

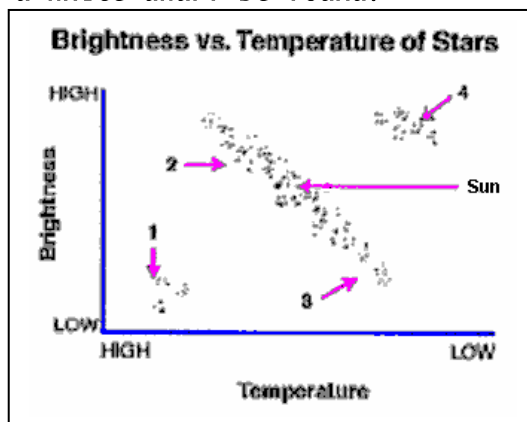
# Web Demo - Topics

## Science Grade 7 - Part 1

1) Snakes feed on mice. The mice eat grain crops. When the crops are plentiful, what will happen?

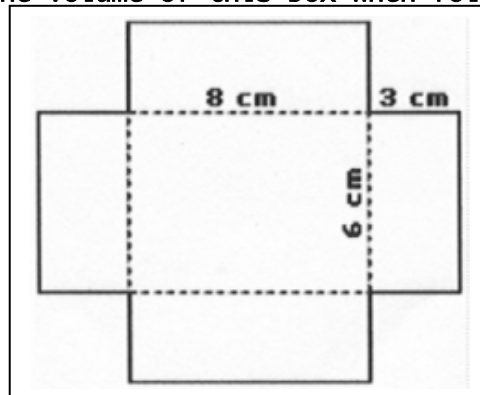
- 1) The mouse population will increase
- 2) The snake population will decrease
- 3) The snake population will increase
- 4) The mouse population will decrease.

2) White dwarfs are hot stars that produce very little light, in which zone would a white dwarf be found?



- 1) Zone 1      2) Zone 2      3) Zone 3      4) Zone 4

3) What is the volume of this box when folded together?



- 1) 144 cubic centimeters      3) 42 cubic centimeters  
 2) 66 cubic centimeters      4) 17 cubic centimeters

4) Our great-grand-parents used 'mustard plasters' as a cure for chest colds. Which would be good scientific evidence for or against the effectiveness of this treatment?

- 1) A letter from a doctor describing what a mustard plaster does.
- 2) Recommendations from several people who say mustard plaster cured them.
- 3) A prescription for mustard plasters in an old medical book.
- 4) Data from controlled experiment on the use of mustard plasters on cold sufferers.

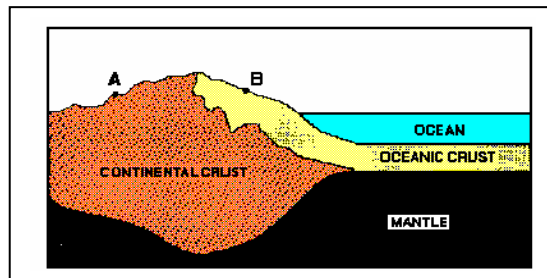
5) Two companies make golf balls, and each claims that its ball goes farther. Which would be the best scientific evidence to decide which ball goes farther?

- 1) You ask the best 100 golfers in the world which ball goes farther.
- 2) You read results of test conducted on the two balls by each company.
- 3) A machine hits each ball with exactly the same force and you measure how far each goes.
- 4) The best golfer in the world hits each ball 100 times and you measure how far each goes.

## Science Grade 7 Questions - Part 2

This program gives students practice in the Earth Sciences.

- 1) A mineral that has a Moh's scale hardness of 1 is
  - 1) diamond
  - 2) calcite
  - 3) corundum
  - 4) talc
- 2) In the diagram, letters A and B represent locations near the edge of a continent.



A geologist who compares non-sedimentary rock samples from locations A and B would probably find the samples from location A contain

- 1) more granite
- 2) more basalt
- 3) more fossils
- 4) the same minerals and fossils

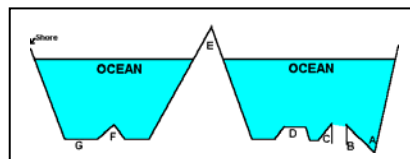
3) The composition of sand of many beaches is

- 1) calcium carbonate
- 2) quartz
- 3) silica ooze
- 4) tomolos

4) Some mapping methods for the ocean floor depend on

- 1) light
- 2) water
- 3) sound vibrations
- 4) gravity

5) Structure G is a



- 1) mid-ocean valley
- 2) mid-ocean rift
- 3) underwater volcano
- 4) mid-ocean trench

6) The bedrock on the top of a mountain area contains fossils of small fish. These fossils indicate that this area was once covered by

- 1) grass lands
- 2) forests
- 3) a sea
- 4) a glacier

7) Which Newton Law explains how a rocket works?

- 1) first
- 2) second
- 3) third
- 4) fourth

## Grade 7 Science - Part 1 Topics

Acids and Bases	Interpreting Graphs
Comparative Anatomy	Interpreting Lab
Comparative Relationships	Metric System
Earth Science	Microscope
Energy Transfer	Newton's Laws
Erosion	Pendulum
Food Pyramid	Physical Science
Food Web	Pollution
Genetics	Pulley
Gravity	Safety
Green Plants	Scientific Process
Human Organs	Seasons
Half Life	Shadows
Solar System	
Spring	
Trees	
Volume	
White Dwarfs	

