

# Tying it all Together

(Asexual vs. Sexual Reproduction & Mitosis vs. Meiosis)

creates 2 identical daughter cells -- 1 organism needed -- offspring get  $\frac{1}{2}$  of DNA from each parent --  
cell doubles DNA and splits twice -- sex cells not needed -- only occurs in sex cells -- sex cells needed (sperm & egg) -  
cells are diploid (2n) -- makes somatic (body) cells -- 2 organisms of the same species needed -- cells are haploid (n)-  
parent contributes 100% of DNA -- produces sex cells (sperm & egg) -- results in genetically different offspring --  
cells double DNA then splits -- purpose to repair cells/replace cells -- creates 4 genetically different daughter cells --  
happens all over the body (except sex cells) -- ways to reproduce are binary fission, budding, fragmentation) --  
produces cells with  $\frac{1}{2}$  of DNA -- offspring identical to parent --

## HOW an organism reproduces

Asexual

Sexual

## What goes on INSIDE the body (in the cells of an organism)

Mitosis

Meiosis

