

# **STEM Fair Projects Often Done by Students**

## **2019-20**

Projects should be experiments, NOT demonstrations and should reflect the student's own work and ideas. As an experiment, the project is a collection and analysis of data.

The following list outlines topics that are commonly seen at STEM fairs and are not necessarily unique ideas or projects. If your student does a similar project make sure it is well thought out with a lot of data and multiple trials (more than 2 or 3) and a creative twist.

1. Effect of music on plants
2. Effect of talking to plants
3. Effect of dark vs. light on plants or colored lights, etc.
4. Effect of liquids on plants other than water, e.g. milk, soda, salt water, etc.
5. Effect of cola, coffee, etc. on teeth; tooth decay, coloring, etc.
6. Effect of running, jumping, music, video games, movies, etc. on blood pressure
7. Balanced diets (data usually unreliable)
8. Strength/absorbency of paper towels (and other products)
9. "Which is best?" – Approach generally without scientific merit (which popcorn pops better, which soap, fertilizer, etc.)
10. Basic maze running
11. Any project that boils down to simple preference; what do girls/boys/cats/dogs like better...
12. Effect of color on memory, emotion, mood, etc.
13. Effect of color on food taste, e.g. changing the color of Jell-O to affect the taste.
14. Optical illusions
15. Reaction times in general and distractions effecting reaction speed
16. Many male/female comparisons, especially if bias shows
17. Basic planarian regeneration
18. Detergents vs. stains
19. Basic solar collectors
20. Acid rain projects (Important: to be considered, thorough research into the composition of acid rain and a scientifically accurate simulation of it would be necessary.)
21. Basic flight tests, e.g., planes, rockets
22. Battery life (plug in and run down)
23. Basic popcorn volume tests
24. Taste comparison, e.g., Coke vs. Pepsi can you tell the difference?
25. Sleep learning
26. Music affecting learning
27. Taste or paw-preferences of cats, dogs, etc.
28. Color choices of goldfish, etc.
29. Basic chromatography
30. Wing or in shape comparison with mass, surface area, etc. not considered
31. Ball bounce tests with poor measurement techniques
32. Fingerprints and heredity
33. Hovercraft design
34. Colonizing bacteria from doorknobs, student's hands, places around the school, etc.
35. Memory Tests
36. Penny polishing; what cleans pennies the best
37. Insulation effectiveness
38. Coke & Mentos
39. Hand sanitizers and bacteria; which sanitizer is best?