Name

## Cells

As you go through this unit on the study of cells, you should have these "big" ideas in mind.

- How can something small and seemingly insignificant make a big impact?
- How do we know about something we can't see?
- How can technology change our current view of the universe?

TASKS: You work as a cell biologist for Pfizer—the world's largest



research based organization. You just started your job as an entry level researcher and need to prove yourself in a couple fundamental tasks before you are assigned to a research project. With a partner or two, you will work on the tasks below. After each activity is completed, you will hold a discussion and share your knowledge with your boss (the teacher). Your boss may choose to have you rework or redo certain tasks based on your level of mastery of the content or he/she might extend/question/provide feedback before signing off on the activity. Ultimately each activity is a building block, just like a cell, that allows your access to further understanding the complex mystery of "life".

|                   | Activity Name   | Page # in<br>ILL | Teacher<br>Initials |  |
|-------------------|---|------------------|---------------------|--|
| Microscopic Image |   |                  |                     |  |
|                   | Overview—Microscopic Image  |                  |                     |  |
|                   | Pre-test  |                  |                     |  |
|                   | Proper Microscope Use   |                  |                     |  |
|                   | POYOProper Microscope Use (Top 5 Most Important Things to               |                  |                     |  |
|                   | Remember is suggested)  |                  |                     |  |
|                   | Lab—Microscopic Image part 1  |                  |                     |  |
|                   | Microscope Labeling (from lab)with sticky labels for review             |                  |                     |  |
|                   | Quiz—Microscope Parts and Functions (must earn 100%)                    |                  |                     |  |
|                   | Lab—Microscopic Image part 2  |                  |                     |  |
|                   | SWYK—Microscopic Image  |                  |                     |  |
|                   | Process—Microscope Man  |                  |                     |  |
|                   | CFU—Microscopic Image (must pass with 80% of higher)                    |                  |                     |  |
|                   | Current Event—Technology related article related to microscope (you     |                  |                     |  |
|                   | must findno later than 2010) annotated (highlight key ideas, brackets   |                  |                     |  |
|                   | for new [vocab], arrows connecting ideas and summary statement at       |                  |                     |  |
|                   | conclusion of reading)  |                  |                     |  |
|                   | Process—Technology current event reflection (questions provided)        |                  |                     |  |
| Cell Theor        | y/Protists  |                  |                     |  |
|                   | Overview—Cell Theory and Single-Celled Organisms                        |                  |                     |  |
|                   | Lab—ABCs of Life (cell drawings should accurately reflect what is seen) |                  |                     |  |
|                   | SWYK—ABCs of Life   |                  |                     |  |
|                   | POYO—SWYK ABCs of Life  |                  |                     |  |
|                   | CFV—ABCs of Life (must pass with 80% of higher)                         |                  |                     |  |
|                   | Lab—Diversity of Protists   |                  |                     |  |
|                   | SWYK—Diversity of Protists  |                  |                     |  |
|                   | POYO—SWYK Diversity of Protists   |                  |                     |  |

You MUST complete the following activities in order:

| CFU—Diversity of Protists (must pass with 80% of higher)                                |  |  |  |
|---|--|--|--|
| Current Event—Technology related article related to Cell Theory or                      |  |  |  |
| Protists (you must findno later than 2010) annotated (highlight key                     |  |  |  |
| ideas, brackets for new [vocab], arrows connecting ideas and summary                    |  |  |  |
| statement at conclusion of reading)   |  |  |  |
| Process—Technology current event reflection (questions provided)                        |  |  |  |
| Study Guide—Protist/Cell Theory/Microscope  |  |  |  |
| Quiz—Protist/Cell Theory/Microscope   |  |  |  |
| Plant and Animal Cells  |  |  |  |
| Overview—Plant and Animal Cells   |  |  |  |
| Cell Organelles—Notes (use of powerpoint on Weebly or Cells Alive)                      |  |  |  |
| Process—Cell Similes (must stick to one topicno repeating parts!)                       |  |  |  |
| Life Process—Notes (use of powerpoint on Weebly)  |  |  |  |
| Process—Life Processes drawings (follow directions carefullygraded                      |  |  |  |
| assignment)   |  |  |  |
| Lab—Plant Cells and More Plant Cells  |  |  |  |
| U Overview—Hierarchical Organization  |  |  |  |
| Lab—Animal Cells  |  |  |  |
| SWYK—Plant and Animal Cells (*prep Lab—Incredible Egg)                                  |  |  |  |
| POYO—SWYK Plant and Animal Cells  |  |  |  |
| CFU—Plant and Animal Cells (must pass with 80% of higher)                               |  |  |  |
| <ul> <li>Current Event—Technology related article related to cells (you must</li> </ul> |  |  |  |
| findno later than 2010) annotated (highlight key ideas, brackets for                    |  |  |  |
| new [vocab], arrows connecting ideas and summary statement at                           |  |  |  |
| conclusion of reading)  |  |  |  |
| Process—Technology current event reflection (questions provided)                        |  |  |  |
| Study Guide—Cell Parts and Life Processes   |  |  |  |
| Quiz—Cell Parts and Life Processes  Transmuch Endowing and Life Processes               |  |  |  |
| Iransport—Extension as time permits (move directly to test if no time)                  |  |  |  |
| Lap—Incredible Egg set up   |  |  |  |
| Cell Transport Notes with textbook  |  |  |  |
| Lap—Incredible Egg results  |  |  |  |
| DOVO CANKILLE III E   |  |  |  |
| CELL LA HUL EAG   |  |  |  |
| CrV—Incredible Egg  Cruche Cruche Coll Livit  |  |  |  |
|   |  |  |  |
|   |  |  |  |