INDIANA BIOLOGY · UNIT 2 · 10 QUESTIONS

# Genetics and Heredity — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

**1** **In a Punnett square the letters along the top and side represent**

- A Offspring phenotypes
- B Parent gametes
- C Enzyme names
- D Chromosome numbers

Understand It with Pulse | Flag a mistake

**2** **A person with blood type O has which genotype**

- A IA IA
- B IA i
- C i i
- D IB i

Understand It with Pulse | Flag a mistake

3 **If a homozygous dominant parent is crossed with a homozygous recessive parent all offspring will be**

- A Homozygous dominant
- B Homozygous recessive
- C Heterozygous
- D Half dominant half recessive

Understand It with Pulse | Flag a mistake

4 **Environmental factors can affect phenotype because they can affect how**

- A Genes are expressed
- B Chromosomes are counted
- C Gametes are made
- D DNA is copied

Understand It with Pulse | Flag a mistake

5 **A mutation in a body cell that is not a gamete is**

A Always passed to offspring

B Never passed to offspring

C Passed only to sons

D Passed only to daughters

Understand It with Pulse | Flag a mistake

6 **Which scientist is best known for the pea plant experiments that founded modern genetics**

A Darwin

B Mendel

C Pasteur

D Watson

Understand It with Pulse | Flag a mistake

7 **A karyotype shows the chromosomes of a cell arranged by**

- A Color
- B Age
- C Function
- D Size and shape

Understand It with Pulse | Flag a mistake

8 **A male human normally has which pair of sex chromosomes**

- A XX
- B XY
- C YY
- D XO

Understand It with Pulse | Flag a mistake

9 **A cross between two heterozygous parents gives 400 offspring About how many are expected to be homozygous recessive**

ANSWER

Understand It with Pulse | Flag a mistake

10 **In humans how many autosomes are in a normal body cell**

ANSWER

Understand It with Pulse | Flag a mistake

## ANSWER KEY

| | | | | | |
|---|---|---|---|---|---|
| **1.** | B | **5.** | B | **9.** | 100 |
| **2.** | C | **6.** | B | **10.** | 44 |
| **3.** | C | **7.** | D | | |
| **4.** | A | **8.** | B | | |

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