Objective List

1. Students will be able to explain how and why larger cells have more demands placed on them than a regular cell.
2. Students will be able to calculate surface area to volume ratios if given the measurements of hypothetical cell sizes.
3. Students will be able to identify the surface area to volume ratio as an inverse relationship and explain why this is an issue for the cell.
4. Students will be able to analyze why cancer cells are a danger to us and how the differ from normal cells
5. Students will be able to identify where daughter cells come from.
6. Students will be able to explain how DNA gets copied and transferred to new cells from parent cells.
7. Students will be able to distinguish the difference between chromosomes and chromatids.
8. Students will be able to explain how cell growth is regulated by explaining what cyclin is.
9. Students will be able to identify each of the stages of the cell cycle: G1 phase, S phase, G2 phase and M phase. In addition students will be able to identify what takes place during each stage.
10. Students will be able to indentify prophase, metaphase, anaphase and telophase, and distinguish what is different in each phase
11. Students will be able to define cytokinesis and understand why this concludes mitosis.