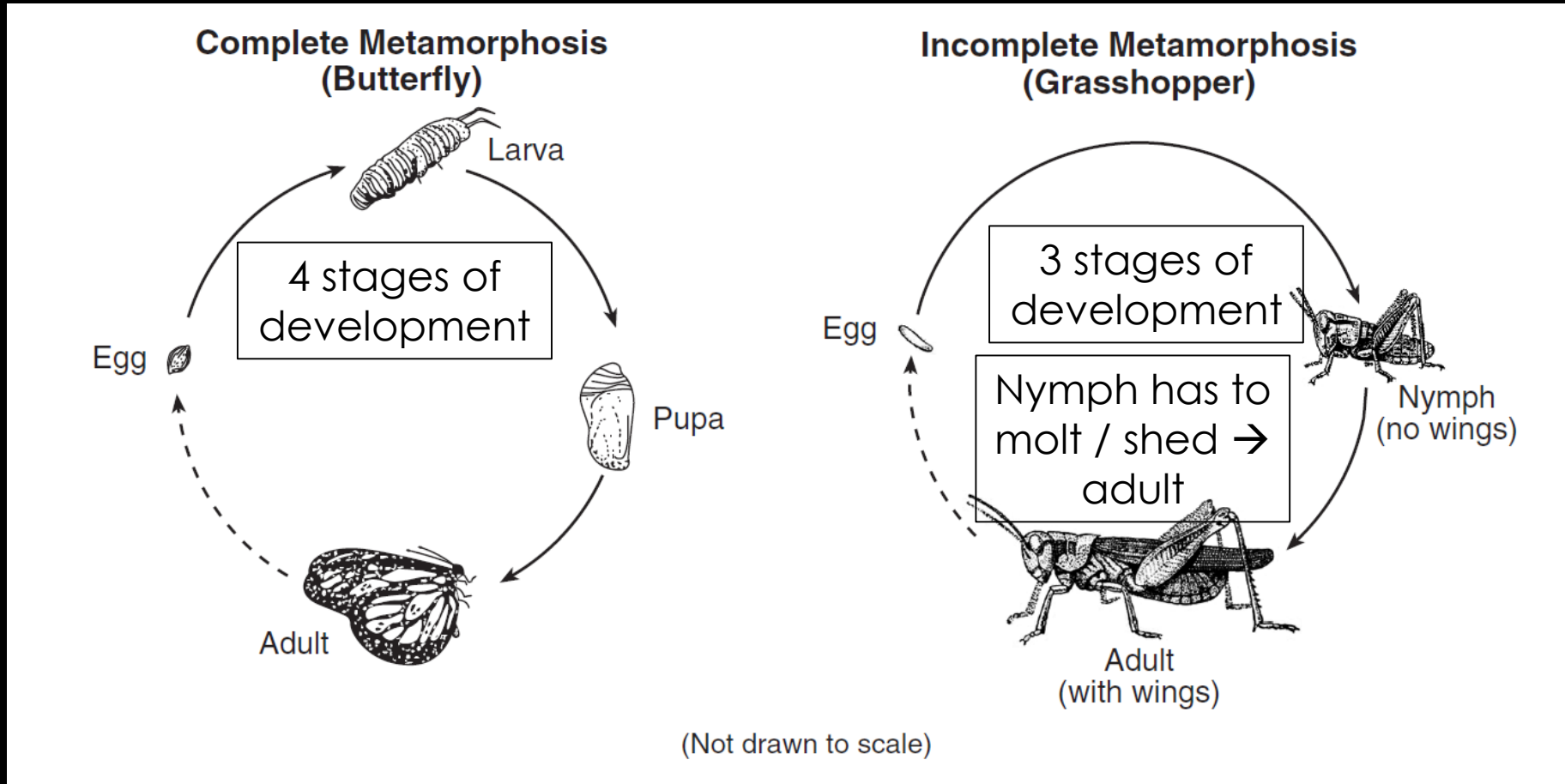


Reproduction Review

Define Metamorphosis

- Developmental change from one form to another
- Ex: tadpole → frog
- Ex: larvae → insect

