5 Practice Scenarios ANSWERS

**For each scenario, please develop a scientific question (Q) and suggest a possible hypothesis (H)**

1. Mrs. Corse-Scott just bought her dream car, a sleek black Lamborghini. Unfortunately, as she was driving around, she was caught in a rain storm. After the storm has passed, Mrs. Corse-Scott notices that her car has more water spots on it then the white Porsche.

Q: What color car shows the most water spots?

H: The darker the car, the more water spots show

1. Susan loves mountain climbing to high peaks. During a recent expedition to Everest, she noticed that there was a large amount of fossils near base camp (ie. base of the mountain).

Q: What altitude has the most fossils?

H: The deeper down under the Earth, the more fossils found / The lower the altitude, the more fossils can be found

1. Jackie loves being outside and being healthy by using natural ingredients however she knows she needs to wear the white, yucky sunscreen to protect her skin. Only just last night, Jackie read that an aquatic bacteria can potentially provide a “natural” sunscreen.

Q: How much more protection does the ‘natural’ sunscreen offer over the white sunscreen?

H: The more natural the sunscreen, the less protection provided

1. An architecture student, living in 10-story apartment complex, is interested in comparing his very expensive AC power bill to that of his parent’s who live in a single story house.

Q: What story of house will be the hottest? What story of house will produce the highest powerbill?

H: The higher up the apartment, the hotter it will be / The less stories of a house, the less expensive the AC bill

1. [This one is a tough one…enjoy!] In chemistry class, Allen determined the effectiveness of various metals in releasing hydrogen gas from hydrochloric acid. Several weeks later, Allen read that a utilities company was burying lead next to iron pipes to prevent rusting.

Q:

H: