

Chapter 6 Materials and Equipment

The following tables contain lists of materials and equipment needed to do all the experiments. The tables are organized as follows:

- Durables
- Consumables
- Additional Items Needed Not Supplied

Durables are items that are not consumed during an experiment. They can be used several times.

Consumables are items that are used up during each class and must be resupplied for future classes. Both the durables and consumables are broken down by group and by class. A group consists of four students. While the teacher, based upon logistics and availability of equipment, will determine the group size, the information is based upon recommended group size of four students. Items listed per class are based on a class size of 40 students.

Additional Items Needed Not Supplied consists of items that are needed to complete the sections, but are not supplied by *It's About Time*®.

The first column gives the section number(s) in which each item will be used. The second column provides information needed for ordering the particular item. The third column gives the item description. The fourth and fifth columns will indicate quantity, based on either group or class needs. The last column provides a space for you to fill in your total item quantity. You will notice certain rows are shaded and have an asterisk in the last column. This is to indicate a duplicate item listing, based on the needs of different sections. You will not need to figure the items in the shaded rows into your total items needed, as they have already been accounted for in the corresponding nonshaded row.

The *Materials and Equipment* lists are broken down into either Plan A or Plan B corresponding to the *Pacing Guide*.

PLAN A					
Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
1, 5	LS-6960	Base (for mini light bulbs)	1 per group		*
3, 6	LS-6960	Base (for mini light bulbs)	4 per group		
1, 3, 5, 6	GH-7704	Generator, hand operated, DC, Genecon	1 per group		
3	CL-6002	Leads, alligator clip (singles)	4 per group		*
4	CL-6002	Leads, alligator clip (singles)	5 per group		*
5	CL-6002	Leads, alligator clip (singles)	1 per group		*
6	CL-6002	Leads, alligator clip (singles)	14 per group		
4	BH-6068	Battery holder, D-cell, stackable	5 per group		
4	RS-0310	Resistor, ohm, 5W-10W	1 per group		
4	RS-1010	Resistor, ohm, 10W-10W	1 per group		
4	RS-1510	Resistor, ohm, 15W-10W	1 per group		
4	VI-0001	V/I meter	2 per group		
6	VI-0001	V/I meter	1 per group		*
6	SS-9019	Knife, switch, SPST	2 per group		

* Please note duplicate item.

PLAN A					
Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
7, 8	CS-0024	Graduated cylinder, plastic, 100 mL	1 per group		
7	BK-1000	Beaker, glass, 1 L	1 per group		*
9	BK-1000	Beaker, glass, 1 L	3 per group		
7, 8, 9	RH-6132	Stirring rod, glass, 8 in.-12 in.	1 per group		
7, 8, 9	TS-3602	Thermometer	1 per group		
7	TO-1260	Tongs, crucible, 18 in.	1 per group		
8, 9	HS-3875	Heater, electric immersion	1 per group		
8, 9	SS-7779	Stopwatch	1 per group		
5	CH-7703	Circuit, 120 V (for demonstrating overload)		1 per class	
7	SH-0100	Specific heat specimen, set		2 per class	
7, 9	HS-5630	Hot plate, student, electric		2 per class	
7, 9	WI-0001	Wire gauze, square, 4 in. x 4 in. (w/ ceramic center)		2 per class	
8, 9	EL-4181	Scale, electronic, 0.1-g readability, 0-1500 g		1 per class	
Section	Item No.	Consumables	Group (4 Students)	Class	Total Items Needed
1	BS-5870	Bulb, blinky	3 per group		
4	BS-1597	Battery, D-cell, alkaline	5 per group		
1, 5	SS-2393	Pad, steel wool, fine	1 per group		
1, 5	LS-6959	Light bulb, mini	1 per group		
3, 6	LS-6959	Light bulb, mini	4 per group		
7, 8	CS-6047	Cup, styrene foam, 12 oz	2 per group		
4, 7	GS-7706	Paper, graph, pkg. of 50		1 per class	
5	BA-0002	Balloons, 9 in.		50 per class	
5	FU-0003	Fuse, 3 A		5 per class	
5	FU-0008	Fuse, 8 A		5 per class	
6	TS-2662	Tape, masking		6 per class	
Section	Item No.	Additional Items Needed Not Supplied	Group (4 Students)	Class	Total Items Needed
2		Pretzels, bag	1 per group		
4		Power supply (can be used in place of batteries and holders)	1 per group		
5, 8		Access to an electrical outlet		1 per class	
5		Hair dryer		1 per class	
8		Calorimeter, electrical	1 per group		

* Please note duplicate item.

