My away the yellow in the green

My first question is , “ What is Acid Rain?” You hear about it all the timein the news and it is very important to the earths ecosystem. In simpleterms, acid rain is rain that is more acidic than normal. All objects in naturehave a certain level of acicicity but acid rain has too much acid in it. Acidrain is a complicated problem, caused by air pollution. Acid rain’s spread anddamage involves weather, chemistry, soil, and the life cycles of plants andanimals on the land and from acid rain in the water. Acidity is measured using apH scale, with the number 7 being neutral.

Therefore, a body with a pH value ofless than 7 is acidic. On the other hand, a value greater than 7 is basic. ThepH of 5. 6 has been used as the baseline in identifying acid rain, although thisvalue is controversial, therefore, acid ran is any rainfall that has an acidity level above what is expected in non-polluted rainfall. Any precipitation thathas a pH value of less than 5. 6 is considered to be acid precipitation.

Readingsof pH 2. 4–as acidic as vinegar–were recorded during storms in New England. During one particularly acid summer storm, rain falling on a lime-greenautomobile leached away the yellow in the green paint, leaving blue raindropshaped spots on the car. Scientists have found that pollution in the air fromthe burning of fossil fuels is the main cause of acid rain. The major chemicalsin air that help to create acid rain are sulfur dioxide, known as (SO2), andnitrogen oxides, known as (NOx).

Acid rain is formed high in the clouds wheresulfur dioxide and nitrogen oxides react with water, oxygen, and oxidants. Thislethal mixture creates a mild solution of sulfuric acid and nitric acid. Sunlight often increases the

speed at which the reaction occur. Rainwater, snow, fog, and other forms of precipitation containing these new solutions of sulfuricand nitric acids fall to earth as acid rain. Acid rain does not make up all ofthe acidity that falls back to earth from pollutants.

Only half of the acidityin the air falls back to earth through dry deposition as gases and dryparticles. The wind blows and then these acidic grains are blown onto buildings, cars, homes, and trees. In some cases, these particles can eat away the objectswhich they land on.

Dry deposited gases are sometimes washed from trees andother surfaces by rainstorms. When this occurs, the runoff water adds the newacids to the acid rain, making a more acidic combination than the falling rainby itself. One of the main causes of acid rain is the sulfur dioxide. Sulfurdioxide is one of the main ingredients which make up the deadly combination thatforms acid rain.

Some of the natural sources that emit this gas are rottingvegetation, volcanoes, plankton, rotting animals and sea spray. However, theburning of fossil fuels, such as coal and oil, do not help the situation and arelargely to blame for approximately half of the emissions of this gas in theworld. Water moves through living plants, animal, streams, lakes, and oceans inthe hydrologic cycle. In that cycle, water evaporates from the land and sea intothe atmosphere. Water in the atmosphere then condenses to form clouds.

Cloudsrelease the water back to the earth as rain, snow, or fog. When water dropletsform and fall to the earth, they pick up particles and chemicals that float inthe air. Even clean, unpolluted air has some particles such as dust or

pollen. Clean air also contains naturally occurring gases such as carbon dioxide. Theinteraction between the water droplets and the carbon dioxide in the atmospheregives rain a pH of 5.

6, making even clean rain slightly acidic. Other naturalsources of acids and bases in the atmosphere may lower or raise the pH ofunpolluted rain. However, when rain contains pollutants, especially sulfurdioxide and nitrogen oxides, the rain water can become very acidic. This problemis a problem of natures balance being tampered with.

If not polluted, normalprecipitation would react with chemicals that are derived from bedrock in theair, soil, lakes, and streams and this rain would be neutralized. Since theprecipitation is highly acidic, these natural buffering chemicals will bedestroyed. When this occurs, the natural buffering effect does not occur, andnature wont keep its balance Acid rain has been a big problem for