

Science Fair ideas

75 great and fun ideas to get you started on a science fair project for AHSEF. I would strongly encourage you to work on something you LOVE to do. The best ideas always come from your own mind. If you choose one of these, please talk to me. Let's make sure it is the best it can possibly be. Also, let's make sure it is not more work than it needs to be. Read through each slowly and ask questions. I am here to help. Enjoy your science fair season.

Blessings,

Dr. Thai

- 1) Clean energy from spinach. What about other plants? <http://www.israel21c.org/israelis-produce-clean-energy-alternative-from-spinach/>
- 2) Using O2 can possibly reset circadian rhythms in mice. Is that true in humans? <http://www.israel21c.org/blast-of-thin-air-can-reset-circadian-clocks/>
- 3) Can you generate enough light using a water bottle and water to light a room in a third world country that has no power sources available?
- 4) Can an underground drip system be developed that will eliminate virtually all water waste?
- 5) How does heat affect the odor of plants <http://www.israel21c.org/flowers-lose-fragrance-as-global-temperatures-rise/>
- 6) Given the spread of West Nile and Zika virus recently, is there a nontoxic or natural repellent that could be used to deal with the mosquitos carrying these diseases.
- 7) In ground heating system to prevent crops like orange trees from freezing. If the ground is warmer, will it transfer up the tree and be warm enough to keep the fruit alive?
- 8) Dentists hate gummy candies because they cause so much tooth decay. Is there a coating that can be put on these candies to prevent them from sticking to teeth? It is a big problem now because so much medicine comes as a gummy.
- 9) Coral is being used as a bone grafting tool. Can it also be used to strengthen other products and not just for a biological use? <http://www.israel21c.org/growing-new-bone-from-corals-raised-in-the-israeli-desert/>
- 10) Help for yo-yo dieting <http://www.israel21c.org/gut-microbes-could-be-to-blame-for-yoyo-obesity/> What if the people ate a diet rich in foods that were natural antibiotics
- 11) <http://www.israel21c.org/placebos-by-prescription-may-work-like-medicine/> Do placebos work as well as actual medication?
- 12) One of the biggest problems with tap shoes is the danger of slipping. Could scoring the taps make them louder as well as increase their fall resistance?

- 13) What about sleep? Can sleep be improved by using a subauditory pulse given by a smart phone to help control breathing rates and put people to sleep? <http://www.israel21c.org/7-apps-and-devices-to-help-you-get-a-great-nights-sleep/>
- 14) Pink lakes – Dusty rose lake, Canada is one of several pink lakes in the world but no one knows why it is pink. Can you test various mineral combinations to see if you can get a truly pink water?
- 15) Can salt water be used to preserve food longer?
- 16) Does salt water preserve cardboard and plastic making those environmentally biodegradable items not so biodegradable after all?
- 17) Kombucha fabric – can you make fabric quickly from kombucha? <http://www.futurity.org/scoby-fabric-kombucha-leather-1149392-2/>
- 18) Will glow in the dark road features lessen accidents?
- 19) Bamboo is supposedly the strongest wood. Could it be used as a dissolvable alternative to metal hardware implanted for fractures? <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2658806/>
- 20) Saffron – does it improve memory before exams?
- 21) If you can write backward, does it mean you can read backward?
- 22) Can different designs of a solar oven get hamburger up to a safe temperature to eat?

- 23) Creme de la mer
- 22) Plasma sounds - does plasma make a sound? If so, in what conditions? The native Indian and Eskimo tribes in Alaska state that the Aurora Borealis has a definite sound.
- 24) Sound science – can energy
- 25) Sand storm protections

- 26) Glowing mushrooms
- 27) Red tide
- 28) Does eye color affect red eye.
- 29) UV light
- 30) Paint ball ballistics
- 31) Stress and strain of pasta bridges – which design is strongest?

- 32) The effects of additives to liquids on siphon flow rates. Do to a liquid change the flow rates of a siphon at all?

