

ASTEROIDS

A Cause Of Mass Extinctions?

- ❖ There is evidence for a massive asteroid strike around the time the dinosaurs went extinct
- ❖ It's not the initial impact that did all the damage – other effects include:
 - World-wide wildfires started by scattered debris re-entering the atmosphere
 - A cloud of dust blocking the sun, destroying the food chain from the bottom up
 - Tidal waves
 - Earthquake and volcano chain reactions
 - Greenhouse effect due to wildfires
 - Tsunamis
 - Acid rain
 - Deadly radiation due to depleted ozone layer
- ❖ We've been discovering asteroids for centuries, in increasing numbers as telescopes improve
- ❖ There are more than 4500 NEAs (Near Earth Asteroids) that have orbits that intersect that of Earth
- ❖ They do sometimes hit the Earth
- ❖ There are theoretical ways to stop an asteroid from hitting...if we can predict that it will hit in time to do something about it
- ❖ If an asteroid comes too close, our survival depends on our ability to monitor and calculate its orbit