

Implementation Chart

Hopefully, as you become more experienced and comfortable with the curriculum, you will shift to small-group *Investigates*. Accordingly, below is an *Implementation Chart* that suggests a three-year timetable to expand the student's role in the chapter by having them do more of the *Investigates*. Although this will require a slightly greater

expenditure of time and more equipment, the benefits to the student will be manifest. Eventually, your goal should be to have the students complete almost all the investigations rather than you having to provide the maximum opportunity for inquiry.

	Section 1 Investigate	Section 2 Investigate	Section 3 Investigate	Section 4 Investigate	Section 5 Investigate	Section 6 Investigate	Section 7 Investigate
Year 1	Small-group	Small-group	Small-group	Whole-class	Small-group	Whole-class	Whole-class
Year 2	Small-group	Small-group	Small-group	Small-group	Small-group	Small-group	Whole-class
Year 3	Small-group	Small-group	Small-group	Small-group	Small-group	Small-group	Small-group

Chapter 3 Materials and Equipment

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

- Multimedia Needed
- Durables
- Consumables
- Additional Items Needed Not Supplied

Multimedia contains all the software and content videos that are necessary to complete the sections. All the multimedia items needed will be included in the Multimedia DVD/CD Set. In addition to the Multimedia DVD/CD Set, other multimedia items are available such as the *ExamView*TM Test Generator and the Constructing Physics Understanding simulations.

Durables are items which 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 group size will be determined by the teacher based upon logistics and availability of equipment, 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 non-shaded row.

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

PLAN A					
Section	ISBN	Multimedia	Group (4 Students)	Class	Total Items Needed
2	978-1-60720-041-3	Multimedia DVD/CD Set		1 per classroom	

Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
2	RS-6719	Ribbon, 12 in. (length), varying widths	3 per group		
2	WS-6731	Wire, #22, bare copper, ft	1 per group		
2, 4, 5, 6, 7	GC-0001	Dynamics cart	2 per group		
2, 4, 6	MC-5418	Clay, modeling, lb	2 per group		
2, 4, 7	SR-6737	Inclined plane for lab cart	1 per group		
2, 4, 7	SH-7212	Large ring stand	1 per group		
2, 4, 7	ST-0002	Rod, aluminum, 12 in. (length) x 3/8 in. (diameter) (to act as cross arm)	1 per group		
2, 4, 7	HO-0002	Holder, right angle, cast iron	1 per group		
2, 4, 7	SS-1281	Scissors	1 per group		
3	PE-5600	Petri dish, sterile, disposable	1 per group		
3, 6, 7	RS-2826	Ruler, metric, in/cm	1 per group		
4, 7	SM-7616	Meter stick	1 per group		
4, 5, 6	WS-0376	Weight, slotted, 100 g	6 per group		
6	SS-7779	Stopwatch	1 per group		
7	TT-6100	AC Ticker tape timer	1 per group		
7	WS-6732	Wood piece, 1 in. x 2 in. x 2 in.	1 per group		
7	VE-0012	Self-adhesive Velcro dot (part of variety of cushioning material set)	1 per group		
7	CO-0012	Cork/cardboard piece, 1/2 in. x 1 in. (part of variety of cushioning material set)	6 per group		
7	TA-0016	Double-sided tape (to adhere pieces, part of variety of cushioning material set)	6 per group		
5, 6	EL-4181	Scale, electronic, 0-1500 g, 0.01 g readability		1 per class	
3	PA-7614	Paper clips, pkg 100		1 per class	
Section	Item No.	Consumables	Group (4 Students)	Class	Total Items Needed
2, 4, 7	FF-7704	File folders	3 per group		
2, 4, 5, 6, 7	TS-2662	Tape, masking		6 per group	
3	WS-7546	Plastic wrap, roll		1 per class	
3	FL-0007	Flour, 5 lb		1 per class	
4	MW-2460	Wire, magnet, #24, 60 ft roll		1 per class	
7	SS-7722	Ball of string		1 per class	
7	RB-6108	Rubber bands, #64, pack		1 per class	

*Please note duplicate item.

Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
7	CS-5011	Unlined index card, 3 in. x 5 in., pkg 100		1 per class	
7	GS-7706	Graph paper, pkg of 50		1 per class	
Mini-Challenge	EP-1100	Easel pad		1 per class	
Mini-Challenge	CM-0008	Markers		6 per class	
Section	Item No.	Additional Items Needed Not Supplied	Group (4 Students)	Class	Total Items Needed
2		Concrete block or similar barrier (wall)		1 per class	
3		Raw egg	2 per group		
3		Large bed sheet		1 per class	
3, 5, 6, 7		Access to a smooth level surface	1 per group		
6		Photogate probeware		1 per class	
6, 7		Motion detection probeware		1 per class	
6, 7		MBL or CBL technology to record probeware activity		1 per class	
7		Stack of books	1 per group		
7		Force probeware		1 per class	
5		Spring or loop of thin metal for dynamics cart	1 per group		
7		Wood block, 4 cm x 4 cm x 3 cm	1 per group		

*Please note duplicate item.

NOTES

PLAN B					
Section	ISBN	Multimedia	Group (4 Students)	Class	Total Items Needed
2	978-1-60720-041-3	Multimedia DVS/CD set		1 per classroom	

Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
2	RS-6719	Ribbon, 12 in. (length), varying widths	3 per group		
2	WS-6731	Wire, #22, bare copper, ft	1 per group		
2	GC-0001	Dynamics cart	1 per group		*
5	GC-0001	Dynamics cart	2 per group		
4, 6	GC-0001	Dynamics cart		2 per class	*
7	GC-0001	Dynamics cart		1 per class	*
2	MC-5418	Clay, modeling, lb	2 per group		
4, 6	MC-5418	Clay, modeling, lb		2 per class	*
2	SR-6737	Inclined plane for lab cart	1 per group		
4, 7	SR-6737	Inclined plane for lab cart		1 per class	*
2	SH-7212	Large ring stand	1 per group		
4, 7	SH-7212	Large ring stand		1 per class	*
2	HO-0002	Holder, right angle, cast iron	1 per group		
4, 7	HO-0002	Holder, right angle, cast iron		1 per class	*
2	ST-0002	Rod, aluminum, 12 in. (length) x 3/8 in. (diameter) (to act as cross arm)	1 per group		
4, 7	ST-0002	Rod, aluminum, 12 in. (length) x 3/8 in. (diameter) (to act as cross arm)		1 per class	*
2, 7	SS-1281	Scissors	1 per group		
4,	SS-1281	Scissors		1 per class	*
3	PE-5600	Petri dish, sterile, disposable	1 per group		
3, 7	RS-2826	Ruler, metric, in/cm	1 per group		
6	RS-2826	Ruler, metric, in/cm		1 per class	*
4	SM-7616	Meter stick	1 per group		
7	SM-7616	Meter stick		1 per class	*
5	WS-0376	Weight, slotted, 100 g	6 per group		
4, 6	WS-0376	Weight, slotted, 100 g		6 per class	*
6	SS-7779	Stopwatch		1 per class	
6	TT-6100	AC ticker tape timer		1 per class	
7	WS-6732	Wood piece, 1 in. x 2 in. x 2 in.	1 per group		
7	VE-0012	Self-adhesive Velcro dot (part of variety of cushioning material set)		6 per class	
7	CO-0012	Cork/cardboard piece, 1/2 in. x 1 in. (part of variety of cushioning material set)		6 per class	

*Please note duplicate item.

Section	Item No.	Durables	Group (4 Students)	Class	Total Items Needed
7	TA-0016	Double-sided tape (to adhere pieces, part of variety of cushioning material set)		6 per class	
5, 6	EL-4181	Scale, electronic, 0-1500 g, 0.01 g readability		1 per class	
3	PA-7614	Paper clips, pkg 100		1 per class	
Section	Item No.	Consumables	Group (4 Students)	Class	Total Items Needed
2, 7	FF-7704	File folders	3 per group		
4	FF-7704	File folders		3 per class	
2, 4, 5, 6, 7	TS-2662	Tape, masking		6 per group	
3	WS-7546	Plastic wrap, roll		1 per class	
3	FL-0007	Flour, 5 lb		1 per class	
4	MW-2460	Wire, magnet, #24, 60 ft roll		1 per class	
7	SS-7722	Ball of string		1 per class	
7	RB-6108	Rubber bands, #64, pack		1 per class	
7	CS-5011	Unlined index card, 3 in. x 5 in., pkg 100		1 per class	
7	GS-7706	Graph paper, pkg of 50		1 per class	
<i>Mini-Challenge</i>	EP-1100	Easel pad		1 per class	
<i>Mini-Challenge</i>	CM-0008	Markers		6 per class	
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6, 7		MBL or CBL technology to record probeware activity		1 per class	
7		Stack of books	1 per group		
7		Force probeware		1 per class	
5		Spring or loop of thin metal for dynamics cart	1 per group		
7		Wood block, 4 cm x 4 cm x 3 cm	1 per group		

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