

Technology in Practice: Applications and Innovations

Module title: Responding to Patterns of Change

Master Materials List

Consumable			
Item Description	Quantity for a class of 30	Optional	Chapter
Bottle, plastic 2-L	4		2
Box, cereal, partially filled with rocks or gravel (or 1 piece of cardboard taped to a ring stand)	1		4
Box, cereal, empty	10		4
Candle, votive and holder	10–12		1, 2
Cardboard, corrugated square (25 × 25 cm [10 × 10 in.])	10		1
Cardboard, pieces of, 8 × 8 – 8 × 10 in. (2 for drought stations, 2 for hurricane stations)	4		2
Convection box materials <ul style="list-style-type: none"> • 10 shoe boxes • 20 toilet paper tubes • 10 sheets of black construction paper • 1 roll of aluminum foil • 1 roll of plastic wrap • 1 roll of transparent tape 	1		1
Food coloring, bottle (red)	1		1
Glue stick or bottle glue	30		2, 3, 4
Ice, 5 lb bag or 40 ice cubes	1		1
Index cards, 3 × 5 in.	40		4
Markers or felt-tip pens of different colors	varies		DT, 1
Matches, safety, box	10		1, 2
Materials for creating a visual presentation (such as poster board or chart paper and markers, or a computer with presentation software)	varies		DT, 2
Materials to design a tool to turn a light switch on and off (such as rulers, straws, aluminum foil, tape, string, rubber bands, Styrofoam, dowels, pushpins, and balloons)	varies		DT

Modeling clay, stick, brown	12		2
Modeling clay, stick	1		4
Paper, 8 ½ × 11 in., unlined	41		1, 4
Paper clip, large	1		4
Paper, construction, 9 × 12 in.	10		4
Paper, large: legal size, chart, or butcher paper	10		DT
Paper towel	10		1
Pens or pencils of different colors (including blue, green, yellow, red)	varies		DT, 1, 2, 3, 4
Plastic wrap, roll	1		1
Splints, wooden	60		1
Sticky notes, 3 × 3 in. pad	30		DT, 2, 3
Tape, masking, roll	1		1
Tape, transparent, roll	1–2		2, 3, 4
Toothpicks, box	1		4
Water, cold (1–3°C), 1 L in thermos	1		1
Water, room temperature, 2 L	1		1
Water source	varies		1, 2
Water, warm, 1 L in thermos	1		1

Non-Consumable			
Item Description	Quantity for a class of 30	Optional	Chapter
Bag or container, opaque	1		3
Can, soup—empty with label removed	10		1
Container for water disposal	2		2
Container, large glass (e.g., fishbowls)	2		1
Container of water for used wooden splints	10		1
Cookie sheet	2		2
Cooler (for storing ice)	1	optional	1
Dishpan, small	2		1, 2
Fan, box (or blow dryer)	1		4
Glass, small, clear drinking	2		2
Index cards (~4 × 6 in.), laminated	2		1
Jars, pint-sized, with equal-sized mouths	4		1, 2

(large enough to fit over a votive candle)			
Lamp, desk, with a 60 or 75 W lightbulb	2		1, 2
Light switch	15	optional	DT
Object, common, that solves a technological problem	10		4
Pitcher for water	2		2
Plastic pieces, 50 white, 50 red	1 set		3
Plastic toy animal (or photo of same)	2–6		DT
Plastic toy houses and buildings, small	varies		2
Potting soil, 1 cup	4		2
Rubber band, large	1		1
Ruler, metric, 30 cm (12 in.)	10		1, 4
Scissors	30		1, 2, 3, 4
Spray bottle, plastic, with water	2		2
Stirring stick	10		1
Token, plastic	300		4
Washer (for weight)	40		4

Equipment			
Item Description	Quantity for a class of 30	Optional	Chapter
Beaker or cup	4		2
Clock, large, with a second hand that is visible to all students	1		1
Psychrometer, sling	2		2
Relative humidity calibration charts (often come with psychrometers)	2		2
Stands, sturdy (to hold sling psychrometers)	2		2
Thermometer	4		2
Tornado Tube	2		2

Safety			
Item Description	Quantity for a class of 30	Optional	Chapter
Fire extinguisher, ABC tri-class	1		1, 2
Goggles, safety	30		1, 2
Mop and bucket (or towels)	1	optional	1, 2