

Day 1:

- Teacher greets students at the door as they enter. Students are seated in pre-assigned seats. Desks should have names, on a sticky or index card, maybe color code by class or the small groups in which you would like them to work.
- (5 min) Students pick up a survey, quick write, info sheet, etc. as they enter to complete as the teacher takes attendance.
- (10 min) Teacher introduces him/herself to the class, gives an overview of the course, what are some of the exciting things they will learn this year. Teacher collects the student info sheets. During this time, if there are materials the teacher expects students to purchase for class, students should be told this information. A composition notebook is suggested.
- (20 min) Class Ice Breaker - Science News of the Summer
Discussion: Had anyone heard about any of this news? Were any problems solved? What questions do you still have? What problems may be created as a result? Did you attempt to solve any problems this summer?
- (40 min) Did you solve any problems this summer? Here's a problem for you to solve now, and here are the materials.
"You are the owner to Rock Hill Widgets, Inc. Sales are up! One of your expenses is in the materials to make your boxes. You currently make boxes from a single sheet of cardboard, and a single length of tape. So that you maximize your profit from increased demand for widgets, how can you make the largest box from the same materials? Boxes should be OPEN boxes." Any extra material should be placed in the box. Teacher passes out sharpies for each student to write their name on the bottom of their box. *Boxes should be put away so that the next class does not see them and get ideas.*

Day 2:

- Teacher greets students at the door as they enter. Students should be reminded to sit in the same seats as yesterday.
- (5 min) Students pick up a copy of the syllabus to read over as the teacher takes attendance.
- (30 min) Teacher begins a discussion with, "Yesterday we discussed some of the many different things we would learn over the course of the year! Do you remember? Who can tell us something that seemed interesting from yesterday?" "How many would agree that in order for us to accomplish these tasks, we must have some order as to how we do things?" "Take a look at your syllabus, and let's talk about it." Go over the highlights of your syllabus, including rules and procedures with students.
- (30 min) Yesterday, you all solved a problem, you made the largest box you could make from a single sheet of cardstock and 1-foot of tape. Teacher allows students to get their boxes row by row. "So, your task was to make the largest box you could make, but how do we quantify 'large?' Is large just about the height of the box? Is it just about how big the base of the box is? How could we measure our boxes?" Teacher sketches a box on the board and demonstrates what height, length, and width and how to calculate volume using $L \times W \times H = V$.
Task: In partners, without moving from your seat, compare your box with you partner. What do you notice? Which do you think is more sturdy? Feasible? Easier to build? Which left the most leftover paper? Could that paper have been used to make a larger box? Which box looks larger? Teacher gives each group a ruler to measure and calculate the volume of their boxes. If students were to remake their box, would they make the same design? How could each box be improved?
- Teacher leads a class discussion showing off some boxes, and asking the class for suggestions as to how boxes could be improved.
- If time permits, teacher may practice student names or ask students about some of the things they wrote on their info sheets as hobbies, goals, etc.

Day 3:

- Teacher greets students at the door as they enter. Students should be reminded to sit in the same seats as previous days.
- (10min) Teacher shares some fond memories of science labs from his/her past, and asks students to share their memories, too. Teacher steers the conversation to the importance of lab safety.
- (6 min) Teacher shows the District lab safety video. During the video, students should jot down notes.
- (15 min) After the video, in small groups, students are to compare notes. They are each given a half sheet of typing paper to neatly write a list of the most important lab safety rules.
- (Hopefully by today, everyone has a composition notebook. Teacher should bring some, just in case.)
(30 min) Individually, students will begin setting up their notebooks. Markers, index cards, tape, and glue sticks, stickers, etc. should be available. Teacher should post on the board what students should do. While students work, teacher should move about the room assisting and getting to know the students.
 - ◆ Students names on the front.
 - ◆ Label a Table of Contents page
 - ◆ Label the last 4 pages as Greek/Latin glossary
 - ◆ Paste your lab rules inside the front cover of the notebook
 - ◆ ...
- If textbooks are now available, and time permits, students may label their textbooks with their name on the spine and front cover, and practice putting the books in their designated location.
- (5min) So, everyone has their notebook ready, textbook ready, you know the rules and procedures, what are your expectations of this course?

Day 4:

- Teacher greets students at the door as they enter. Students should be reminded to sit in the same seats as previous days. Teacher asks students to pick up their textbook and have their notebook ready to begin class.
- (5 min) Who can remember what I told you this class was about? (brief discussion) Today we will get to know our textbook.
- (15 min) Give each student: Getting to Know your Textbook. Allow time to complete this assignment.
- (10 min) Teacher leads a brief discussion of the textbook's organization, then leads into topics of the first chapter.
- (15min) Students find a partner, to read with, and complete the information on the first 1-2 pages of the textbook. Somewhere on these pages is a lab. Students should complete this lab tomorrow.
- (10min) Discuss what students learned from these pages, and go over the answers - be sure to do this today.

Day 5: Prepare a workshop model lesson to include the first lab in your lab manual.

→ Mini Lesson:

→ Independent Work:

→ Group Work:

→ Sharing:

