

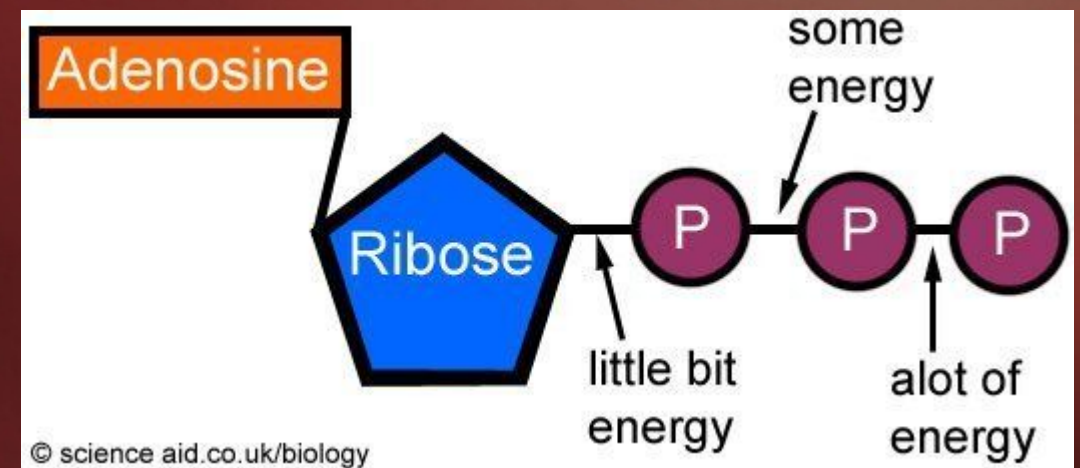
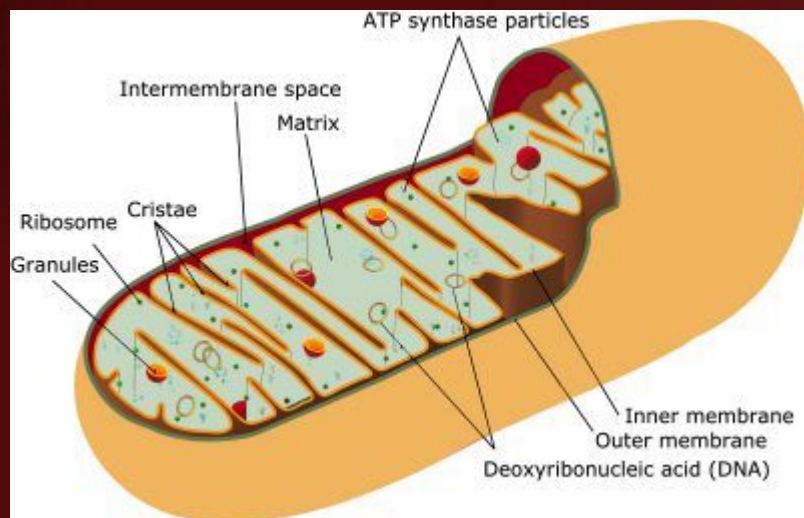
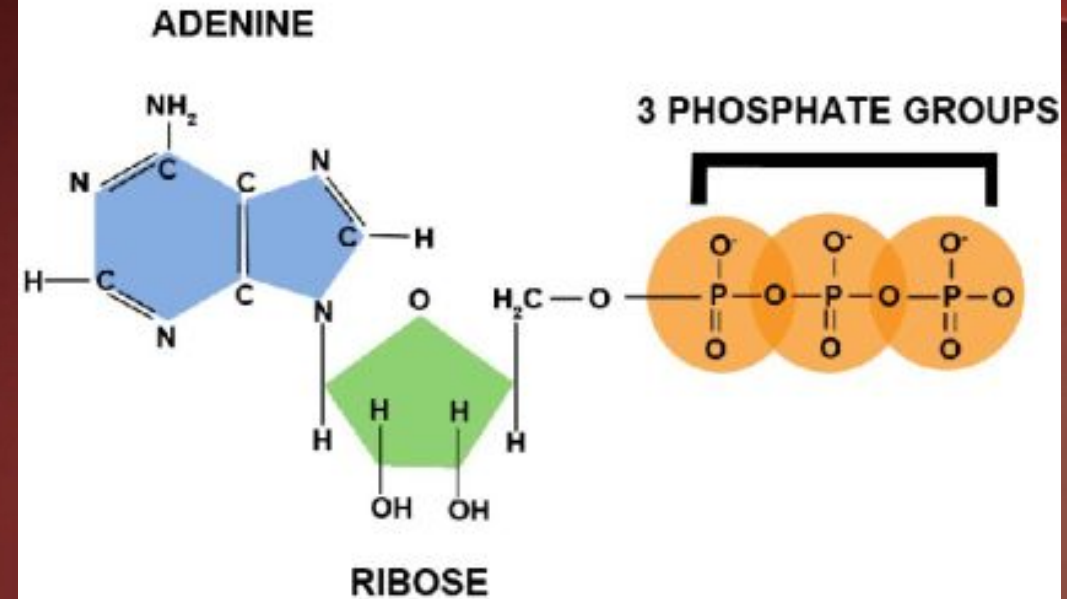
ENERGY SUPPLY TO MUSCLES & TYPES OF CONTRACTIONS

