

ST. FRANCIS XAVIER SCHOOL SCIENCE FAIR 2020



Ms. Colleen Barrett
Principal

Mr. Patrick Van
Coordinator

AEROSPACE

1. Do the fins of a rocket affect how it flies?

Max Petherbridge (7)

ASTRONOMY

2. Will placing a satellite at different orbital distances from impact change the amount of stellar debris collected?

Thienna Nguyen (8)

BEHAVIORAL SCIENCE

3. Does color affect memory?
4. Does gender affect color preferences?
5. Does gender affect reaction time?
6. Does virtual competitors affect performance?
7. Does the color of paper affect how long it takes a person to finish a test?
8. Does color affect memory?
9. Does gender affect reflex?
10. Will humans better remember something seen or heard?
11. What age group is more likely to cheat?
12. Asche conformity experiments
13. Does a basketball player make more free throws with or without an audience?
14. Which gender best remembers a series of images?
15. Does an oddball stimulus affect the estimated duration?
16. Does gender affect ability to accurately identify the meaning of facial expressions?
17. Does studying speed affect test scores?
18. Does gender affect memory?
19. Does cross hand eye dominance affect the accuracy of shooting darts?
20. How does does playing video games affect heart rate?
21. Does violin or piano calm people more?
22. Does the use of flashcards affect memory recollection?
23. Does thought process affect the taste of food?
24. Does age determine how people spend money?
25. Does the monochromatic color scheme of a photo affect how much someone would pay for it?
26. Does time of day affect memory?
27. The Do time limits affect work efficiency?
28. Does listening to music while studying affect test results?
29. Do rewards affect a child's performance on a quiz?

Mya Allen (7)
Elle Anderson (7)
Jack Baskfield (8)
Emma Bevenour & Andrea Fernandez (8)
Neve Cavalier (8)
Kennedy Colegrove (7)
Gretchen Couri (8)
Stephen Couri (7)
Harmony Drake (8)
Deneen Elliott (8)
Erin Floyd (8)
Emma Gillespie (7)
Marie Golden (8)
Grace Gustafson (8)
Grace Hurley (8)
Caitlyn Lazar (7)
Sofia Marino & Kelsey Langston (8)
Patch McCurry (7)
Josie Pfeffer (7)
Brynn Ryan (7)
Stephen Ryan (8)
Amelie Sambo (8)
Clodagh Stack (8)

Claire Stevoff (7)
Maggie Tsuru & Sydney Pigott (8)
Jack Wilson (8)
Anna Beth Woolf (8)

BOTANY

30. Does the color of light affect plant growth?
31. What type of soil is best for plant growth?
32. Does caffeine affect plant growth?
33. Which liquid can grow a plant the best?
34. Does rain water or tap water affect the growth of a plant?

Sophia Hofmeister (7)
Christopher Langill (8)
Peter McNeely (8)
Jack Ryan (8)
Madelyn Varkey (8)

CHEMISTRY

35. What is the effect of acid on tooth enamel?
36. Does sunlight affect the amount of vitamin C in orange juice?
37. Pectinase has the greatest impact on which fruit: apple, oranges pears or grapes?
38. How do different acids and bases affect the pH level of lemon juice?
39. What fruit turns brown the fastest when frozen?

Charles Close (7)
Gus Geiger (8)
Katie McBrearty (7)
Avery Schneider (7)
Addison Stewart (7)

CONSUMER SCIENCE

40. How do objects affect wifi signal strength?
41. Can people tell the difference between natural and artificial scents?
42. Does brand affect peoples choice in clothing?
43. Does the thickness of a guitar string affect its frequency?
44. Can Americans live without meat?

Owen Connolly (8)
Emily Couri (7)
Adeline Ferdinand (7)
Ethan Fernando (8)
Gracie Glen & Isabella Meccia (8)

45. Which toothpaste removes sugary substances on teeth the most effectively?
46. Is the paper towel that absorbs the most water absorb the most vegetable oil?
47. Do different brands and type of potatoes chips affect how much oil is in them?
48. What kind of toothpaste removes stains from teeth the best?
49. Does the source of drinking water affect the quality?
50. Does the type of fat baked into cookies affect their diameter?
51. What is the most effective laundry detergent to remove stains?
52. Does the amount of air in ice cream affect the flavor?
53. Does gender affect peripheral vision?
54. Which laundry detergent works best?

