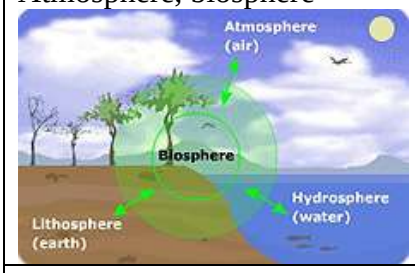
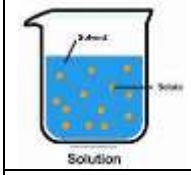
Name
Period

Due Date 10/4 Friday Coversheet/ WCW Date

-wcw/ coversheet 1.1 What is Earth Science? pg 2 1.2 A view of Earth pg 7 1.3 Representing Earth's Science pg 11 1.4 Earth System Science pg 18 1.5What is Scientific Inquiry pg 23	2.1 Matter pg 34 2.2 Minerals pg 44 2.3 Properties of Minerals pg 50
Warm-up 9/25 Name 2 "____spheres" in the world. Atmosphere, biosphere  	Warm-up 9/27 Describe the interaction between the Biosphere (animal / plant life) and the Atmosphere. Oxygen- Into us out of plants Carbon dioxide- Into plants out of us.
Critical Thinking Why does Earth have layers? Pressure and gravity act different with different materials, also gases and liquids move differently	Critical Thinking How is the big bang a theory? Extrapolation- we worked backwards using the scientific method and thought experiments
Wrap-up Describe the Scientific Method. Purpose, hypothesis, procedure, data, conclusion	Wrap-up If the universe is expanding, and galaxies are moving away from each other. How can we Get to another galaxy that is 10,000,000 light years away? WORM HOLE ??

back side of wcw

Ch 1 Intro to Earth Science Picture of title, colored	Ch 2 Minerals Picture of title colored
Warm-up Describe a solution. A mixture of solutes and solvents defines a solution  	Warm-up 10/2 What is the difference between a mineral and a rock? mineral 1 type of molecule 
Critical Thinking Which element is the solvent? In the mixture... Water is the solvent	Critical Thinking How can an object form from the destruction of another object? 1 answer) Left over material can't be reversed 1 answer) Bonds are broken and formed with different elements
Wrap-up Which element do you think is in control of the hard or slim feel? Why? Borax, because...	Wrap-up What is due Friday? Why is it due?

Ch 1.1 What Is Earth Science? p. 2-5

Key Concepts

- What is the study of Earth science?
  Earth science is the study of all the systems of Earth
- How did Earth and the solar system form?
  SS formed when gravity combines dust and gas.

Vocabulary

- Earth science-
- Geology- study earth parts
- Oceanography- study of oceans
- Meteorology-study of weather
- Astronomy- space

Graphic Organizer

Geology	Study of Earth
Oceanography	Study of the ocean life
Meteorology	Study of weather
Astronomy	Study of the solar system and the Universe

Assessment p. 5

1. Oceanography, geology, meteorology, astronomy
2. Geology has historical and physical sections, the past and the ground
3. Historical geography is the study of the timeline.

Physical geography is the study of the crust and all parts of the lithosphere.

4. Nebular hypothesis, the Solar system comes from the explosion of a star and the gas and dust recombining.
5. Because the interaction between the multiple spheres

6. Yes because weather is not exclusive to Earth.

7. If the beginning elements float away the other element's can never be formed

Ch 1 Section 2 A View of Earth p.6-10

Key Concepts

- What are the four major spheres into which Earth is divided?
  atmosphere, biosphere, geosphere, hydrosphere
- What defines the three main parts of the solid Earth?
  core, mantle, crust
- Which model explains the position of continents and the occurrence of volcanoes and earthquakes?
  plate tectonics

Vocabulary

- Hydrosphere- all the water on earth
- Atmosphere- all the air/gas above earth
- Geosphere- all the rock
- Biosphere- all plant and animal life
- Core- earths center
- Mantle- thicker magma layer
- Crust- top layer

No graphic organizer

Assessment- p.10

1. Lake –hydro, meadow-geo, bio canyon-geo cloud-atm

2. Core, Mantle, Crust

3. Crust is solid but can move on top of the mantle the core is made of solid iron.

4. Earthquakes
5. Internal Energy of Earth, geo-thermal

6. Chris Goes to the bathroom and flushes the toilet, that water ends up in the ocean

the sun evaporates that water which condenses and makes clouds, which rains down on us on our parade.

