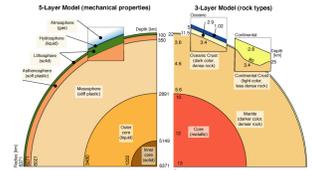


SIO 15 LECTURE 04: CONTINENTAL DRIFT AND PLATE TECTONICS

Leftovers from Lecture 3
Announcements

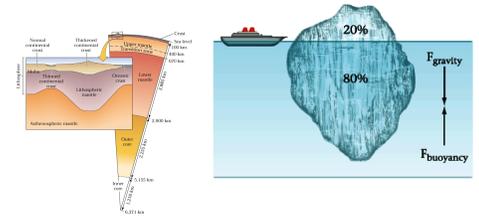
**Elastic, Ductile and Brittle Material and Earth's Layers see short video 4a;
short videos are test material**

The Layered Earth



Isostasy and the Lithosphere-Asthenosphere System

see short video 4b



Lithospheric Plates



Mantle Convection (see Lecture 2 online notes)

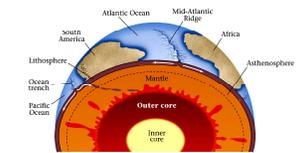
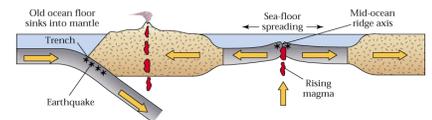


FIGURE 4.10 Earth: Portrait of a Planet, 2nd Edition Copyright 2010 W. H. Freeman & Company

Plate Tectonics - The Grand Unifying Theory



The 2 Driving Forces:

Continental Drift

see short video 4c



Alfred Wegener 1915

Earth's Magnetic Field

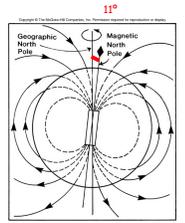
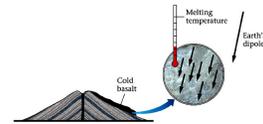


Fig. 3.4

Recording Earth's Magnetic Field

see short video 4c



Apparent Polar Wander Curves

see short video 4c



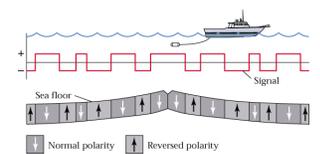
Harry Hess 1950s

Seafloor Observations

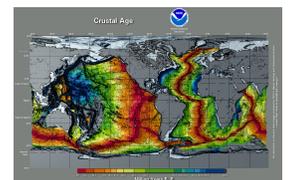
see short video 4d



Seafloor Spreading



Age of Oceanic Lithosphere



The Cooling Oceanic Lithosphere

