Energy Systems Information Sheet

1 Creatine Phosphate System or ATP system

- *Immediate energy system.*
- *Anaerobic, does not use oxygen*
- *Uses creatine phosphate to create energy.*
- *Can only last for about 10 seconds.*
- *Limited supply of creatine phosphate and has to be resynthesized.*
- *Used in 100m, long jump, javelin, sprinting, jumping*

2 Lactic Acid system

- *Anaerobic energy system- short term energy system. Does not use oxygen*
- *Here ATP is made by the partial breakdown of glucose and glycogen*
- *Involves anaerobic glycolysis (the breakdown of glucose or glycogen to produce ATP)*
- *Lactic acid is produced, causing stiffness and fatigue.*
- *Used in 400m race, 200m swim.*

3 Aerobic System

- *Long term energy system.*
- *Uses oxygen.*
- *Breakdown of fatty acids to provide large amounts of ATP.*
- *Carbon dioxide and water are by products.*
- *Occurs in the mitochondria of cells- power stations responsible for converting food into energy.*
- *Slow system but is continuous.*
- *Used in marathon, triathlon.*