## Chapter 5 Materials and Equipment

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

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

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 ${ }^{\oplus}$.

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 | Item No. | Durables | Group (4 Students) | Class | Total Items Needed |
| 1, 3, 7, 9 | SM-1676 | Meter sticks | 1 per group |  |  |
| 1,3 | CS-3246 | 3" C-clamp | 1 per group |  |  |
| 1,3 | WH-0500 | 500-g weight with hook | 4 per group |  |  |
| 1,3 | PH-3070 | Pulley with mount | 1 per group |  |  |
| 1,3,4 | GS-5100 | Safety glasses, impact | 4 per group |  |  |
| 1, 2, 3 | CS-6047 | Styrene-foam cup, 12 ounces | 2 per group |  |  |
| 1, 3, 4, 5, 9 | SS-1281 | Scissors | 1 per group |  |  |
| 2 | HS-0100 | Helical coil | 1 per group |  |  |
| 2 | SS-7779 | Stopwatch | 1 per group |  |  |
| 2, 5, 7, 8 | RS-2826 | Ruler, metric, in./cm | 1 per group |  |  |
| 4 | TS-0400 | Large test tubes $20 \times 150$ | 4 per group |  |  |
| 6 | CB-1414 | Cardboard, 14" x 14" | 2 per group |  |  |
| 5,6 | SS-6133 | Mirror support | 2 per group |  |  |

* Please note duplicate item.

| Section | Item No. | Durables | Group <br> (4 Students) | Class | Total Items Needed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5, 6, 7, 9 | 22-2000 | Light bulb socket with switch and 40W bulb | 1 per group |  |  |
| 5,9 | SS-6135 | Posterboard, 11" x 14", white screen | 1 per group |  |  |
| 6 | MS-2114 | Mirror, plane, $7.5 \times 12.5 \times 4 \mathrm{~mm}$ | 2 per group |  |  |
| 6, 7, 8 | RH-6131 | Clear glass rod 4"- 8" | 1 per group |  |  |
| 6, 7, 8 | LP-0002 | Laser pointer - class 2 | 1 per group |  |  |
| 6, 7, 8 | RH-1000 | Plastic rod holder | 1 per group |  |  |
| 6 | PM-0521 | Protractor | 1 per group |  |  |
| 7 | LS-1000 | Cylindrical mirror | 1 per group |  |  |
| 8 | AC-2279 | Acrylic block | 1 per group |  |  |
| 8 | PR-0001 | Right-angle prism | 1 per group |  |  |
| 9 | LS-1001 | Convex lens 10 cm focal point | 1 per group |  |  |
| 9 | LS-7001 | Convex lens 20 cm focal point | 1 per group |  |  |
| 9 | LS-6600 | Light source for optical bench with battery holder | 1 per group |  |  |
| 9 | OH-1404 | Optical bench apparatus | 1 per group |  |  |
| 9 | OT-0001 | Overhead transparencies | 1 per group |  |  |
| 9 | WS-6136 | Wood block to raise light source | 3 per group |  |  |
| 10 | LS-9000 | Lamp, clip-on with shade |  | 4 per class |  |
| 10 | LS-4119 | Stand for clip-on lamp |  | 4 per class |  |
| Section | Item No. | Consumables | Group (4 Students) | Class | Total Items Needed |
| 1, 3 | FL-0030 | Fishing line - 30 lb test ( 55 yards) | 1 per group |  |  |
| 2 | TS-6120 | Adding-machine tape, roll | 1 per group |  |  |
| 5,10 | CB-1414 | Cardboard, 14" $\times 14$ " | 2 per group |  |  |
| 9 | BS-1608 | AA alkaline battery | 1 per group |  |  |
| 7, 8 | GS-7706 | Graph paper, pkg 50 |  | 1 per class |  |
| 2 | TS-2662 | Tape, masking |  | 6 per class |  |
| 2, 5, 7, 9 | CS-5011 | Card, unlined index, 3" x 5" pkg 100 |  | 1 per class |  |
| 4 | SS-6113 | Straw, drinking, transparent, pkg 100 |  | 2 per class |  |
| 10 | BU-0001 | Bulb-25W White |  | 1 per class |  |
| 10 | BU-0002 | Bulb-25W Green |  | 1 per class |  |
| 10 | BU-0003 | Bulb-25W Blue |  | 1 per class |  |
| 10 | BU-0004 | Bulb-25W Red |  | 1 per class |  |
| Section | Item No. | Additional Items Needed Not Supplied | Group (4 Students) | Class | Total Items Needed |
| 1,2 |  | Large area clear of obstructions | 1 per group |  |  |
| 4 |  | Access to water, 300 mL | 1 per group |  |  |
| $5,6,7,9,10$ |  | Access to an electrical outlet | 1 per group |  |  |
| 6, 7, 8 |  | Paper | 1 per group |  |  |
| 10 |  | Large white screen |  | 1 per class |  |
| 10 |  | Acrylic or water-color paints (different colors) | 6 per group |  |  |
| 10 |  | Paper to paint on | 2 per group |  |  |
| 10 |  | Paint brush | 1 per group |  |  |