## Earth Science/General Science - Part 2 Topics

Mineral Identification	Earthquakes - Tsunami
Cooling & Hardening of Magma	Interprets Data in Graphs/Tables/Diagrams
Igneous Rocks	Air Masses
Rocks: Identifying Characteristics	Jet Stream
Sedimentary Rocks	Low and High Pressure Areas
Metamorphic Rocks	Fronts
Foliated & Nonfoliated Rocks	Wave Cyclones
Types of Metamorphic Rocks	Isobars & Isotherms
Minerals	Atmospheric Pressure
Ocean: Sediment & Sand	Water Vapor
Ocean: Mapping	Clouds
Continental Shelf	Seasons
Ocean: Extent and Depth	Locally Caused Weather
Ocean Salinity	Weather & Plant Life
Ocean Life	Weather Forecasting
Minerals on the Ocean Floor	Weather Instruments
Longitude	Closed Systems
Latitude	Change of Phase
Earth Time Relationships	Atmospheric Environment: Nitrogen &
Oxygen	
Map Reading	Atmospheric Environment: Carbon dioxide
Contour Lines	Atmospheric Environment: Water

Interpreting Contour Lines  
Prime Meridian  
International Date Line  
Longitude & Time  
Topographical Maps  
Destructional Forces: Weathering  
Destructional Forces: Chemical  
Decaying Animals & Plants  
Destructional Forces: Plants  
Soil Formation  
Erosion  
Permeable Rocks  
Erosion: Constructive Action  
Water Table  
Artesian Wells & Geysers  
Zones of Aeration & Saturation  
Stream Erosion  
Transportation of Rock Materials  
Landslides  
Formation of Valleys  
River: Life History  
Flood Plain  
Rivers  
Regions of Wind Activity  
Wind Erosion  
Transportation of Dust  
Glaciers  
Valley Glaciers  
Hanging Valleys  
Continental Glaciers  
Piedmont Glaciers  
Work of Glaciers  
Moraine  
Outwash Plains  
Drum-lines - Kettles - Cirque - Till  
Work of Waves & Shore Currents  
Waves  
Classes of Shorelines  
Theory of Isostasy  
Earthquakes  
Mercalli & Richter Scales  
L Waves  
P Waves  
S waves  
Volcanoes  
Theory of Isostasy  
Continental Drift Theory  
Evidence of Continental Drift  
Evidence of Magnetic Reversal  
Ocean Floor Spreading  
Folding & Faulting  
Major Landforms: Mountains  
Major Landforms: Plains  
Fractures  
Major Landforms: Plateaus  
Extrusive Rocks  
Intrusive Rocks  
Fossil Content  
Conditions Necessary for Preservation  
Interpretation of fossils  
Petrification  
Rock Sequence  
Radioactive Dating  
Relative Dating  
Earth History: Age of the Earth

Atmospheric Environment: Air Constituents  
Van Allen Belt  
Layers of Atmosphere: Ionosphere  
Layers of Atmosphere: Stratosphere  
Layers of Atmosphere: Troposphere  
Layers of Atmosphere: Mesosphere  
Layers of Atmosphere: Thermosphere  
Environment: Humans  
Air Pollutants  
Disposal of Substances  
Solar Energy  
Energy Transfer: To & From the Atmosphere  
Air Movement: Unequal Heating  
Air Movement: Wind Belts  
Coriolis Effect  
Wind Movement  
Conduction  
Convection  
Radiation  
Humidity  
Condensation & Sublimation Nuclei  
Clouds & Fog  
Dewpoint & Frost  
Forms of Precipitation  
Hydrologic Cycle  
Lightning  
Thunderstorms  
Tornados  
Cyclones  
Hurricanes  
Blizzards  
Heat Waves - Sunburn  
People \* Climate  
Earth's Rotation  
Apparent & Real Motion  
Earth's Movement  
Geocentric Model  
Heliocentric Model  
Moon and Earth's Motion  
Seasons  
Gravity & Gravitational Attraction  
Summer and Winter Solstice  
Spring and Fall Equinox  
Aurora Borealis  
Earth's Circumference  
Earth's Curvature  
Visible Stars  
Reflecting & Refracting Telescopes  
Theory of Earth's Origin  
Phases of the Moon  
Moon Features  
Lunar Eclipse  
Solar Eclipse  
Tides  
Astronomical Distances  
Size Comparison of Solar System Objects  
Distances - Solar System Objects  
Sun's Composition  
Sun's Energy  
Sun's Layers  
Sun Spots  
Electromagnetic Spectrum  
Black Holes  
Constellations  
Star Brightness & Magnitude

Geologic History  
Prepaleozoic Time  
Paleozoic Era  
Mesozoic Era  
Cenozoic Era  
Pollution  
Acid Rain  
Commercial Solutions to Pollution  
Land Pollution  
Man - Environmental - Recycling  
Environmental Solutions  
Environment & Humans  
Solid Wastes  
Water Pollution  
Air Pollution  
Resources  
Breeder Reactors  
Biomass  
Coal  
Conservation  
Fission  
Fusion  
Fuels  
Gasohol  
Gas & Oil  
Geothermal Energy  
Nuclear Power  
Synfuels  
Solar Energy  
Tidal Energy  
Wind Energy

Kinds of Stars  
Novas & Supernovas  
White Dwarfs  
Nebula  
Neutron Star  
Quasars  
Red Shift  
Galaxies  
Interplanetary Distances  
Origin of the Universe  
Solar System  
Planets: Earth  
Planets: Mercury  
Planets: Venus  
Planets: Jupiter  
Planets: Saturn  
Planets: Mars  
Planets: Neptune - Uranus - Pluto  
Asteroids  
Meteor  
Comets  
Aircraft Navigation in Air  
Aircraft Instruments  
Getting into Space  
Forces affecting Space Flight  
Thrust  
Returning to Earth  
Space Stations  
Satellites  
Future Space Programs  
Determines a Quantitative Relationship  
Determines a Qualitative Relationship