Potential Science Fair Ideas

<https://www.sciencefaircentral.com/>

<http://www.sciencekids.co.nz/projects.html>

You may use one of the following ideas, but I encourage you to come up with your own that you are interested in!

I will also make sure that no two students are doing the same project. ☺

Behavioral and Social Science

1. Is smiling contagious?

2. How good are people at estimating measurements? (How big, far, etc. something is)

3. Does reverse psychology work?

4. How does gender affect short-term memory?

Biochemistry

1. What is the effect of aquatic plants on ocean acidity?

2. How do different light wavelengths affect photosynthesis?

3. Does plant food really help cut flowers live longer?

4. Can eating different things for breakfast keep you more awake?

Botany

1. Does temperature affect germination of a bean plant?

2. How do different types of fertilizer affect the growth of a plant?

3. Does the presence of soap in water affect plant growth?

4. How do different types of light bulbs affect plant growth?

Chemistry

1. How permanent are permanent markers?

2. How does the pH of water affect the soil that surrounds it?

3. What type of water is the hardest? Has the highest/lowest pH?

4. Which brand of laundry detergent works best?

Computer Science

1. Which method of digital image compression (jpeg etc.) results in the best color photos?

2. How secure are your security questions?

3. What is the fastest Internet browser?

4. What materials can block a Wi-Fi signal?

Earth and Space Sciences

1. What liquids can best erode rock?

2. Can plants stop soil erosion?

3. Do different types of rocks in soil affect plant growth?

4. What kinds of weather conditions are best for stargazing? (Ex. Warm vs. cold nights)

Engineering

1. How much weight can a super cooled semiconductors and the magnetic field created by them hold?

2. Does an electric toothbrush remove more plaque than a manual tooth brush?

3. Which bridge can hold more weight, a beam, suspension, or arch bridge?

4. How much force does it take to drive a nail through different types of wood?

Environmental Science

1. Can a home water filter be used to filter out color and taste from powdered drinks mixed with water?

2. How do nutrients affect the cell density of algae?

3. What is the effect of organic and inorganic matter on water quality?

4. How might sea-level rise affect the DMV area?

Mathematics

1. Are certain advertisements true?

- Ex. Testing cereal brand names and finding out if they do provide an accurate measurement in their advertising (ex: 30% more for free – is there really 30% more product)

2. What is the relationship between Fibonacci’s numbers and nature?

3. Is home-field advantage a real phenomenon?

4. How does performing a small number of trials affect data reliability?

Medicine and Health

1. Which is more effective, hand sanitizer, soap, or water, at killing bacteria?

2. How can you reduce the amount of bacteria in your tooth brush?

3. How does the temperature of food affect the taste?

4. Do most people have the same dominant hand, eye, ear, and foot?

Microbiology

1. Can natural products kill more bacteria than pharmaceuticals?

2. How does temperature affect bacteria/mold growth?

3. What type of yeast works best in baking?

4. What type of bread molds the fastest?

Physics

1. How does temperature affect an instrument’s pitch?

2. What is the electrical conductivity of different liquids?

3. Which battery works better? Alkaline, lithium, nickel cadmium, or nickel metal hydride?

4. Do cork bats really make baseballs go farther?

Zoology

1. Are insects attracted to lamps for heat or for light?

2. Are dogs truly colorblind?

3. Are ants attracted to real sugar or artificial sugar more?

4. Do dogs respond to treats or praise more?