

## AZrivers/GLOBE Equipment List – Ordering Info, v. 6/08

Following is a list of basic equipment that schools would need to implement all areas of the GLOBE Program. You do not need all of this equipment to begin participating in either program! Equipment may be purchased from many science equipment supply businesses. Several supply houses, including Forestry Suppliers and Ben Meadows offer "GLOBE KITS". These kits contain many of the instruments needed to implement the most common GLOBE protocols. Generally, kits contain one of each item unless otherwise indicated. (see [www.forestry-suppliers.com](http://www.forestry-suppliers.com)). I have ordered the lists from most common to most advanced/least common items.

The Forestry-Suppliers GLOBE Elem. kit sells for \$395.00; the Secondary kit is \$459 (adds pH meter & buffer)

Equipment	F-S product code	Approx. cost per item	Elem/Sec. Kit	"Optional"
<b>FOR HYDROLOGY INVESTIGATIONS</b>				
Thermometer, calibration, °C	77141	\$9.95	*	
Turbidity Tube, homemade	Light tube	10.00		*
Paper for pH	78005	8.00	*	
Meter, pH 52 pen	76219	55.95	**	
Calibration buffer, pH 4/10/7	76126/127/104	7.65 x3	**	
Meter, Conductivity (uS)	76270	55.95	*	
Calibration std, 447 uS	76105	8.85	*	
Meter, Oakton pH/EC/Temp	76530	125.00		*
Test Kit, Alkalinity (Wat-DR)	77125	30.35		*
Calibration std, Alk	Baking soda			
Test Kit, Dissolved Oxygen	77152	47.50		*
Calibration std, DO	Shake it			
Test kit, Nitrate-N	77050	73.75		*
Calibration std, Nitrate	78005	10.60		*
Wash bottle	53605	4.35		*

<b>Other Optional Equipment</b>				
Latex gloves (box of 100)	77083	\$6.95		
Graduated cylinder, 100ml, 6	53641	5.00	*	
Safety Goggles	23296	3.95		
Safety glasses	23276	2.50		
Clip board	53432	2.15		
Meter stick	71163	7.95		

<b>FOR ATMOSPHERE INVESTIGATIONS</b>				
Weather Shelter	89129	\$135.00	*	
Taylor Digital Max/Min Therm.	89212	31.95	*	
Calibration Thermometer	77141	9.95	*	
Rain Gauge	88994	33.50	*	
Sling psychrometer (OK)	88982	48.95		*
Sling psychrometer (better)	89053	91.25		
Altimeter/barometer	43315	54.25		*
Zikua Ozone reader (adv)	77728	185.00		*
Ozone strips (20)	77729	43.50		*
Digital Aerosol meter (adv) dbrooks@ mcs.drexel.edu		~120.00		
*Meter for pH, buffer solutions and pH paper, same as Hydrology Equipment				
<b>FOR SOIL INVESTIGATIONS</b>				
GLOBE soil color chart	77369	\$40.00	*	
USDA Soil Texture flow chart	77352	15.95		*
Soil thermometer	89082	13.25	*	*
Hydrometer	76370	18.75	*	*
Graduated cylinder, 500ml	53629	13.95	*	*
Dispersing Solution	77961	30.00		*
Soil sieve, #10	53935	8.85	*	*
Soil fertility kit (NPK)	77960	24.95		*
Soil cans	77045	30.95		*
Acid Drop bottle	53676	3.00	*	
Ohaus electronic balance (0.1 g)	93952	81.00		*
Auger	67095	119.00		*
Soil drying oven/microwave	Build your own			*
<b>FOR LAND COVER INVESTIGATIONS</b>				
Garmin etrex GPS unit	Walmart	\$100.00		
Compass	37177	10.13		
Tape measure – 50 m	39789	23.95	*	*
Tape measure – 15 m	40106	15.95		
GLOBE wire pin flags	33799	2.90	*	*
GLOBE Plant color guide	77898	10.25		