| PLANB |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Section | Item No. | Durables | Group (4 Students) | Class | Total Items Needed |
| 1,7 | SM-1676 | Meter sticks | 1 per group |  |  |
| 3, 9 | SM-1676 | Meter sticks |  | 1 per class | * |
| 1 | CS-3246 | 3" C-clamp | 1 per group |  |  |
| 3 | CS-3246 | 3" C-clamp |  | 1 per class | * |
| 1 | WH-0500 | 500-g weight with hook | 4 per group |  |  |
| 3 | WH-0500 | 500-g weight with hook |  | 4 per class | * |
| 1 | PH-3070 | Pulley with mount | 1 per group |  |  |
| 3 | PH-3070 | Pulley with mount |  | 1 per class | * |
| 1, 4 | GS-5100 | Safety glasses, impact | 4 per group |  |  |
| 3 | GS-5100 | Safety glasses, impact |  | 4 per class | * |
| 1, 2 | CS-6047 | Styrene-foam cup, 12 ounces | 2 per group |  |  |
| 3 | CS-6047 | Styrene-foam cup, 12 ounces |  | 1 per class | * |
| 1,4 | SS-1281 | Scissors | 1 per group |  |  |
| 3, 5, 9 | SS-1281 | Scissors |  | 1 per class | * |
| 2 | HS-0100 | Helical coil |  | 1 per class |  |
| 2 | SS-7779 | Stopwatch |  | 1 per class |  |
| 2, 5, 7 | RS-2826 | Ruler, metric, in./cm | 1 per group |  |  |
| 8 | RS-2826 | Ruler, metric, in./cm |  | 1 per class | * |
| 4 | TS-0400 | Large test tubes $20 \times 150$ | 4 per group |  |  |
| 6 | CB-1414 | Cardboard, 14" x 14" | 2 per group |  |  |
| 6 | SS-6133 | Mirror support | 2 per group |  |  |
| 5 | SS-6133 | Mirror support |  | 2 per class | * |
| 6, 7 | 22-2000 | Light bulb socket with switch and 40W bulb | 1 per group |  |  |
| 5,9 | 22-2000 | Light bulb socket with switch and 40W bulb |  | 1 per class | * |
| 5,9 | SS-6135 | Posterboard, 11" $\times 14$ ", white screen |  | 1 per class |  |
| 6 | MS-2114 | Mirror, plane, $7.5 \times 12.5 \times 4 \mathrm{~mm}$ | 2 per group |  |  |
| 6,7,8 | RH-6131 | Clear glass rod 4"- 8" | 1 per group |  |  |
| 6,7,8 | LP-0002 | Laser pointer - Class 2 | 1 per group |  |  |
| 6, 7, 8 | RH-1000 | Plastic rod holder | 1 per group |  |  |
| 6 | PM-0521 | Protractor | 1 per group |  |  |
| 7 | LS-1000 | Cylindrical mirror | 1 per group |  |  |
| 8 | AC-2279 | Acrylic block | 1 per group |  |  |
| 8 | PR-0001 | Right-angle prism | 1 per group |  |  |
| 9 | LS-1001 | Convex lens 10 cm focal point |  | 1 per class |  |
| 9 | LS-7001 | Convex lens 20 cm focal point |  | 1 per class |  |
| 9 | LS-6600 | Light source for optical bench with battery holder |  | 1 per class |  |
| 9 | OH-1404 | Optical bench apparatus |  | 1 per class |  |

* Please note duplicate item.

| Section | Item No. | Durables | $\begin{array}{c}\text { Group } \\ \text { (4 Students) }\end{array}$ | Class | $\begin{array}{c}\text { Total Items } \\ \text { Needed }\end{array}$ |
| :---: | :--- | :--- | :--- | :--- | :--- |
| 9 | OT-0001 | Overhead transparencies |  | 1 per class |  |
| 9 | WS-6136 | Wood block to raise light source |  | 1 per class |  |
| 10 | LS-9000 | Lamp, clip-on with shade |  | 4 per class |  |
| 10 | LS-4119 | Stand for clip-on lamp |  | 4 per class |  |
| Section | Item No. |  | Consumables | (4 Students) | Class | \(\left.\begin{array}{c}Total Items <br>

Needed\end{array}\right]\)

* Please note duplicate item.


## NOTES