Difference between Complete and Incomplete metamorphosis



DNA

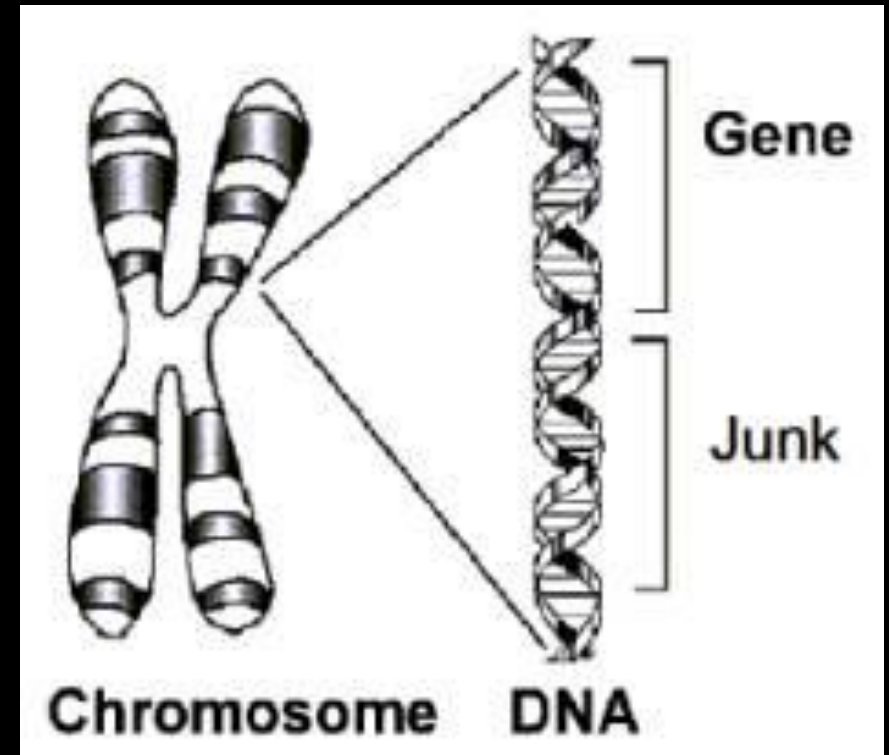
- Carries traits from one generation to the next

Gene

- Composed of DNA = made of DNA
- Carries a single unit of heredity information

Chromosomes

- Packages of DNA
- Carry genes
- Body cells have 2 copies of each chromosome
- Sex cells have only 1 copy



Practice (Determine number of chromosomes)

Organism	Body cells	Sex cells
Human	<input type="text"/>	<input type="text"/>
Skunk	<input type="text"/>	<input type="text"/>
Potato	<input type="text"/>	<input type="text"/>
Fruit fly	<input type="text"/>	<input type="text"/>
Kangaroo	<input type="text"/>	<input type="text"/>

Selective Breeding

- Choosing certain organisms to reproduce → organism with desirable traits
- Ex: breeding dogs

Asexual reproduction

- Offspring are genetically identical to the parents
- Only 1 parent

Sexual Reproduction

- Offspring have different genetic information from parents
- Genetic information comes from 2 different sex cells
- Involves fertilization

Sperm

- Male sex cell
- Only has 1 set of chromosomes

Egg

- Female sex cell
- Only has 1 set of chromosomes

Fertilization

- Fusion of sex cells

Zygote

- Cell formed by fertilization

Internal Development

- Offspring develop inside one of the parents
- Ex: humans

External Development

- Offspring develop outside of the parents
- Ex: birds and reptiles develop in eggs

Photosynthesis

- Energy process in plants
- Produces oxygen and stores energy from sun

Respiration

- Releases stored energy
- uses oxygen gives off carbon dioxide

Biological Adaptation

- Trait that helps an organism survive
- Ex: Arctic hare turns white in the winter

Extinction

- Occurs when the environment changes and species do not have adaptations to help them survive