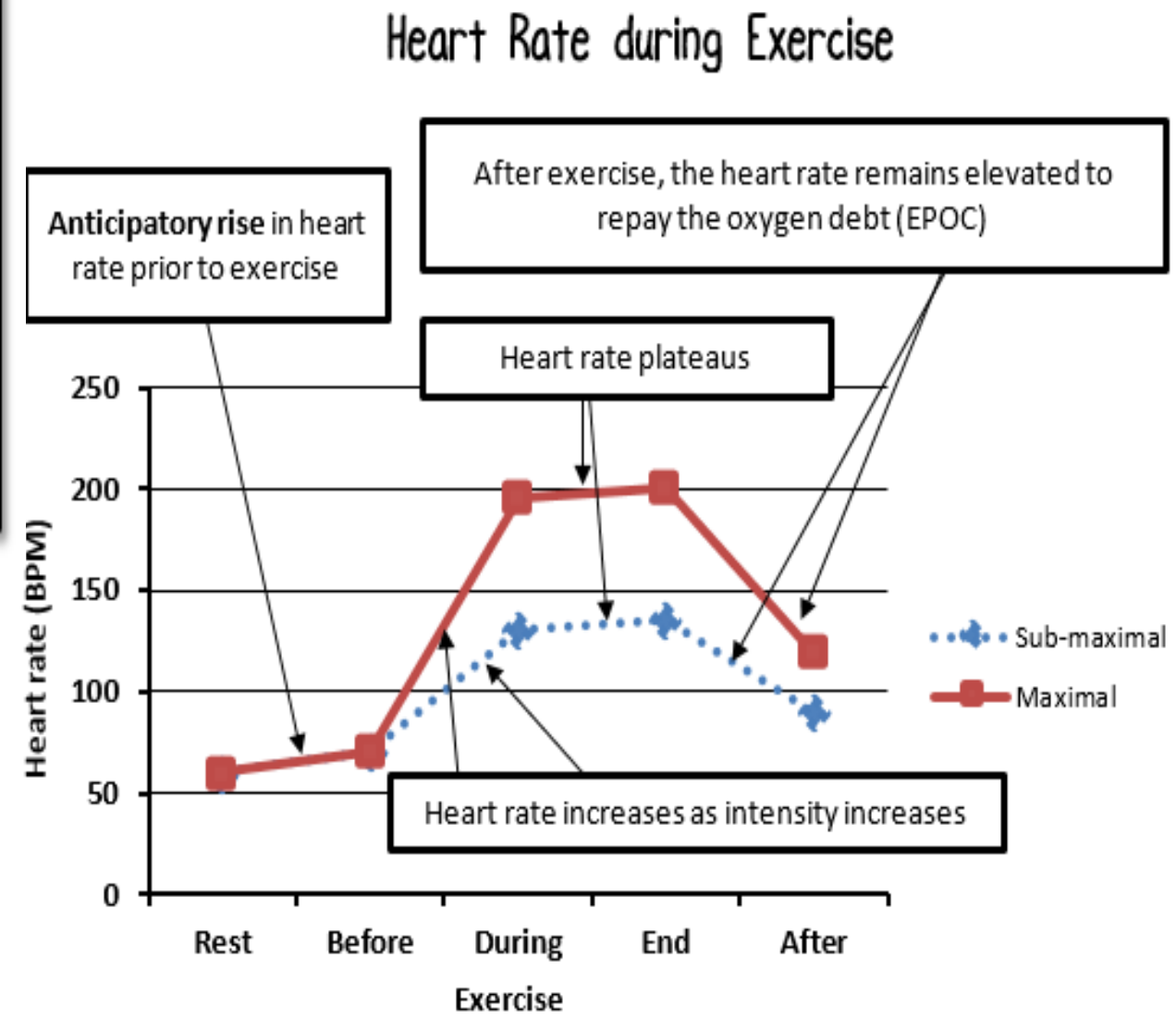
Paper 1: Cardiac system

The relationship facts:

- A long-term effect of exercise is cardiac hypertrophy, which involves an increase in heart size and strength. A stronger heart can pump out more blood per contraction, resulting in a higher stroke volume.
- With more blood being pumped per contraction, the heart does not have to work as hard and is more efficient, meaning long-term exercise results in a lower resting heart rate.
- Exercise increases heart rate, due to the demand for more oxygen by working muscles. This will result in an increased cardiac output during exercise.



Paper 1: Aerobic & anaerobic exercise

Aerobic Exercise

Aerobic exercise is any form of exercise which is completed at an intensity that allows a plentiful supply of oxygen to be taken in by the lungs and used by the body.

Below is a summary equation and sporting examples of **aerobic** exercise:

Glucose + Oxygen → Energy + Carbon Dioxide + Water

Marathon Running

Long-distance Cycling

Open-water Swimming

These sports are all performed at a relatively low intensity and for a prolonged period of time.