Subtitle

WHAT IS ATP?

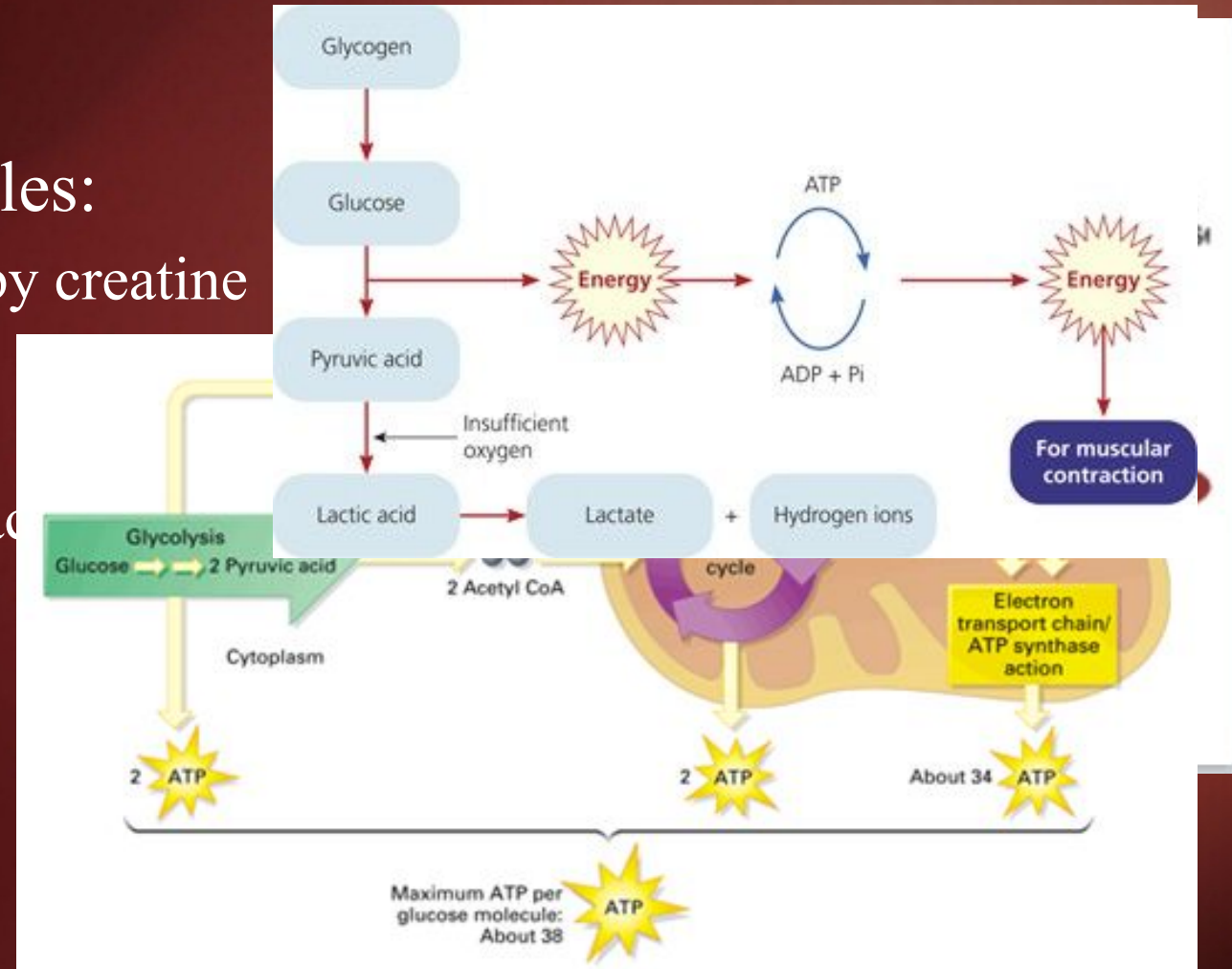
- Energy currency of the cell
- Mitochondria and cellular respiration
- ATP → ADP and vice versa

