

ERTH01: Review Sheet

Midterm Exam – April 26, 2006

The midterm exam will be comprehensive and multiple-choice. This review sheet is a guideline only – there may be questions on the exam not specifically addressed here but covered in class, the assigned reading, or the homework.

Things to help you study:

- Class notes
- Homework assignments
- Assigned reading
- Animations posted on the web
- This Review Sheet

Solar System

- Basics about the planets: names, size, inner/outer planets

Earth

- Continental Drift – evidence used to propose it
- Additional evidence used to formulate seafloor-spreading/plate tectonics hypotheses
- Variations in seafloor bathymetry
- Seafloor magnetic “stripes”
- Plate tectonics – driving mechanisms, motions of plates
- Earthquakes and volcanoes – global distribution
- Seismic waves: what they tell us about Earth’s interior
- Volcano types and structure
- Types of plate boundaries: mid-ocean ridges, subduction zones, transform faults (major examples too)
- Hotspots
- Layers: compositional vs. mechanical layering
- Magnetic field
- Seasons

The Moon

- Exploration: important missions
- Lunar samples: what they can tell us, types
- Internal structure
- Rotation and orbit periods
- Geography – highlands, near side/far side differences, basins

- Lunar maria
- Atmosphere
- Craters - formation, different types (simple, complex, basins, ray craters), using them to establish relative ages of regions
- Moonquakes
- Formation and evolution of Moon

Moon/Earth System

- Why we see the same side of the Moon
- Tides
- Phases of the Moon

General Astronomy Topics

- Where are we in the universe?
- Historical Astronomers
- Kepler's 3 Laws
- Electromagnetic waves (light): sizes of wavelengths
- Optical vs. radio telescopes