

Quantitative Research Topics for STEM Students

Biology and Life Sciences

1. How many seeds grow better in different kinds of dirt?
2. Which plant food makes plants grow the tallest in 30 days?
3. How much water do different plants need to stay healthy?
4. What changes in plants happen when the light is different?
5. How many bugs can you find in different spots in your yard?
6. Does music help plants grow better or worse?
7. How fast do different seeds grow in warm water?
8. What light colors help plants make more food?
9. How many leaves fall from trees during different weather?
10. Which food makes hamsters run faster on their wheels?
11. How much do different animals eat in summer and winter?
12. How do fish act when the water gets warmer or cooler?
13. How many germs grow on different soap bottles?
14. Which hand cleaner kills the most germs in 30 seconds?
15. How do different vitamins change how fast hair grows?
16. What happens to your heart rate when you exercise more?
17. How many calories do kids burn playing different sports?
18. Which foods help you remember better during school tests?
19. How much sleep helps kids remember math facts best?

20. What happens to plant roots when you add salty water?
21. How many worms live in different types of garden dirt?
22. Which cleaners work best to kill germs on kitchen counters?
23. How fast do fruits rot in hot and cold places?
24. What do birds do on rainy days when they eat food?
25. How many times do crickets chirp when it's hot or cold?

Chemistry and Chemical Engineering

26. How much baking soda makes the biggest safe volcano?
27. Which liquids stay mixed and which ones separate into layers?
28. How hot does water need to be to melt sugar?
29. What happens when you mix oil and water in different amounts?
30. How much salt can melt in one cup of water?
31. Which things get rusty faster when left in the rain?
32. How do different acids change the color of purple cabbage?
33. What happens to ice cream when you add more or less of things?
34. How much soap makes the biggest and longest bubbles?
35. Which metals carry electricity better than others?
36. How does temperature change how fast things melt or disappear?
37. What happens when you mix different food coloring drops?
38. How much vinegar makes the best glass cleaner?
39. What things float or sink in different liquids?
40. How do different sugars change how cookies taste?
41. What happens to milk when you add different acids slowly?
42. How much air makes a paper plane fly the farthest?

- 43. Which saltwater makes crystals grow the fastest?
- 44. How do oils change how fast candles burn?
- 45. What happens to egg whites when you add different things?
- 46. How hot does it have to be to melt different plastics?
- 47. What natural things make the best plant dyes?
- 48. Which soaps clean white clothes the best?
- 49. What happens when you shake soda and let gas out?
- 50. How much food coloring changes water into bright colors?

Physics and Engineering

- 51. How far do different balls bounce when dropped from up high?
- 52. What paper shapes make the strongest bridges?
- 53. How fast do things fall in air compared to water?
- 54. What happens to sound when the size of a container changes?
- 55. How much weight can different stuff hold before breaking?
- 56. What shapes roll down ramps the fastest?
- 57. How do magnets pull metal from near or far away?
- 58. What happens to shadows when you move light around?
- 59. How much force stretches springs the most?
- 60. Which things carry heat better when tested with ice?
- 61. How do surfaces change how far marbles roll?
- 62. What happens to swinging pendulums when their string is longer or shorter?
- 63. How much air makes balloons pop at different heights?
- 64. What shines light back best in the sunlight?
- 65. How do different wheels change how fast cars move?

66. What happens to water waves when the bowl shape changes?
67. How much electricity goes through different safe materials?
68. What paper airplane flies farthest when there is no wind?
69. How do ramps change how fast balls roll down?
70. What happens to rubber bands when you keep stretching them?
71. How much rubbing slows down different things on the floor?
72. What keeps heat in best when wrapping a warm bottle?
73. How do pulleys help you lift heavy things easily?
74. What happens to light when it goes through different liquids?
75. How much power makes motors spin faster or slower?

Mathematics and Statistics

76. How many steps do kids take walking to school each day?
77. Which math games help kids learn multiplication the fastest?
78. How much time do kids spend doing homework every night?
79. What patterns show up when you count candy colors?
80. How many questions do kids get right using different ways?
81. Which study tricks help kids remember math facts longer?
82. How much money do families spend on food each week?
83. What happens to test scores when kids get more sleep?
84. How many books do kids read in each school month?
85. Which ways of teaching help kids learn fractions better?
86. How does screen time change kids' math scores each day?
87. What patterns show when you graph the weather every day?
88. How many words do kids spell right using different practice ways?

