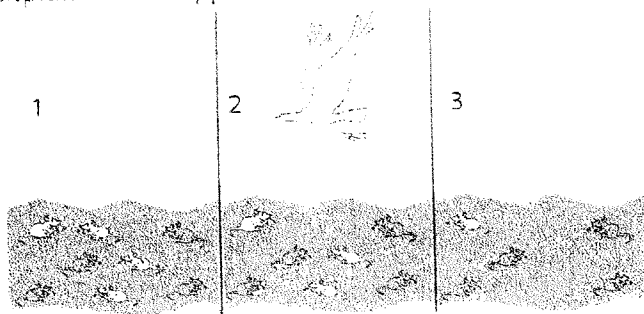


IN: 1. Describe how the population of mice is different in figure 3 compared to figure 1.
 Explain what happened to cause this difference. _____



2. What characteristic is favored for survival? _____
 3. Which type of mice are the "fittest"? _____

OUT:

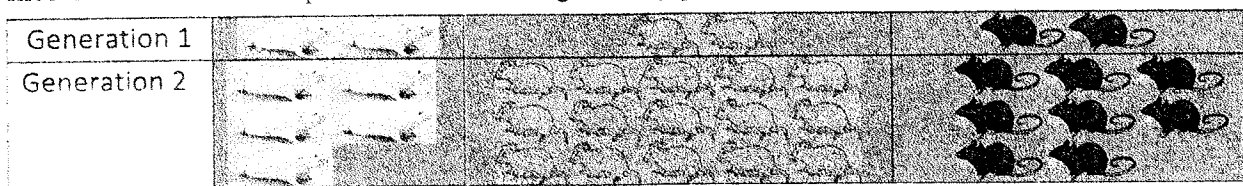
1. What does the term fitness mean when biologists are discussing evolution? _____

Suppose a population had three female mice with the following characteristics.

Color of Fur	White	Gray	Black
Running speed	5 cm/sec.	6 cm/sec.	8 cm/sec.
# offspring produced by each female	5	15	8
Age at death	3 months	6 months	3 months

2. From an evolutionary point of view, which mouse would be the fittest? How do you know that this mouse would be the fittest? _____

A characteristic which is influenced by genes and passed from parents to offspring is called a **heritable trait**. A heritable trait that increases fitness is called an **adaptive heritable trait**. Individuals with an adaptive heritable trait generally produce more offspring.



3. Explain why the percent of mice with gray fur would increase from generation 1 to generation 2. Include the terms **fitness** and **adaptive heritable**.

