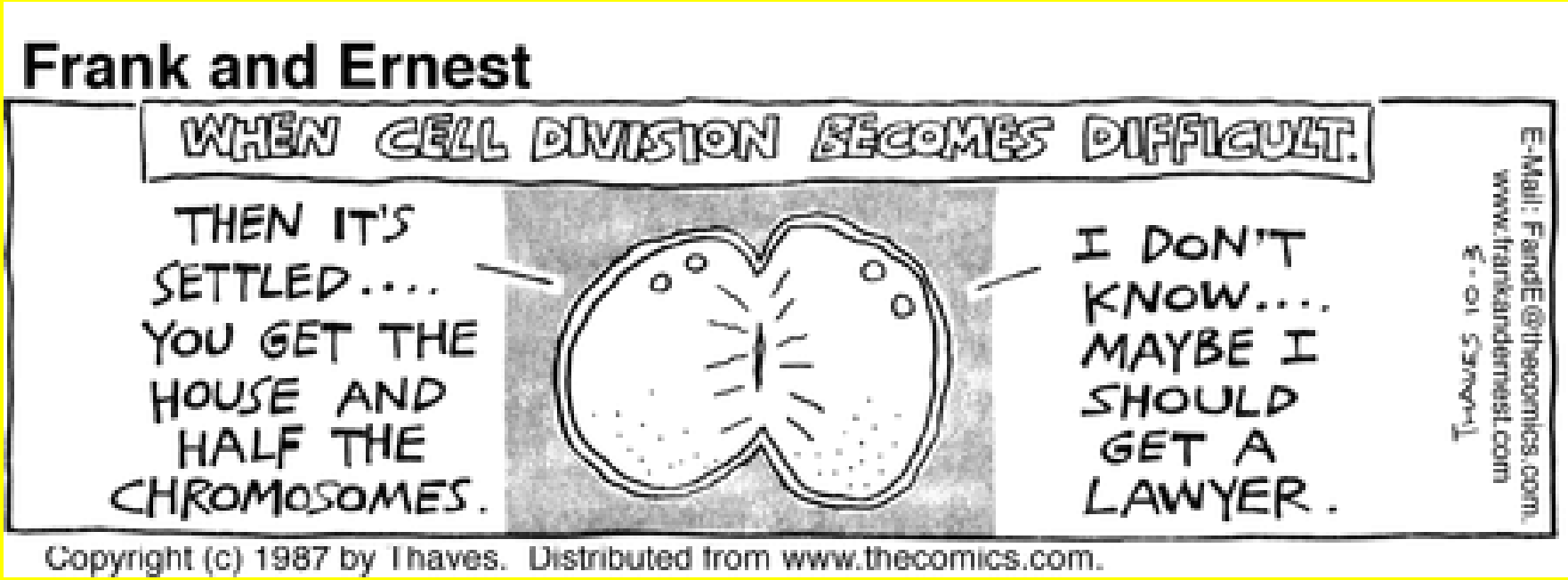
Chapter 11-4
Part 1

Intro to MEIOSIS



I. Mendel

A. Studied genetics before genes, DNA and meiosis were discovered.

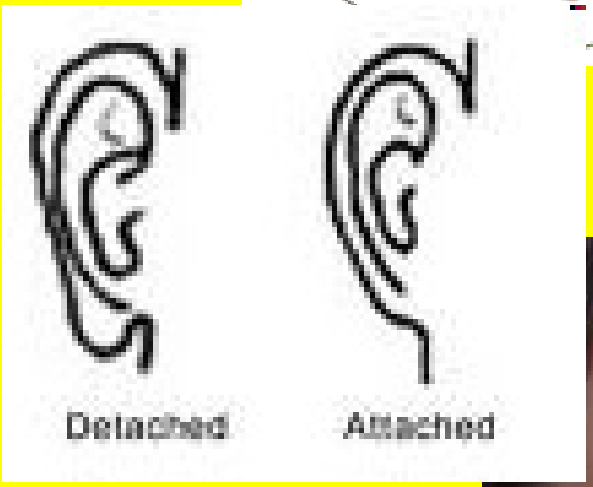
B. Wrote several principles-two that apply

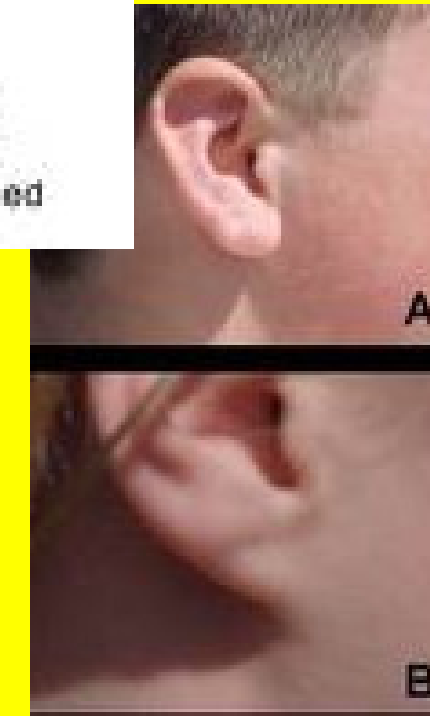
1. Each organism inherits a single copy of every gene from each parent.
2. When an organism produces gametes (Sex cells), genes must be separated so each gamete contains 1 set.