89. Which games help kids get better at solving problems?
90. How much play time helps kids pay more attention in class?
91. What happens to grades when kids eat a healthy breakfast?
92. How many kids like different ways of learning today?
93. Which memory tricks help kids remember math rules best?
94. How much music practice helps kids do better in concerts?
95. What patterns show when you track moods every day?
96. How many minutes do kids read different types of books?
97. Which prize ideas help kids finish homework faster?
98. How much water do kids drink on hot school days?
99. What happens to focus during different class times?
100. How many kids take part in classroom games and lessons?

STEM Research Topics for High School Students

101. How does using social media affect teen sleep every night?
102. Which clean energy works best in your town or area?
103. How much plastic trash comes from school lunch programs?
104. What happens to air near roads compared to near parks?
105. How do different exercises change teen stress each day?
106. Which learning apps help teens learn science faster?
107. How does screen light change how teens fall asleep?
108. What weather patterns show up in local weather records?
109. How does music type change how well students study?
110. Which recycling plans work best in high school lunchrooms?
111. How does caffeine change teen heart rate and focus?

- 112. What happens to plants in areas with different pollution?
- 113. How do teaching styles change how students learn chemistry?
- 114. Which ways help teens feel less stressed often?
- 115. How much dirty water is in nearby streams today?
- 116. What grade patterns show through the school year?
- 117. How do foods change teen energy in school?
- 118. Which tech tools help students learn physics better?
- 119. How does loud sound change how well kids pay attention?
- 120. What happens to memory when students take notes in different ways?
- 121. How does sleep time change teens' test scores?
- 122. What nature changes affect local bird numbers?
- 123. How much exercise helps teens feel happy and do better in school?
- 124. What phone use patterns show during school hours?
- 125. How does lighting change how well students understand reading?

Experimental Research Topics for STEM Students

- 126. What happens when plants grow under different colored lights?
- 127. How does temperature change how fast bread dough rises?
- 128. What items protect eggs best when dropped from up high?
- 129. How does music in the background change how students solve puzzles?
- 130. What happens to plant growth when different sounds are played?
- 131. How does soil type change how fast seeds grow?
- 132. Which cleaning ways kill the most germs on surfaces?
- 133. How does room temperature change how well students remember things?
- 134. What happens when you mix different amounts of ingredients?

- 135. How do exercise types change how fast heartbeats go back to normal?
- 136. What items keep things warm the best?
- 137. How does light in a room change how well kids read small words?
- 138. What happens to reaction speed after kids eat different snacks?
- 139. How do water types change how fast plants grow?
- 140. What study methods help kids remember new words best?
- 141. How does caffeine change how well students stay focused?
- 142. What happens to plant leaves when watering times are changed?
- 143. How do colors change kids' moods during class time?
- 144. What materials carry electricity better in a classroom test?
- 145. How does noise level change how well kids do math?
- 146. What happens to how fast ice melts in different containers?
- 147. How do smells change how well students remember during studying?
- 148. Which surfaces cause more or less rubbing when things slide?
- 149. How does humidity change how comfy students feel at school?
- 150. What happens to crystals when water temperature is changed?

Quantitative Research Topics Grade 12

- 151. How do job choices change how much money students might earn later?
- 152. Which college prep ways help students get better test scores?
- 153. How much time do older students spend doing different things?
- 154. What things affect how students pick their college majors?
- 155. How do internships change how interested students are in jobs?
- 156. Which study plans help students get ready for big tests best?
- 157. How much stress do students feel during each part of the school year?

