

**Geology 1002 (Section 1)  
Honors Physical Geology  
Howe-Russell E131  
TTh 9:00 - 10:30**

- **Instructor:** Jeffrey A. Nunn
- **Office:** Room E235 Howe-Russell
- **Telephone:** 578-3353
- **e-mail:** gjjeff@lsu.edu
- **Office hours:** 4:00 to 5:00 MT or by appointment

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**Resources**

- **Class web page**  
<http://www.geol.lsu.edu/jnunn/1002.1/>
  - Course outline, exam schedule
  - Outlines of each lecture
  - Chapter Summaries/Review Sheets
  - Post grades
- **Text:** Understanding Earth (Fifth Edition) (2006), Grotzinger, Jordan, Press, and Seiver
- **Publisher web page:**  
<http://www.whfreeman.com/understandingearth/>
  - Photos, Animations
  - Study Guides
  - Links
  - Quizzes

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**Classroom Conduct**

- Turn off cell phones and other electronic devices
- Put away newspapers, magazines etc.
- Arrive on time
- If you MUST leave early, let me know and leave quietly

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## Evaluation

- Three in Class Exams (100 points each)
  - questions may be T/F, multiple choice or short answer
  - make up exams are essay
  - graded on a curve
- Final Exam (150 points) - Comprehensive
- Seven Projects (40 points each)
- Nine Quizzes (Top 7 worth 10 points each)

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## Field Trip to Tunica Hills



- Saturday Nov. 15
- Optional
- Extra Credit
- Fun!!!
- No LSU Football

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Geologic processes range over many spatial scales



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Some geologic processes are slow, but measurable and important over millions of years



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### Rocks and Minerals

Diamond versus Graphite



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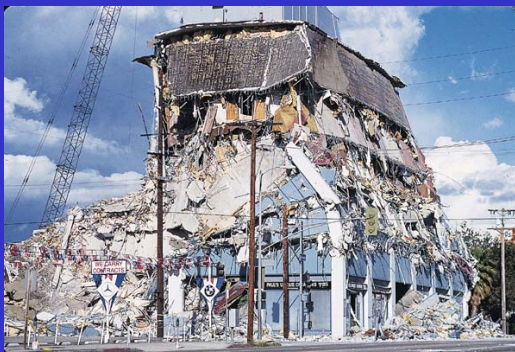
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### Earth's Interior

Earthquake in Northridge, CA in 1994



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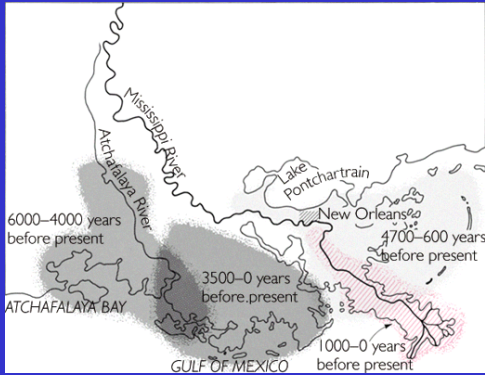
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## Surface Processes



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## Mineral and Energy Resources are vital to Civilization



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## Man's activities are having an impact on the Earth

Indiana Coal Strip Mine



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## Hypothesis -Theory - Law

- A **hypothesis** is an explanation initially offered for a set of observations.
- When a **hypothesis** withstands many tests it may be called a **theory**.
- A **theory** for which it seems there to be no sensible reasons to challenge is called a **law**.

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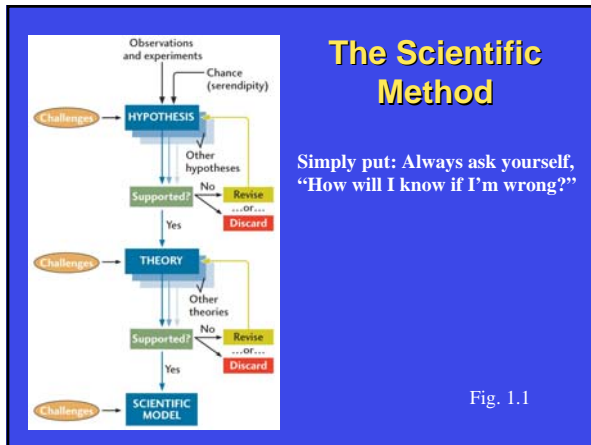


Fig. 1.1

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## A Good Theory is...

