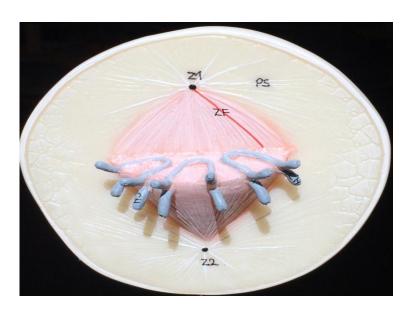


## **Prophase**

Chromatin condenses into chromosomes in the nucleus (K). Nucleolus (N, red) still present, Model 1: Spindle apparatus (Z1, Z2) forms.

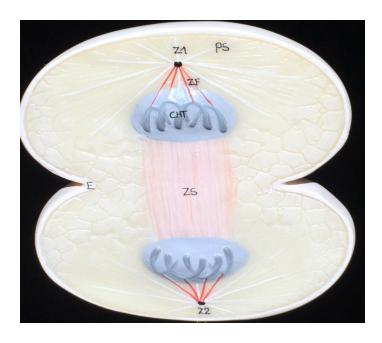
Nuclear membrane disappears, nucleolus disappears, centrosomes (PS) on opposite poles Model 3: of cell, chromosomes (CH) attach to spindle apparatus and begin migrating to metaphase plate (shown)



**Metaphase** 

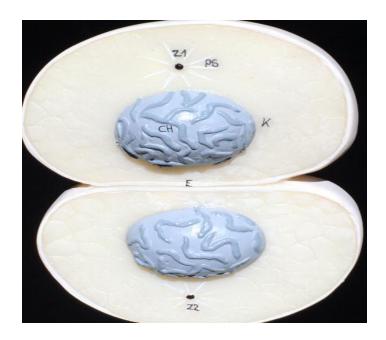
Model 4: Chromosomes (CH) line up on metaphase plate at the center of the cell (shown)

## **Mitosis Model Key:**



**Anaphase** 

Model 5: Centromere on chromosomes (CH) split to begin anaphase. Spindle (Z1, Z2) contracts and moves sister chromatids (chromosomes) to opposite poles of the cell



**Telophase** 

Chromosomes reach opposite poles and clump; events of prophase are reversed (nuclear membrane reforms, nucleolus reforms, chromosomes de-condense, spindle apparatus disappears); cytokinesis (Division of the Cell is completed)