II. Chromosome Number

A. Homologous Chromosomes = chromosomes that code for same genes/traits, but come from different parents and so have different genetic info.

B. Chromosome from female parent that has the genes for hair color, eye shape, dimples and ear lobes paired up with the chromosome from male parent that codes for those same genetic traits, but have different genetic info are **homologous** chromosomes.





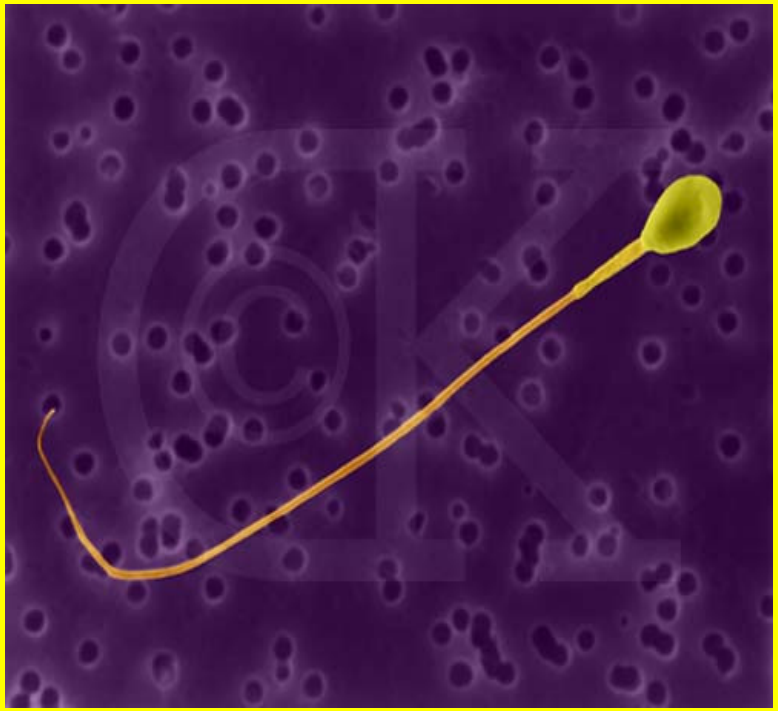
Example: Gene/Trait = earlobes
Genetic info = attached or unattached

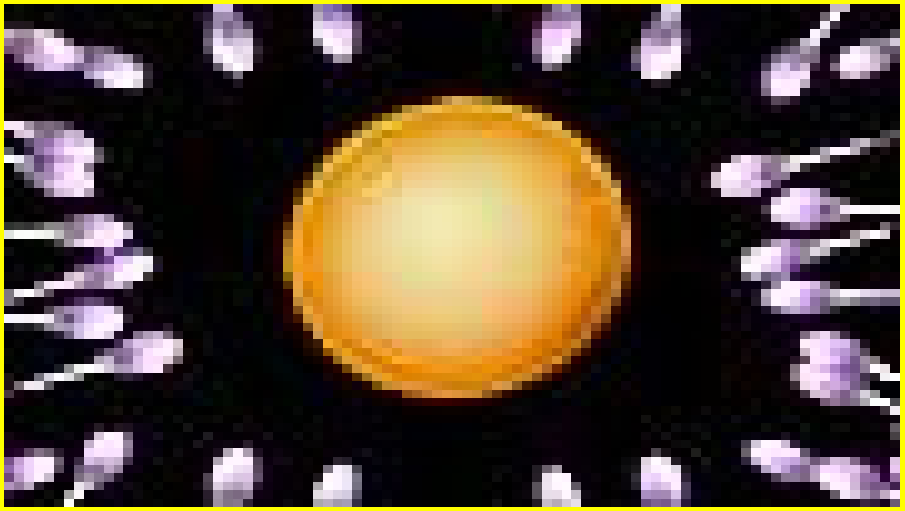
B. Haploid=N

1. N = One set of chromosomes (from one parent).

2. Humans haploid # = 23

3. All **gametes** contain **haploid** #





C. Diploid=2N

1. Two sets of homologous chromosomes

2. 2N (remember N=1 set of chromosomes)

3. Humans 2N=46

4. All **somatic cells** contain the **diploid** number of chromosomes