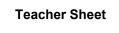


http://ccwsscience.org

SCHOOLYARD URBAN HEAT STUDIES EQUIPMENT & SUPPLY LIST





Administrative

- Curriculum manual/access to electronic files
- Lesson plans and student data sheets
- Calculators for select labs
- Timers/stopwatch/phone clock
- Select labs require internet access (desktop preferred, Chromebooks okay, iPad has not been tested)

Lab supplies

- Infrared thermometers (IRTs) (1 per 3-4 students)
- Solid bricks & spray paint: white & black (set of 3 per student group)
- Insulated "tray": e.g., insulation foamboard, lid of cooler (1 per brick set)
- Water, heat source and/or ice
- Styrofoam cups, 3 per student group
- Heat lamp (optional)

Temperature Monitoring Equipment & Supplies

Surface Sites

- GPS or equivalent (phone app)
- Infrared thermometers (IRTs) (1 per student group)
- Data collection sheets
- Watch or phone for time

General Logger needs

- Rubber boots (if desired)
- Cable ties
- ONSET HOBO Temperature Pendant MX (Model MX2201) – ~3 per teacher plus one set of 6 for reference site.
- Mobile device Bluetooth 4.0 compatible with ONSET app
- ONSET application, free download
- Wire snips/strong scissors

Air Logger Sites

- Logger housing device to protect from thermal and weather influences
- A north-facing location to mount device, not in the shade

Surface Water Logger Sites

- Brick with holes
- Coated wire tether cable with stainless steel hardware (crimper, stainless ferrules, quick links)
- 3"-4" PVC housing
- Logger ID tags
- (property access and approval)
- Handheld thermometers to take manual water temperature measurements (optional)