Earth/Environmental Science Homework & Test Review

Week 9: March 16 – 20, 2015
DUE DATE: Friday, March 20th

Vocabulary: Fill in the missing areas on the table below using your textbook, class activities and any other resources you find helpful.

Vocab Word	Definition	Example/Application
Air Pollutants	*Can be solid particles, liquid droplets, or gases; natural or man-made*	Ground-level ozone, lead, sulfur dioxide, particulate matter, nitrogen dioxide, _____ _____
Acid Rain		Lowers pH of soil and lakes to make them more acidic.
Fossil Fuels	General term for organic materials that are combusted (burned) for fuel	
Smog		Often caused by heavy traffic, high temperatures, sunshine and calm winds.

Key Pollutants: Organize the information about air pollutants using the following table

Air Pollutant	Major Sources	Environmental/Health Effects
Sulfur Dioxide (SO₂)		Precursor to acid rain, which damages lakes, rivers, trees; damage to cultural relics
Nitrogen Dioxide (NO₂)		Precursor to acid rain
Particulate Matter (PM) Very small solids or liquids suspended in air		Visibility; Respiratory Problems
Carbon Monoxide (CO)		Human Health: Dizziness, headaches, fatigue, extreme exposure leads to death
Lead		Fish/animal kills
Volatile Organic Compounds (VOCs – have hydrogen and carbon atoms; hydrocarbons)		Smog precursor
Ground-Level Ozone		Reduced crop production and forest growth; respiratory problems; smog precursor

Matching: Identify the following source of air pollution as a naturally occurring event (**Nat**) or man-made activities (**Man**).

_____ Smoke and dust from volcanoes   _____ Smoke from forest fires started by lightning

_____ Carbon monoxide from vehicles   _____ Dust Storms

_____ Nitrous oxides from vehicle exhausts   _____ Sulfur dioxide from power plants

_____ Smoke from power plants that burn fossil fuels

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Poster Project: In the box below, record your topic and your partner's name and draw a sketch of your plan for your poster:

Topic: _____

Partner: _____

Sketch of your plan for your poster:

Concept Map: Relate this week's talk about the air pollution by completing the following concept map. Each word is used only once.

Word Bank

acid rain

nitrogen oxides

nitrogen dioxide

particulates

photochemical smog

air pollution

sulfur dioxide

car exhaust

respiratory problems

fires

is caused by

combustion of
fossil fuels

which releases

which releases

which release

which reacts
with gas in
air to form

which react
with sunlight
to form

which form
clouds
leading to

reduction
in visibility