Dominic Holton (7)
Elizabeth Ingrassia (7)
Kit Kirkendall (7)
Caroline Locke (7)
Caroline McCullough & Callie Mitchell (8)
Nicole Patchin (8)
Ava Rupert (8)
Ali and Danny Ryczek (8)
Emmersyn Schwab (7)
Barbara Tobin-Tornvall (7)

EARTH

55. Where is lake most polluted?

Caroline Gorman (8)

ELECTRONICS

56. Do different charging wall adapters affect the speed of an S9?

Jack Ehlert (7)

ENGINEERING SCIENCE

57. Does the size of the battery affect the speed of a homopolar motor?

John Farr (7)

ENVIRONMENTAL SCIENCE

58. Testing pH of Lake Geneva
59. Are pesticides helpful or harmful?

Morgan Deger (8)
Emily Walberer (8)

HEALTH SCIENCE

60. Does athleticism affect lung capacity?
61. Does the time of day affect flexibility?
62. Does improved flexibility affect speed?
63. Smoking vs vaping: which is more dangerous?

Katie Dunn & Erin Keating (8)
Abby king (7)
Ethan Santiago (7)
Ben Trapp (8)

MATERIAL

64. What kinds of wood will burn the best?
65. What paper is the best for flying a paper airplane?

Max Moser (7)
Drew Zavattero (8)

MATHEMATICS

66. Does the flipping motion affect the results of coin flips?

Jack Keenan (7)

MICROBIOLOGY

67. How effective are different antibacterial products?

Drew Fullenkamp (8)

PHYSICS

68. Does the amount alcohol in hand sanitizer affect burn time?
69. Does height affect the speed of a swimmer?
70. How is the conductivity of water affected when substances are added?
71. How much electricity can fruits produce?
72. Does the temperature of a tennis ball affect the height it will bounce?
73. How does weight affect how far a maglev train travels?
74. Which type of mint cools water the most?
75. Does the speed of an electric current affect how fast you can electroplate an object?
76. Which citrus fruit acts as the best battery?
77. Does hot water freeze faster than cold water?
78. What length of rope is best for jumping rope?
79. Do mints affect the temperature of water?
80. Which 3D geometric shape scatters the most light?
81. What type of liquid melts the fastest?
82. Does the amount of salt affect the viscosity of ice cream?

Unss Aatir (7)
Georgia Andrew (7)
Henry Brandenberger (7)
Cole Driscoll (7)
Evan Ehlman (7)
Will Elliott (8)
Eleanor Fruin (7)
Lizzie Goodson (7)
Sophie Goodson (8)
Andrew Hollerich (8)
Kathleen Hutchinson & Riley Pope (8)
Lucy Kirkendall (7)
Kenny Langston (8)
Ella Lannan (8)
Grace Loeher (7)

83. Does temperature affect the strength of magnets?
84. The physics behind kicking
85. What different reference dyes make up the colors of M&Ms?
86. Can water walk?
87. What melts ice faster, salt water or fresh water?
88. Does the mass of an arrow affect its penetration ability?
89. The science of shooting a basketball?
90. What is the best bridge design made out of popsicle sticks?
91. Does the shape of a parachute affect the speed?
92. Does using different kinds of salts to make ice cream affect the temperature?
93. Which bridge can support the most weight: beam or suspension?
94. Does distance affect the accuracy of a field goal kick?

Jack McBrearty (8)
Max Micek (7)
Thea Michael (8)
Finn Miller & Ryan Hundley (7)
JP Ohle (7)
Daniel Polk (8)
Joey Ponzi (8)
Rumaan Samir (8)
Daniel Scattone (8)
Lainey Semple (8)
Liam Uruba (8)
Matty Wallace (8)

ZOOLOGY

95. Are dogs mouths cleaner than humans?
96. What household liquid best in a homemade fly trap?
97. What type of landscape/food do worms prefer?

Cassidy Brown (7)
Drennan Devaraj (7)
Carter Lange (7)