- *Parsimonious*  
(is the simplest explanation available)
- *Consilient*  
(explains a wide range of phenomena)

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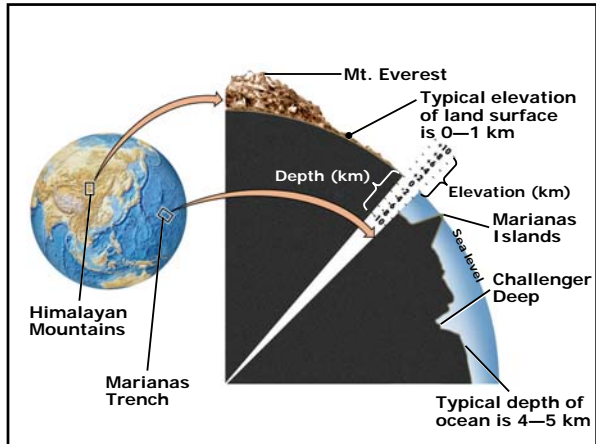
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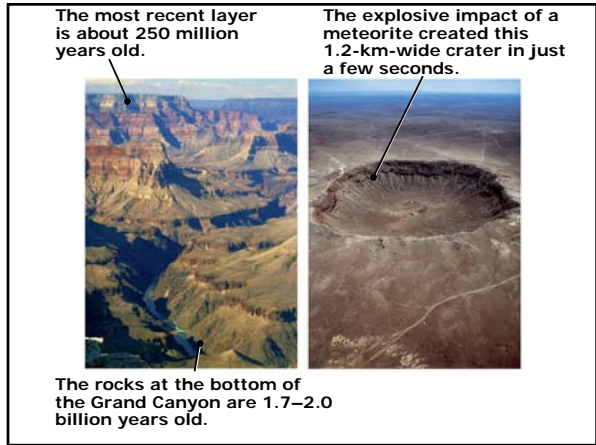
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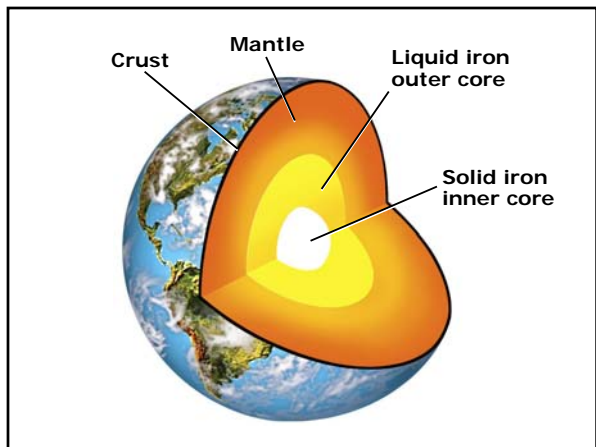
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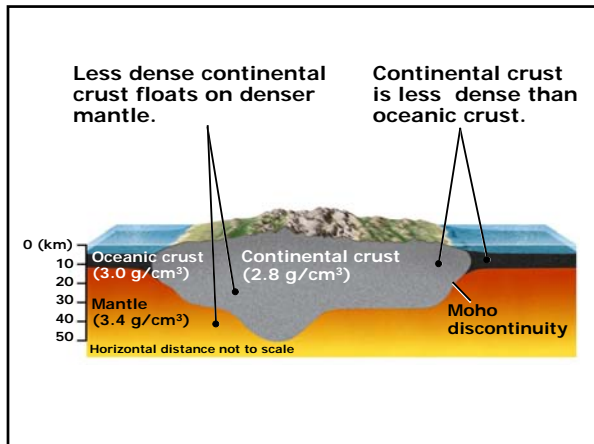
