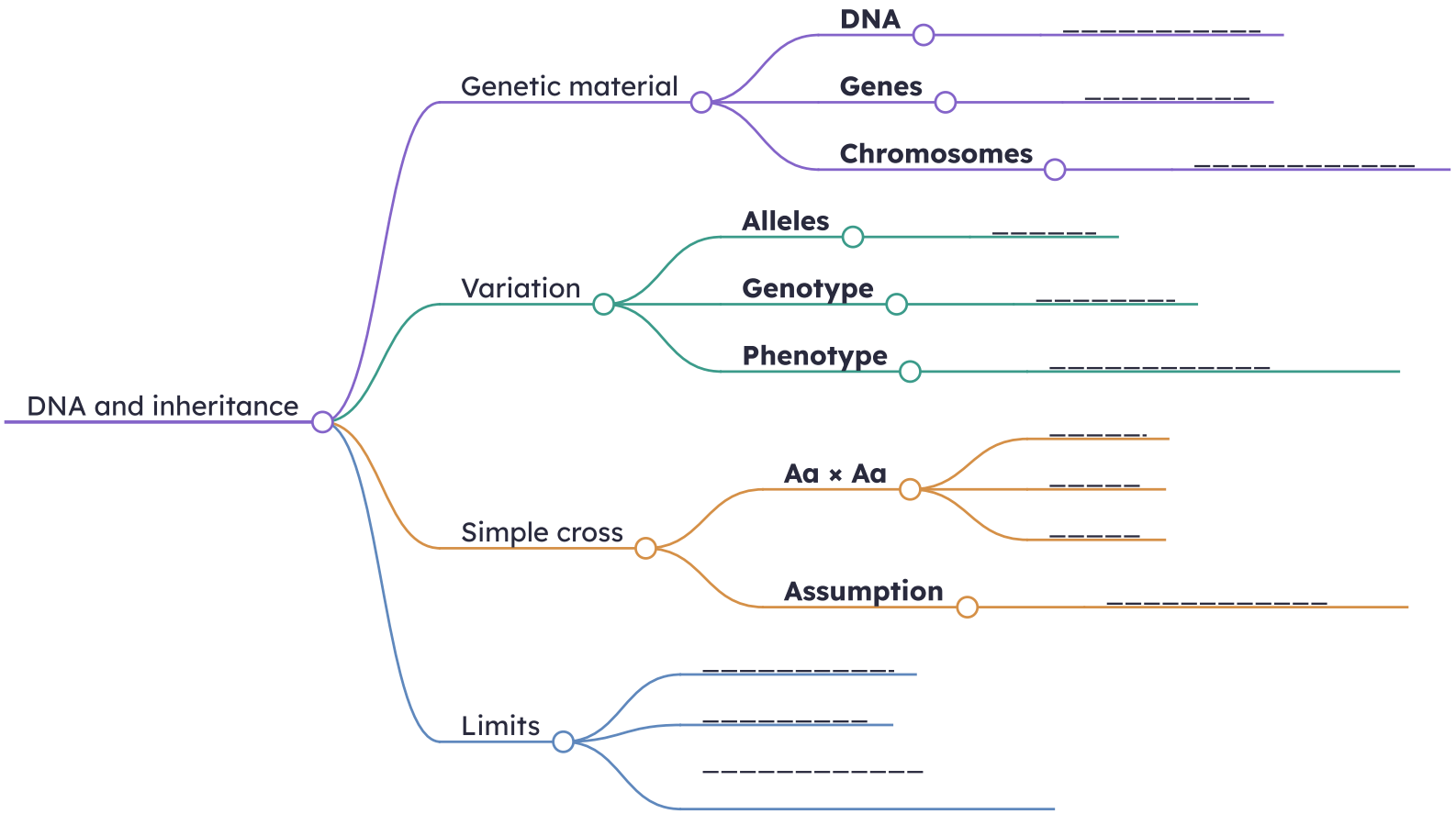
DNA and inheritance

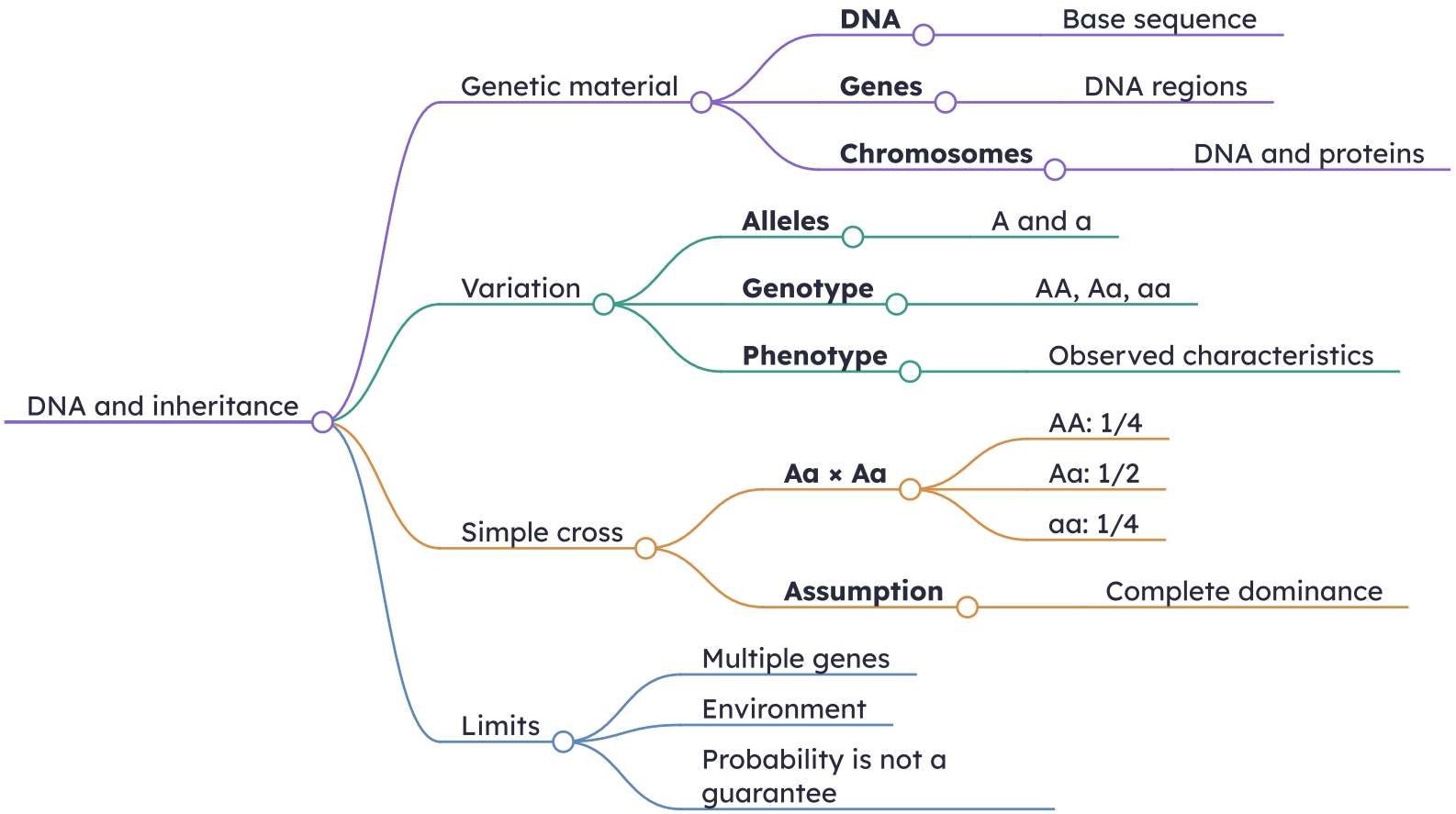
Fill the branches with key terms and explanations from memory. Compare with the answer key on the next page.



Name _____ Date _____

DNA and inheritance

Connect DNA, genes, chromosomes, alleles, and the limits of simple inheritance models.



Read one branch at a time. Then cover the details and explain them in your own words.

DNA and inheritance · in detail

Every detail from the map in reading order. Follow the indentation to see which ideas belong together.

Genetic material

- DNA
  - Base sequence
- Genes
  - DNA regions
- Chromosomes
  - DNA and proteins

Variation

- Alleles
  - A and a
- Genotype
  - AA, Aa, aa
- Phenotype
  - Observed characteristics

DNA and inheritance · in detail

Every detail from the map in reading order. Follow the indentation to see which ideas belong together.

Simple cross

- Aa × Aa
  - AA: 1/4
  - Aa: 1/2
  - aa: 1/4
- Assumption
  - Complete dominance

Limits

- Multiple genes
- Environment
- Probability is not a guarantee