**Post Assessment Answer Key**

Instructions: Answer the following questions.

1. What is glucose?
   1. A type of protein
   2. A type of sugar
   3. A type of fat
   4. A type of vitamin
2. What does a glucose test strip measure?
   1. The amount of protein in a solution
   2. The amount of glucose in a solution
   3. The amount of fat in a solution
   4. The amount of salt in a solution
3. What is insulin and what role does it play in the body?

Insulin is a hormone produced by the pancreas that helps regulate blood sugar levels by facilitating the uptake of glucose into cells for energy.

1. Why is it important for people with diabetes to monitor their blood glucose levels?

It is important because maintaining proper blood glucose levels helps prevent complications such as nerve damage, kidney damage, vision problems, and cardiovascular diseases. Regular monitoring allows individuals to manage their condition effectively through diet, exercise, and medication.

1. How can testing different solutions for glucose help scientists and engineers develop better treatments or devices for diabetes?

Testing different solutions for glucose can help scientists and engineers understand how various substances affect blood sugar levels. This knowledge can be used to develop more accurate glucose monitoring devices, create better insulin delivery systems, and improve dietary recommendations for individuals with diabetes.