PLAN A					
Section	Item No.	Additional Items Needed Not Supplied	Group (4 Students)	Class	Total Items Needed
7, 8, 9		Water, cold, 1 L	1 per group		
9		Access to a microwave oven		1 per class	

PLAN B					
Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
1, 5	LS-6960	Base (for mini light bulbs)	1 per group		*
3	LS-6960	Base (for mini light bulbs)	4 per group		
6	LS-6960	Base (for mini light bulbs)		4 per class	*
1, 3, 5	GH-7704	Generator, hand operated, DC, Genecon	1 per group		
6	GH-7704	Generator, hand operated, DC, Genecon		1 per class	*
3	CL-6002	Leads, alligator clip (singles)	4 per group		
4	CL-6002	Leads, alligator clip (singles)		5 per class	*
5	CL-6002	Leads, alligator clip (singles)	1 per group		*
6	CL-6002	Leads, alligator clip (singles)		14 per class	*
4	BH-6068	Battery holder, D-cell, stackable		5 per class	
4	RS-0310	Resistor, ohm, 5W-10W		1 per class	
4	RS-1010	Resistor, ohm, 10W-10W		1 per class	
4	RS-1510	Resistor, ohm, 15W-10W		1 per class	
4	VI-0001	V/I meter		2 per class	
6	VI-0001	V/I meter		1 per class	*
6	SS-9019	Knife, switch, SPST		2 per class	
7	CS-0024	Graduated cylinder, plastic, 100 mL	1 per group		
8	CS-0024	Graduated cylinder, plastic, 100 mL		1 per class	*
7	BK-1000	Beaker, glass, 1 L	1 per group		
9	BK-1000	Beaker, glass, 1 L		3 per class	*
7	RH-6132	Stirring rod, glass, 8 in.-12 in.	1 per group		
8, 9	RH-6132	Stirring rod, glass, 8 in.-12 in.		1 per class	*
7	TS-3602	Thermometer	1 per group		
8, 9	TS-3602	Thermometer		1 per class	*
7	TO-1260	Tongs, crucible, 18 in.	1 per group		

* Please note duplicate item.

PLAN B					
Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
8, 9	HS-3875	Heater, electric immersion		1 per class	
8, 9	SS-7779	Stopwatch		1 per class	
5	CH-7703	Circuit, 120 V (for demonstrating overload)		1 per class	
7	SH-0100	Specific heat specimen, set		2 per class	
7, 9	HS-5630	Hot plate, student, electric		2 per class	
7, 9	WI-0001	Wire gauze, square, 4 in. x 4 in. (w/ ceramic center)		2 per class	
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7	CS-6047	Cup, styrene foam, 12 oz	2 per group		
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4, 7	GS-7706	Paper, graph, pkg. of 50		1 per class	
5	BA-0002	Balloons, 9 in.		50 per class	
5	FU-0003	Fuse, 3 A		5 per class	
5	FU-0008	Fuse, 8 A		5 per class	
6	TS-2662	Tape, masking		6 per class	
Section	Item No.	Additional Items Needed Not Supplied	Group (4 Students)	Class	Total Items Needed
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4		Power supply (can be used in place of battery and holder)		1 per class	
5, 8		Access to an electrical outlet		1 per class	
5		Hair dryer		1 per class	
8		Calorimeter, electric		1 per class	
7		Water, cold, 1 L	1 per group		
8, 9		Water, cold, 1 L		1 per class	
9		Access to a microwave oven		1 per class	

* Please note duplicate item.