7. Geo-sphere, since there is no water or life

8. Evaporated water from the hydro-sphere goes into the atmosphere forming clouds

9. Meteorologist studies weather, atmosphere

Ch 1 Section 3 Representing Earth's Surface p.11-17

Key Concepts

1. What **lines on a globe** are used to indicate location?
   latitude, longitude
2. What problems do **mapmakers** face when making maps?
   Details, estimations, north and south poles are difficult
3. How do differ from other maps?

Vocabulary

1. latitude- equator is zero, north is positive to 90 degrees (north pole), below is negative
2. longitude- prime meridian is zero, west is positive to 180 degrees, east negative to -180
3. topographic map- map that shows elevation change
4. contour line- line on topographic map that represents the same elevation
5. contour interval-spacing between contour line (scale)

Graphic Organizer

Representing Earth's Surfaces

What I expect to learn	What I learned
A	
B	
C	
D	

Assessment p.17

1. Latitude tells the position above and below the equator. Longitude tells the position west and east of Greenwich England, prime meridian.
2. No matter what kind of map is made, some position of the surface will always look either too small, too big, or out of place. Mapmakers have, however, found ways to limit the distortion of shape, size, distance, and direction.
3. Contour lines show elevation on a topographic map.
4. Equator, 0 latitude, west/ east. Prime meridian, 0 longitude, north/south
5. Lines of longitude are parallel on a Mercator map this is important with navigation.
6. Weather, navigation, landsat, global positioning system, very long baseline interferometer
7. Each map is used for a different purpose; view longitude or latitude without distortion.

Ch 1.4 Earth System Science p.18-22

Key Concepts

- How is Earth a system?- connection of spheres
- What is a system? connection of living and nonliving objects
- Where does the energy come from that powers Earth's systems?
  Sun, and geothermal
- How do humans affect Earth's systems? global warming, natural parks
- What makes a resource renewable or nonrenewable?
  Renewable- made again
  Nonrenewable-can't reuse

Vocabulary

- system- a system can be any size group of interacting parts that form a complex whole.[=

Graphic organizer

1. Earth system science
   A. what is a System?
      1. Most natural systems are driven by sources of energy that move matter and\or energy from one place to another
      2. In a closed system energy moves freely in and out the system, but no matter can enter or leave the system

   B. Earth as a System
      1. The Earth system is powered by energy from two sources.
      2. There is heat that remains from the time Earth formed

   C. People and the environment
      1. Environment refers to everything that surrounds and influences an organism
      2. Some of these things are biological and social, others are nonliving such as water, air, soil, and rock.

   D. Environmental problems
      1. Some of the problems are local, some are regional, and still others are global.
      2. The loss of fertile soils to erosion, the disposal of toxic waste, and the combination and depletion of water recourses are also of considerable concern. The list continues to grow.

Assessment

Ch 1 Section 5 What Is Scientific Inquiry? P.23-24

Key Concepts

- What is a hypothesis?
- What is a theory?

Vocabulary

- hypothesis
- theory

Graphic Organizer

Assessment

Chapter 2 Minerals Section 1 Matter p.34-43

Key Concepts

- What is an element?
- What particles make up atoms?
- What are isotopes?
- What are compounds and why do they form?
- How do chemical bonds differ?

Vocabulary

- element
- atomic number
- energy level
- isotope
- mass number
- compound
- chemical bond
- ion
- ionic bond
- covalent bond
- metallic bond

Graphic Organizer

Assessment

Ch 2 Section 2 Minerals p.44-49

Key Concepts

- What are five characteristics of a mineral?
- What processes result in the formation of minerals?
- How can minerals be classified?
- What are some of the major groups of minerals?

Vocabulary

- mineral
- silicate
- silicon-oxygen tetrahedron

Graphic Organizer

Assessment

Ch 2 Section 3 Properties of Minerals p.50-55

Key Concepts

- What properties can be used to identify minerals?
- What is the Mohs scale?
- What are some distinctive properties of minerals?

Vocabulary

- streak
- luster
- crystal form
- hardness
- Mohs scale
- cleavage
- fracture
- density

Graphic Organizer

Assessment