Pre-AP Biology: Cell Cycle Flip Chart

Objective: To provide an opportunity for students to use their knowledge of the cell cycle to create a flip chart to illustrate the differences in each phase of the cell cycle.

Materials:

3 pieces white paper
Markers, colored pencils, crayons
Diagrams of cells during cell cycle

Procedure:

1. Following the guidance of the teacher, prepare the flip chart using the 3 pieces of white paper. Staple the top of the chart in two places as instructed.
2. On the outer flap, write the title "Cell Cycle" and write your name underneath. You may decorate the cover however you wish.
3. On each of the following tabs, write these labels IN ORDER from top to bottom: Interphase, Prophase, Metaphase, Anaphase, and Telophase/Cytokinesis
4. Lift up the cover flap. The title Interphase should be written at the bottom of the first flap. You are going to be working on this flap for the next few procedures.
5. Find the picture of the cell during interphase on the WS attached. Cut out the cell—do not cut around the letters—remove the letters from the cell diagram. Use a glue stick to attach the cell diagram to the left side of the interphase flap.
6. Use the key from the diagrams on the WS to label the parts of the cell. Write in the names of the parts!
7. Color the diagram—each part should be a different color, and draw a colored box around the label. Example: Color the nuclear membrane blue and draw a blue box around the nuclear membrane label. Do this for all cell parts and labels.
8. On the side opposite the picture, use your notes to write a description of what happens during that phase of the cell cycle. For example: Interphase is made up of G_1, S, and G_2. Write descriptions of what is happening during these phases.
9. Continue steps 4-8 for each of the remaining phases.
10. Please be neat and meet all the requirements of the project to get full credit.
11. For the Telophase/Cytokinesis flap, be sure to write a description of cytokinesis since there is not a picture to represent this phase.