

Max's Athletics Academy: Mastering the Track and Field

Lace up your trainers and prepare to excel—every movement is a puzzle waiting to be solved!

- **Sprinting requires explosive power; the drive phase involves pushing against the track at a 45-degree angle to generate forward momentum.**
- **In throwing events, such as the shot put, the athlete's release angle determines the projectile's trajectory; a 45-degree angle is theoretically optimal for distance.**
- **Middle-distance running demands a balance of aerobic capacity and pacing strategy to ensure the runner maintains consistent velocity throughout the race.**
- **High jump technique involves the 'Fosbury Flop', where the athlete arches their back over the bar to keep their centre of mass as low as possible during the clearance.**
- **Relay races rely on the 'blind exchange' of the baton, where timing and communication are essential to ensure the team's total speed does not decrease during the transition.**

Did you know? Did you know? In the long jump, the final three strides are the most crucial! Athletes must lower their centre of gravity and increase their velocity before takeoff to maximise their 'flight' distance through the air.

Key vocabulary: Acceleration · Biomechanics · Momentum · Kinetic energy · Trajectory · Technique · Endurance · Velocity