An ATP Molecule



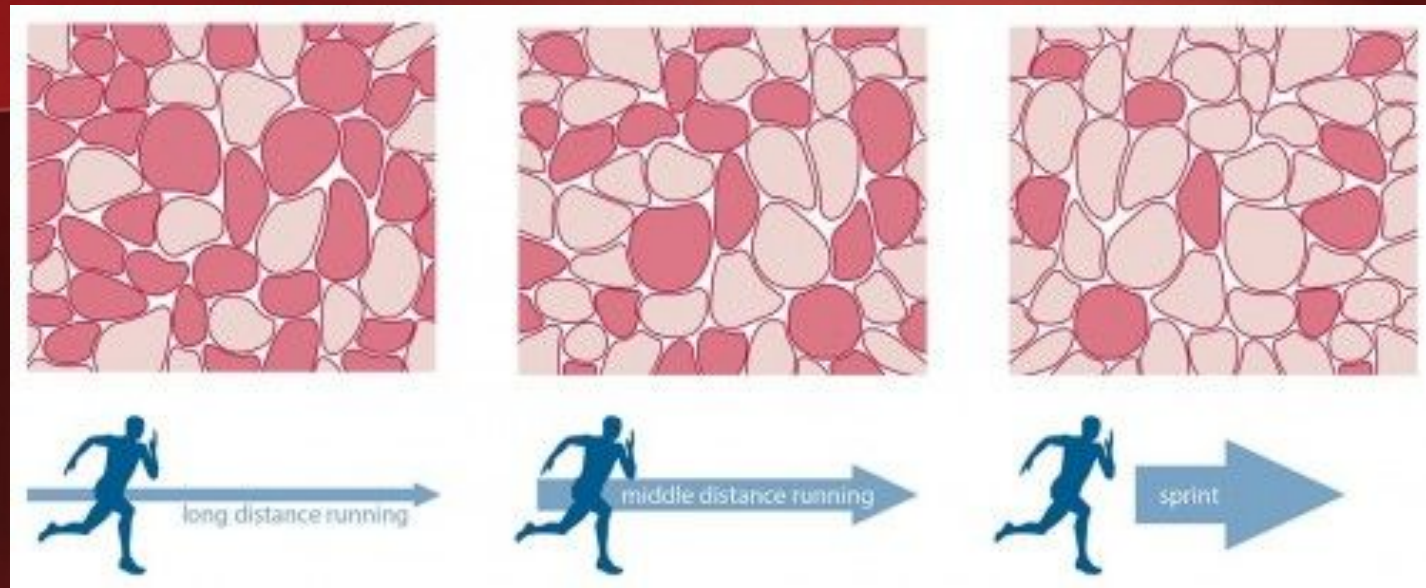
ATP AND MUSCLE FUNCTION

- Muscles need ATP to contract
- Three sources of ATP for muscles:
 1. Direct phosphorylation of ADP by creatine phosphate (CP)
 2. Aerobic cellular respiration
 3. Anaerobic glycolysis and lactic acid formation



MUSCLE FATIGUE

- Muscles and exercise
- Oxygen Deficit
 - Red muscle fibers
 - White muscle fibers
 - Which person is the sprinter and the distance runner? How do you know?



MUSCLE CONTRACTIONS

- What is a muscle contraction?
- Isotonic Contractions
- Isometric Contractions
- Muscle Tone

