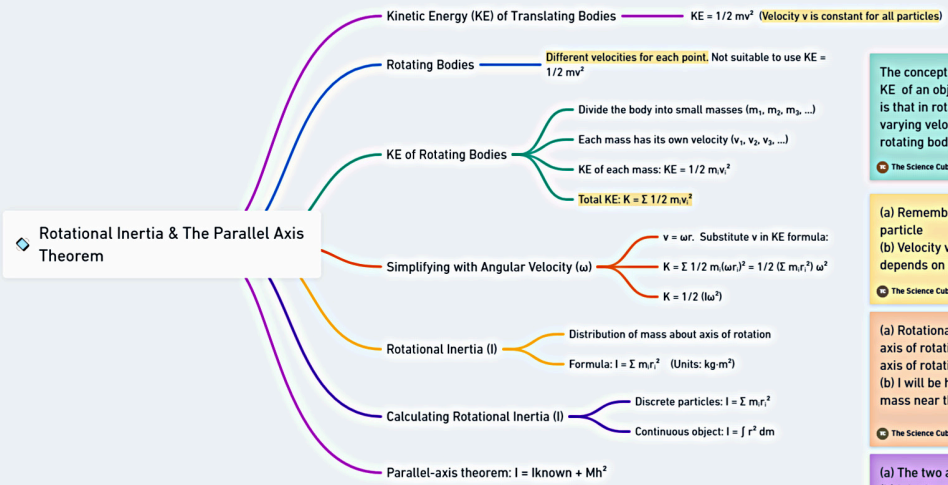
3. Mind Map: Moment of Inertia & Parallel Axis Theorem



The concept of rotational KE is analogous to the KE of an object in linear motion. The distinction is that in rotational motion, we account for the varying velocities of each particle within the rotating body.

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(a) Remember ω is always the same for each particle
(b) Velocity v is different for each particle and depends on the radial distance from the axis

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(a) Rotational inertia is always defined about the axis of rotation (it can be different for a different axis of rotation)
(b) I will be higher for objects that have more mass near the axis & vice versa

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(a) The two axis are parallel
(b) h is the perpendicular distance b/w the 2 axis

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