3A/B Biological Sciences

Energy Extended Answer.

Use the paper provided to write your responses to the following questions.

1. The energy released from glucose during respiration is used to convert the ADP molecule into an ATP molecule.

a) Draw a diagram to show this process. (3)

b) Describe 3 features of ATP which make it suited to the role of energy carrier. (3)

2. Respiration and photosynthesis are often said to be opposite reactions.

a) What reasoning supports this idea? (2)

b) Why should this statement be considered incorrect? (4)

3. Yeast cells living at the bottom of a stagnant lake obtain their energy in a different way to a duck swimming on the surface.

Describe in detail these differences using correct biological terminology. (6)