National 5 Biology

**S4 Revision Homework 2** (source – Model Paper 3, Qus 1 & 5)

**Peer Marking Scheme**

Carefully peer mark using the marking scheme below. Remember wording is very important! If you are not sure ask your teacher for advice. Give constructive feedback at the end – What did they do well? How could they improve?

Underline = essential for mark

/ = alternative

() = non-essential for mark

Qu 1.

(a) (i) osmosis (1)

(ii) water moved from **higher concentration** inside the cells to **lower concentration**

 in the sugar solution. (answer must be in terms of **water concentration**) (1)

(b) substance – oxygen **OR** glucose **OR** CO2 (1)

Reason – required for respiration (O2 or glucose) **OR** waste removal (CO2) (**reason must match substance**) (1)

(c) active transport requires additional energy passive does not **OR**

 active is against concentration gradient, passive is down the gradient **OR** active involves carrier protein passive does not. (**comparison** required) (1)

Qu 2.

1. (i) 10% (1)

(ii) increasing the concentration of ATP increases the contraction it causes in muscle cells

 (*Answer should* ***not restate the results***) (1)

(iii) starting/initial lengths were different. (1)

1. Prevents cross contamination of ATP solutions (1)
2. Aerobic – **X, Y**

 Fermentation – **W, X, Z** (**all = 2, 1 error = 1**)