- 33) Erosion and types of rocks

- 34) Does noise affect concentration?

- 35) Optical illusions – are boys or girls more likely to perceive optical illusions more quickly

- 36) Optical illusions – at what age can children perceive optical illusions?

- 37) How does color affect the taste of food?

- 38) If someone is a super taster, does that mean they are more likely to have an aversion to a particular food?

- 39) Eggs are rinsed in a bleach solution prior to being sent to the grocery store for sale. This removes the protective outer coating put on by nature as the chicken lays the egg. It is not

healthy for people to eat bleach so does the bleach get inside the egg shell and into our food supply?

40) Marketing wrappings – people reportedly can see colors in the green spectrum more easily. Does this influence their choices of products if products are marketed with green wrappings?

41) Clean up oil spills - Could surrounding an oil spill with oil absorbing polymers prevent the spread of future oil spills?

42) Bacteria on toothbrushes. The invisible spray from the flushing of toilets can make bacteria spread. Is there more bacteria on a toothbrush stored on a counter near the toilet vs one that is stored further away or inside a cabinet?

43) Does light color affect heart rate?

44) What are some different ways of water conservation when growing grass?

45) Creating a bezoar - How much gelatin in the form of gummy bears can be eaten and still pass through the intestines safely?

46) Do chemical fertilizers vs organic fertilizers alter the acidity the soil to a greater extent

47) Planeria can be grown and used as a wound healing model. Which causes them to regenerate faster, use of caffeine or aloe Vera?

48) Water conservation - Super absorbent polymers and sandbags, use in watering grass if it is embedded in sod. How much evaporates if polymer used.

49) Drag on cars? Can you change the drag by using different surfaces like a golf ball does?

50) Animals orient magnetically. Do plants?

51) Are 2 ears better than 1 for localizing a sound?

52) How do different materials affect air resistance?

53) Pareidolia: People hearing what they want to hear and seeing faces in objects. How common is this? Does it indicate a particular personality type?

54) Does clothing color influence first impressions?

55) Is sensitivity heightened on your dominant side?

56) Is soil pollution present around Gas stations? What about parking lots?

57) Do roadside objects distract drivers?

- 58) Does color preference change with age? Should that affect marketing?
- 59) Compare homemade glue to commercial glue strength.
- 60) How much time does technology take out of people's day?
- 61) Lefties and memory. Does being LH make you remember things more easily?
- 62) Dead zones exist in ocean bays caused by fertilizer runoff which stimulates algae growth. Can you use resources to increase oxygen in the area and reverse this?
- 63) Does thickness of rind slow spoilage rates on citrus fruit?
- 64) Is UV radiation really blocked by UV absorbing compounds in laundry detergent?
- 65) Can UV absorbing compounds be effectively added to soaps so that they are more readily available for use on skin?
- 66) Make sourdough bread and discover which sugar is best to feed your yeast.
http://www.education.com/activity/article/Sourdough_bread/
- 67) Make your own bio plastics from a variety of things such as banana peels, or other fibrous materials that are normally thrown away. Compare the strength of each.
- 68) Can a scoby be used effectively as organic fertilizer for plants?
- 69) Compare different ways of eliminating dust mites. Which is the best? Count the dust mites using a magnifying glass. Consider making some kind of a mesh to catch them in and then dispose of it, mites and all.
- 70) What types of food cause the oral allergy syndrome? http://www.all-science-fair-projects.com/project975_131.html
- 71) Does the temperature of the water you use to wash your hands matter? Use glow germ to find out in a fun and cool way.
- 72) Spare tire disasters -how many people leave their spare tire in their cars for years and then when they need to use them, they either are crumbly or they blow out on the way to the repair shop because the rubber has decayed. Do this project to find out how many good spare tires are in the cars of your family and friends and if they check them very frequently. Having a good spare tire can save someone's life.
- 73) What type of roofing material or what color is the most energy efficient?
- 74) Use indophenol to explore cooking processes that preserve vitamin C.

75) How does the pH level of a solution affect corrosion?