# Multiple Choice

1. What is the main intent of the Bridge Design Pattern?

A. To enhance the functionality of an object at runtime

B. To separate an abstraction from its implementation so that the two can vary independently

C. To ensure that a class has only one instance and provide a global point of access to it

D. To define an interface for creating an object, but let subclasses decide which class to instantiate

2. Which of the following best describes what the 'abstraction' in the Bridge Pattern does?

A. It is the lower-level implementation that does the actual work

B. It defines the object's interface

C. It is a design principle that dictates that software entities should be open for extension, but closed for modification

D. It is a pattern that ensures a class has only two instances

3. In the Bridge Pattern, what is the 'implementor' responsible for?

A. Defining the interface for the abstraction

B. Implementing the bridge between different parts of the system

C. Providing the implementation for the abstraction's interface

D. Creating multiple instances of an object

4. Which of the following is a benefit of using the Bridge Design Pattern?

A. It simplifies the code by merging abstraction and implementation

B. It increases the coupling between the abstraction and implementation

C. It allows for the implementation to be developed independently from the abstraction

D. It ensures that a class can only have one instance

# Answer Key

Question 1: b. To ensure that a class has only one instance and provide a global point of access to it

Question 2: a. It defines the object's interface

Question 3: b. Providing the implementation for the abstraction's interface

Question 4: b. It allows for the implementation to be developed independently from the abstraction