

## Cell Division

### Model 1 Prophase

Formation of the chromosomes from the chromatin network of the cell nucleus (K), beginning formation of an achromatic spindle between the daughter chromosomes (Z1, Z2), developed from the centrosome, and formation of aster rays (PS) around the daughter centrosomes.

N= nucleolus

C= cytoplasm

### Model 2 Prophase

Similar to 1, but extension of the achromatic spindle (ZS)

### Model 3 Prophase

Similar to 2, but radiation of achromatic fibres (ZF) from the centrosomes to the chromosomes (CH); beginning longitudinal division of the chromosomes; dissolution of the nuclear membrane.

### Model 4 Metaphase

Orientation of the lengthwise split chromosomes (Ch) at the equatorial plane of the spindle ("equatorial plate").

### Model 5 Anaphase

Contraction of the achromatic fibres (ZF) and moving of the daughter chromosomes (Ch) to the opposite poles of the spindle (Z1, Z2).

Model 6 Anaphase

Similar to 5, in addition, constriction of the plasma body (E).

### Model 7 Anaphase

Further moving asunder of the daughter chromosomes and formation of "daughter plates" (Ch T). Progressive constriction of the plasma body (E).

### Model 8 Telophase

Loosening and ramification of the chromosomes (Ch) into the nuclear reticulum and formation of the nuclear membrane (K); involution of the aster rays; complete separation of the plasma body.