Body in Action *Checklist*

Changing Levels of Performance (* = Credit outcomes)

1. Continued exercising of muscles causes **muscle fatigue**.

2. Muscle fatigue is caused by a lack of oxygen and the build up of **lactic acid**.

3*. Lactic acid is produced as a result of **anaerobic respiration** in the muscles.

4*. The word equation is glucose ⟶ lactic acid + energy.

5*. Anaerobic respiration occurs because the oxygen supply by the blood cannot keep up with the demands by the muscles.

6. **Pulse rate** is measured in beats per minute and is a measure of how quickly the heart is beating.

7. **Breathing rate** is measured in beats per minute and one breath is in and out.

8. Both pulse rate and breathing rate **increase with exercise**.

9. The reason for an increase in pulse rate and breathing rate during exercise is an **increased demand for oxygen** by the muscles and the production of excess carbon dioxide.

10. In a fit person pulse rate and breathing rate do not go as high during exercise and come down quicker after exercising when compared to an unfit person.

11. After exercise, pulse rate, breathing rate and lactic acid levels take some time to return to normal. This is the **recovery time**.

12*. **Training** improves fitness by increasing the efficiency of the lungs and blood circulation.

13. Recovery time is reduced by increased training.