STATION 1

Shrinky Dink Cells

1. Use the cell template to color then trace **ONE** (each person) plant **or** animal cells.
2. Use permanent markers ONLY – no crayons.
3. Correctly **Label** the parts of the cell with the black Sharpie. Use the Organelle ID page to help labeling.
4. Cut around the border to shape your cell and eliminate rough edges.
5. Punch a hole in the top is you wish to hang your cell.
6. Write your name on the bottom.
7. Place on the cookie sheet when complete.
8. The teacher will shrink your cell for you.
9. Quiz each other on the functions until it is time to rotate.

STATION 2

POP-UP CELLS

1. Choose ONE – plant or animal cell (opposite of your shrinky dink cell) to make a pop-up cell.
2. Color the organelles with colored pencil PRIOR to cutting.
3. Follow the direction on the paper labeled **PROCEDURE** – Be sure to FOLLOW DIRECTIONS in order. **OMIT PART 3**
4. Complete the blanks with the correct functions for each organelle you have on your pop-up cell.
5. CLEAN-UP – Throw away all scrap paper and replace all colored pencils into the tub when finished.
6. If you finish with time remaining – QUIZ your station partners on the functions of the organelles and compare the differences between the plant and animal cells.

STATION 3

CELL QUIZLET

1. Log onto the computer using YOUR LOGIN
2. Access the QUIZLET website

http://quizlet.com/ cv12l

3. Play the games SCATTER and SPACE RACE
4. Explore the LEARN activity
5. Take the TEST
6. Record your grade and highlight any organelle functions you missed in your journal on the “cell structures and functions” worksheet.
7. CREATE FLASH CARDS using the index cards provided for each organelle – write the cell structure on one side and the function on the other.

STATION 4

CELL ANALOGY BOOK

1. Using the cell structures and their functions create a comparative analogy T-chart like the one below. You MUST create **at least 10 analogies** using different organelles.

Organelle in Cell	Part of Analogy Facility	FUNCTION
Nucleus	Mayor	Controls all cell functions / controls all city activities
Vacuole	Water Tower and treatment plants	Stores water, nutrients and waste

2. Once you have completed your brainstorming chart - **Create a BOOK** to record your analogies in a creative, colorful, **illustrated** product. 1 analogy per page! See examples.
3. Use the computer paper as your pages and a sheet of construction paper as a cover.
4. Colored pencils are available to illustrate.
5. IDEAS: Mall, School, Sports Stadium, Military, USA, Boat, Concert, Fire Station, Play, Amusement Park, Disney World, Airport or one of your own.

STATION 5

Cell Comparison

1. In your journal draw a typical animal cell and a typical plant cell INDICATE the DIFFERENCES with noticeable markings such as *
2. Refer to the chart below to note the differences between Prokaryotic and Eukaryotic Cells – Draw a typical Prokaryotic cell and a typical Eukaryotic Cell – INDICATE the DIFFERENCES with a *

		Eukaryotic Cell
Nucleus:	Present	Absent
Number of chromosomes:	More than one	One--but not true chromosome: Plasmids
Cell Type:	Usually multicellular	Usually unicellular (some cyanobacteria may be multicellular)
True Membrane bound Nucleus:	Present	Absent
Example:	Animals and Plants	Bacteria and Archaea
Genetic Recombination:	Meiosis and fusion of gametes	Partial**,** cell division - transfers DNA
Lysosomes and peroxisomes:	Present	Absent

	Eukaryotic Cell	
Microtubules:	Present	Absent or rare
Endoplasmic reticulum:	Present	Absent
Mitochondria:	Present	Absent
Cytoskeleton:	Present	May be absent
Ribosomes:	larger	smaller
Vesicles:	Present	Present
Golgi apparatus:	Present	Absent
Chloroplasts:	Present (in plants)	Absent; chlorophyll scattered in the cytoplasm
Flagella:	Microscopic in size; membrane bound; usually arranged as nine doublets surrounding two singlets	Submicroscopic in size, composed of only one fiber
Cell wall:	Only in plant cells and fungi (chemically simpler)	Usually chemically complexed
Vacuoles:	Present	Present
Cell size:	10-100um	1-10um

3. Complete the Venn Diagram to summarize the similarities of plant vs animal and eukaryote vs prokaryote

STATION 6

CELL STRUCTURE SORT

1. Each student should empty their own Ziploc bag of cell parts, words and functions onto the table.
2. Spread out the cell structures – matching the correct word to the visual picture of the structure to the correct function.
3. Check your results with those of your station partners.
4. Shuffle and Return the cards to the correct Ziploc bag without mixing them with another person's bag.
5. Quiz each other of the parts of the cell and their functions if you have time remaining.