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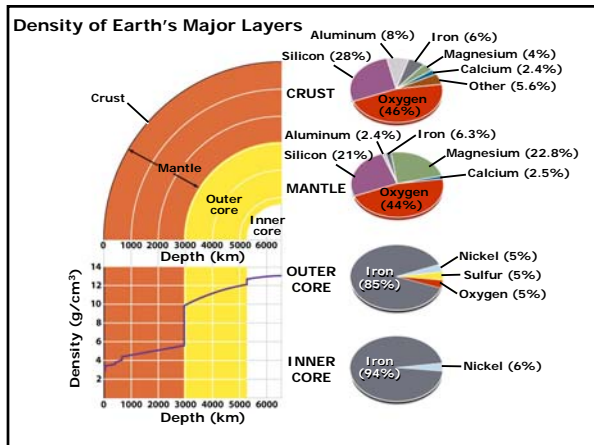
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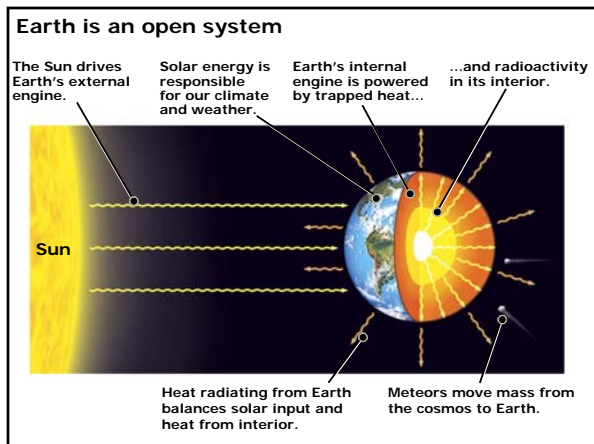
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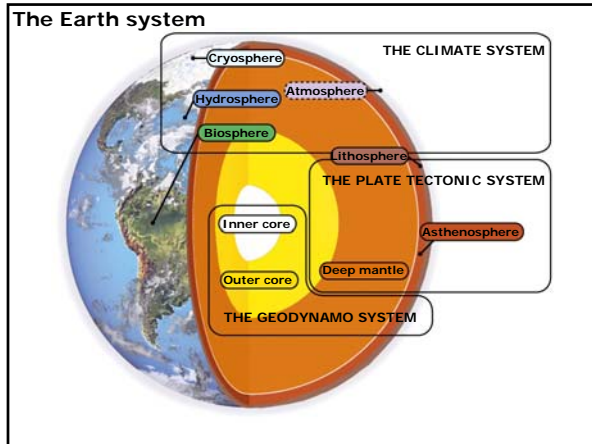
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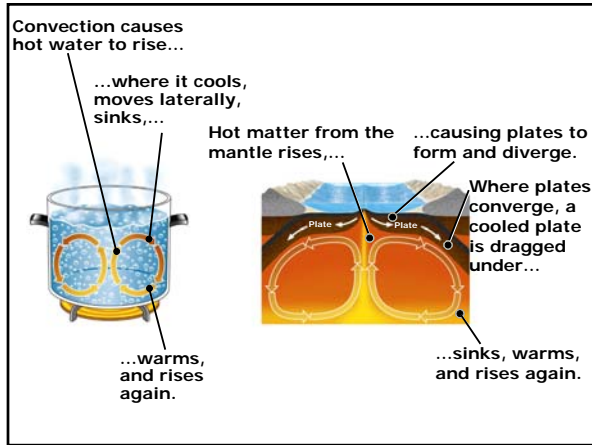
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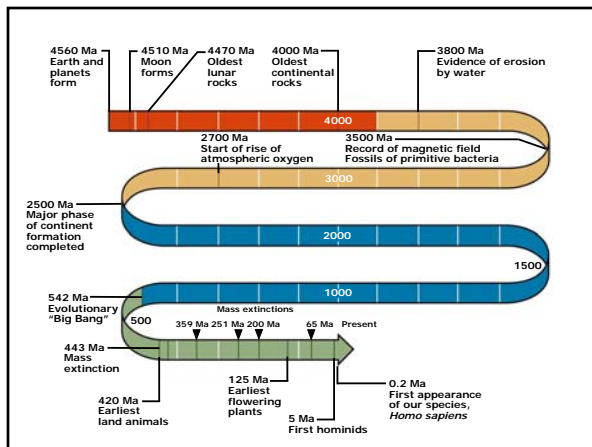
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