158. What happens to motivation during the last year of school?
159. How do scholarship chances change how students pick colleges?
160. Which after-school clubs help students learn to be leaders?
161. How does using social media affect school grades often?
162. What things help students choose which college to go to?
163. How do teaching styles change how excited students are in class?
164. Which time plans help students handle homework and fun better?
165. How much sleep helps students do better on test days?
166. What happens to friendships when students start college?
167. How do volunteer jobs help students get involved in their towns?
168. Which talking skills help students do well in job interviews?
169. How does help from family change student confidence in school?
170. What things help students get used to college life?
171. How do learning styles change how students do in each subject?
172. Which money skills help students make smarter choices with money?
173. How much moving helps students feel happy and healthy at school?
174. What happens to creativity when students do art activities?
175. How do good mentors help students plan for their future jobs?

Quantitative Research Topics for STEM Students in the Philippines

176. How does typhoon season change how plants grow each year?
177. Which Filipino foods have the most vitamins and minerals?
178. How much plastic trash comes from different schools in the Philippines?
179. What happens to air quality in Manila during different times of the year?
180. How do different rice types grow in different Philippine soils?

181. Which clean energy works best on tropical islands?
182. How does rainfall change how much crops grow in different parts of the Philippines?
183. What patterns show up in fish numbers during monsoon seasons?
184. How do coconut products help local businesses grow?
185. Which water cleaning ways work best in countryside areas?
186. How does cutting down trees affect animals in Philippine forests?
187. What happens to coral reefs when ocean temperatures change slowly?
188. How do different farming ways change soil quality in the Philippines?
189. Which medicinal plants grow best in different Philippine climates?
190. How does air pollution affect kids' health in big cities?
191. What patterns show up in earthquake data over the years?
192. How do different fishing ways change sea life today?
193. Which building materials work best during typhoon season?
194. How does plastic trash hurt Philippine ocean life over time?
195. What happens to bird migration during climate changes?
196. How do farming ways change water quality in local areas?
197. Which solar power systems work best in tropical weather?
198. How does city growth change flooding during storms?
199. What things affect mangrove forest health and growth?
200. How do waste systems change community health today?

Environmental Science and Sustainability

201. How much water does your family use during different activities?
202. Which recycling ways work best in your school?

- 203. How do different ways of travel change air pollution each day?
- 204. What happens to animals when new buildings are made nearby?
- 205. How much energy do different machines use at home?
- 206. Which plants clean indoor air the best?
- 207. How do different packing materials change how much trash is made?
- 208. What happens to soil when you use different plant foods?
- 209. How much plastic trash comes from different food packs?
- 210. Which ways save the most water at home?
- 211. How do weather changes affect plant growth every year?
- 212. What happens to streams when it rains a lot again and again?
- 213. How much carbon dioxide do daily activities make?
- 214. Which clean energy works best where you live?
- 215. How do seasons change how animals behave?
- 216. What happens to air near different kinds of buildings?
- 217. How much noise hurts animal behavior in your area?
- 218. Which ways of composting help cut food waste the most?
- 219. How do people's actions change the health of local nature?
- 220. What happens to temperature when more trees are planted?
- 221. How does light at night change how night animals act?
- 222. Which ways help schools lower their harm to the earth?
- 223. How do different farming ways change local water?
- 224. What happens to birds during building projects?
- 225. How does cutting trash help make the environment better?

Computer Science and Technology

226. How many hours do students spend using different tech devices?
227. Which computer languages help students learn coding the fastest?
228. How does screen time change how well students sleep each night?
229. What happens to creativity when students use different software?
230. How do different apps change how students learn and study?
231. Which computer games help students get better at solving problems?
232. How does internet use change how students talk to others?
233. What happens to focus when students do many things on devices?
234. How do different keyboards change typing speed and right answers?
235. Which online learning sites help students learn math better?
236. How does making digital art change drawing by hand?
237. What happens to talking when students use different messaging apps?
238. How do video games change how fast students react?
239. Which coding projects help students understand logic best?
240. How much does social media change students' self-confidence?
241. What happens to memory when students rely on devices?
242. How do different search engines help students find information?
243. Which websites help students learn science facts best?
244. How does using automation change students' problem-solving?
245. What happens to creativity when students use artificial intelligence?
246. How do digital tools change students' writing and talking skills?
247. Which virtual reality games help students understand hard science?
248. How does working online with others help teamwork skills?
249. What happens to focus when students get many notifications?

250. How do taking breaks from tech change learning and work?