARCHERS ACTIVITY: (Taylor Grace)</b>	<b>Cloud in a Bottle</b>
	15 liter bottles with lids
	5 package matches
warm water	
<b>HALL OF RESEARCHERS ACTIVITY: (Maggie Leon-Corwin)</b>	<b>LabX – Extreme Event Game</b>
	<a href="https://labx.org/extreme-event/">https://labx.org/extreme-event/</a>
	Printable Game Materials
	<a href="https://labx.org/extreme-event/materials">https://labx.org/extreme-event/materials</a>
	class set resource cards
	Recommended, but optional: 6 electronic devices for students (tablet, laptop, computer, cell phone)
Recommended, but optional: 1 electronic device for teacher	
Recommended, but optional: access to WiFi	
<b>HALL OF RESEARCHERS ACTIVITY: (Leslie Garcia)</b>	<b>Coke &amp; Milk Experiment</b>
	1 bottle each – Coke, Diet Coke, Dr Pepper, Sprite, Root Beer
	¼ cup non-fat dry milk powder

<b>HALL OF RESEARCHERS ACTIVITY: (Vinushika Panchalogaranjan)</b>	<b>Wind Turbine Blade Design</b>
	3 wind turbine sets – each set has:
	1 wired motor assembly mount on 18" 3/4" PVC pipe
	6 6" pieces 3/4" PVC pipe
	3 t connectors
	4 90° connectors
	6 cork hubs
	25 pool noodle mounts
	3 multi-meters
	20 paper plates
	15 plastic cups
	10 craft foam sheets
	100 craft sticks
30 rubber bands	
tape and/or hot glue	
fan or wind source	

<b>CITIZEN SCIENCE PROJECT - SUGGESTED APPS/DATA UPLOAD SITES</b>	
<b>CITIZEN SCIENCE PROJECT: PROJECT SQUIRREL</b>	Online observation data collection site <a href="https://www.surveymonkey.com/r/?sm=mhalkcwjwQ7bEoqax9CNYQ_3d_3d">https://www.surveymonkey.com/r/?sm=mhalkcwjwQ7bEoqax9CNYQ_3d_3d</a>
<b>CITIZEN SCIENCE PROJECT: OLAHOMA BIOBLITZ 2022</b>	iNaturalist app iOS – <a href="https://apps.apple.com/us/app/inaturalist/id421397028">https://apps.apple.com/us/app/inaturalist/id421397028</a> Android – <a href="https://play.google.com/store/apps/details?id=org.inaturalist.android&amp;hl=en_US&amp;gl=US">https://play.google.com/store/apps/details?id=org.inaturalist.android&amp;hl=en_US&amp;gl=US</a> eBird Mobile App iOS – <a href="https://apps.apple.com/us/app/ebird-by-cornell-lab-ornithology/id988799279">https://apps.apple.com/us/app/ebird-by-cornell-lab-ornithology/id988799279</a> Android – <a href="https://play.google.com/store/apps/details?id=edu.cornell.birds.ebird">https://play.google.com/store/apps/details?id=edu.cornell.birds.ebird</a>
<b>CITIZEN SCIENCE PROJECT: eBird</b>	eBird Mobile App iOS – <a href="https://apps.apple.com/us/app/ebird-by-cornell-lab-ornithology/id988799279">https://apps.apple.com/us/app/ebird-by-cornell-lab-ornithology/id988799279</a> Android – <a href="https://play.google.com/store/apps/details?id=edu.cornell.birds.ebird">https://play.google.com/store/apps/details?id=edu.cornell.birds.ebird</a> eBird Essentials Course <a href="https://academy.allaboutbirds.org/product/ebird-essentials/">https://academy.allaboutbirds.org/product/ebird-essentials/</a> Merlin Bird ID App iOS – <a href="https://apps.apple.com/app/apple-store/id773457673">https://apps.apple.com/app/apple-store/id773457673</a> Android – <a href="https://play.google.com/store/apps/details?id=com.labs.merlinbirdid.app">https://play.google.com/store/apps/details?id=com.labs.merlinbirdid.app</a>

<b>CITIZEN SCIENCE PROJECT:</b> <b>BudBurst</b>	BudBurst App iOS – <a href="https://apps.apple.com/us/app/budburst/id1531186881">https://apps.apple.com/us/app/budburst/id1531186881</a> Android – <a href="https://play.google.com/store/apps/details?id=org.chicagobotanic.budburst&amp;hl=en_US&amp;gl=US">https://play.google.com/store/apps/details?id=org.chicagobotanic.budburst&amp;hl=en_US&amp;gl=US</a> Online – <a href="https://budburst.org/register">https://budburst.org/register</a>
<b>CITIZEN SCIENCE PROJECT:</b> <b>FIELD PHOTO 2</b>	Field Phot App iOS – <a href="https://apps.apple.com/us/app/field-photo-2/id1515049617">https://apps.apple.com/us/app/field-photo-2/id1515049617</a> Android - <a href="https://play.google.com/store/apps/details?id=edu.self.FieldPhoto">https://play.google.com/store/apps/details?id=edu.self.FieldPhoto</a>

## TEACHER'S LOUNGE KIT SUPPLIES

Supplies for one teacher

<b>TEACHER'S LOUNGE ACTIVITY</b>	<b>Water Testing Chemistry</b>
	10 pack test strips
	Test strip color chart
	8 (16x150mm) polystyrene test tubes with caps
	water samples
<b>TEACHER'S LOUNGE ACTIVITY</b>	Optional: chemistry recording sheets (from activity PDF)
	<b>Water Desalination – Solar Stills</b>
	2 disposable salad bowls
	2 5 oz cups with lids
	2 plastic bowl covers
	1 tsp. salt
	8 salinity test strips
	2 glue dots
	test strip color chart
	hot water
<b>TEACHER'S LOUNGE ACTIVITY</b>	Optional: lamp to speed up evaporation
	Optional: salinity recording sheet (from activity PDF)
	<b>Nitrogen testing on fertilizer runoff model</b>
	2 foil pans with lids
	2 burlap dividers
	soil
	1 oz portion cup of pasture grass seed mix
	recycled water bottle with lid
	push pin
	6 nitrate/nitrite test strips
<b>TEACHER'S LOUNGE ACTIVITY</b>	test strip color chart
	water
	<b>Seed Paper Bookmarks</b>
	1 oz portion cup with drought tolerant wildflowers seeds
	4 x 4 plastic screen
	4 oz. paper pulp mix
paper towels	
warm water	
Optional: plate or tray	

**TEACHER'S LOUNGE  
ACTIVITY**

**Water Sampling Engineering Challenge**

8 oz water bottle with lid

2 ping pong balls

1 piece scrap Styrofoam

4 craft sticks

1 piece craft foam

6-10 flat marbles

3 feet string

4 twist ties

2 rubber bands

hot glue gun/sticks

5 gallon bucket filled with water or something similar