Qualitative Research Topics for STEM Students

List of top Qualitative Research Topics for STEM Students:

Environment & Nature

1. How do various bird songs change where they build nests?
2. Why do worms come out when it rains but hide at other times?
3. What makes some plants grow faster in the sun than others?
4. How do ants work as a team to carry food to their homes?
5. Why do leaves turn color in the fall but remain green in summer?
6. How do squirrels recall where they hid their nuts for many months?
7. Why do some flowers close at night and open in the daylight?
8. How do bees choose which flowers hold the sweetest nectar?
9. What causes mushrooms to appear overnight after a rainy day?
10. Why do pinecones open when they are dry but remain closed when wet?
11. How do fish breathe in water without coming up for air?
12. Why do some rocks shine while others look plain and dull?
13. How do caterpillars turn into butterflies inside their silky cocoons?
14. What makes the ocean salty while rivers and lakes taste fresh?
15. Why do ducks float on water while chickens sink when they swim?
16. How do snails leave shiny trails when they slide on surfaces?
17. Why do volcanoes burst with hot lava instead of staying still?
18. How do shadows get longer in the evening and shorter at noon?
19. What makes thunder sound loud and lightning shine bright during a storm?
20. Why do some animals sleep during the day and stay awake at night?

21. How do roots know to grow down into the earth and not up?
22. Why do fireflies shine in the dark but stop glowing by morning?
23. How do birds know when to fly south for winter?
24. What makes the wind strong enough to blow leaves from trees?
25. Why do some seashells have stripes while others are plain?
26. How do spiders make webs without getting stuck in them?
27. Why do dandelion seeds fly away when you blow on them?
28. How do frogs croak loudly at night but stay quiet during the day?
29. What makes the moon seem bigger near the horizon at night?
30. Why do some stones skip on water while others sink quickly?
31. How do trees live through winter without leaves to catch sunlight?
32. Why do raindrops make circles when they hit puddles?
33. How do earthworms mix soil without hands or any tools?
34. Why do some bugs shine under UV light but not in sunlight?
35. How do seeds know which way is up when they begin to sprout?
36. What makes the sky look blue during the day and black at night?
37. Why do some plants have thorns while others have soft leaves?
38. How do clouds keep water without dropping it until it rains?
39. Why do waves crash loud on shores but not in deep oceans?
40. How do camels live in deserts without water for many days?

Health & Medicine

41. Why do cuts heal quicker with bandages than without?
42. How does laughing make your body feel good and calm?

43. Why do some people sneeze when they see bright light?

44. How do band-aids stick on skin without hurting when taken off?

45. What makes your stomach rumble when you are hungry?

46. Why do we blink many times a day without thinking?

47. How do vaccines keep you safe from germs you have not met?

48. Why do fingers get wrinkly when in water too long?

49. How does brushing your teeth every day stop cavities from forming?

50. Why do onions make your eyes tear up when you cut them?

51. What makes your heart beat fast when you are scared or excited?

52. How do bandages help scabs form over cuts to heal them?

53. Why do we yawn when we are tired or see someone yawn?

54. How does sunlight help our body build strong bones?

55. Why do some people need glasses to see things well?

56. How do medicines know where to work in your body?

57. Why do we shiver when we are cold but sweat when hot?

58. What makes hair grow longer on your head than on your arms?

59. How do braces slowly make teeth straight over many months?

60. Why do some people snore loud when they sleep?

61. How does soap kill germs on your hands when you wash?

62. Why do ears pop when you ride in an airplane or elevator?

63. What makes your skin turn red when you get a sunburn?

64. How do taste buds tell sweet from sour?

65. Why do bruises change color as they heal over time?

66. How do broken bones mend with a cast or splint?

67. Why do we hiccup when we eat too fast or feel gassy?
68. What makes your nose run when you are sick with a cold?
69. How does exercise make your muscles strong and healthy?
70. Why do we need to drink water every day to live?
71. How do X-rays take pictures of the bones inside your body?
72. Why do some people have allergies to pollen or peanuts?
73. What makes scars remain on skin after cuts heal?
74. How do thermometers read your body temperature when you are sick?
75. Why do we dream when we sleep but forget most dreams?
76. How do hospitals help people get well when they are hurt?
77. Why do babies have more bones than grown-ups when they grow?
78. What makes blood red and not blue or any other color?
79. How do stitches keep skin together until wounds fully heal?
80. Why do doctors test your reflexes with a small rubber hammer?

Technology & Innovation

81. How do robots move without arms or legs like people?
82. Why do video game controllers shake when you crash or win?
83. How do touchscreens work when you slide your finger on them?
84. What makes light bulbs shine bright when you flip a switch?
85. How do remote controls change TV channels without any wires?
86. Why do electric cars use batteries instead of gas?
87. How do 3D printers make toys layer by layer?
88. What makes airplanes stay in the sky without flapping wings?

89. How do traffic lights know when to change to red or green?

90. Why do drones fly without a pilot inside controlling them?

91. How do microwaves heat food faster than ovens or stoves?

92. What makes GPS know exactly where you are on Earth?

93. How do escalators move steps up and down all day long?

94. Why do calculators solve math problems faster than people?

95. How do metal detectors find coins hidden in the sand?

96. What makes virtual reality headsets feel like real worlds?

97. How do solar panels change sunlight into electricity for homes?

98. Why do washing machines spin clothes to dry them quickly?

99. How do flashlights make bright beams with small batteries?

100. What makes zippers zip up jackets without getting stuck?

101. How do speakers change electricity into music or voices?

102. Why do ice makers in fridges make perfect cubes?

103. How do elevators know which floor to stop at?

104. What makes fireworks burst into colorful shapes in the sky?

105. How do submarines sink in water and then float back up?

106. Why do keyboards have letters in a special order?

107. How do clocks keep time well for years without stopping?

108. What makes hair dryers blow warm air to dry hair?

109. How do toasters make bread into crispy golden slices?

110. Why do magnets stick to fridges but not to wooden doors?

111. How do cameras take pictures with one click?

112. What makes glue sticky enough to keep paper together?

113. How do thermostats know when to turn heaters on or off?
114. Why do credit cards have chips instead of only stripes?
115. How do automatic doors open when someone comes close?
116. What makes wheels roll smooth on roads without slipping?
117. How do compasses always point north no matter where you travel?
118. Why do light switches turn lamps on with one flick?
119. How do umbrellas fold small but open wide to block rain?
120. Why do batteries lose power after being used?

Space & Exploration

121. How do rockets launch into space without falling back?
122. Why do stars twinkle at night but not in the day?
123. How do astronauts float in space without gravity pulling them?
124. What makes the moon look like different shapes each night?
125. How do satellites orbit Earth without crashing into it?
126. Why do planets spin around the sun year after year?
127. How do telescopes see galaxies far away from Earth?
128. What makes the sun so hot next to other stars?
129. How do space suits keep astronauts safe from freezing cold?
130. Why do comets have long, bright tails when they are near the sun?
131. How do rovers drive on Mars without humans steering them?
132. What makes black holes unseen but able to pull in stars?
133. How do astronauts eat when there is no gravity?
134. Why do some planets have rings while others do not?

135. How do scientists find new planets beyond our solar system?
136. What makes Venus the hottest planet even though it is not the closest?
137. How do spaceships come back to Earth without burning up?
138. Why do meteorites sometimes hit Earth from space?
139. How do stars form patterns called constellations in the sky?
140. What makes Jupiter the largest planet in our solar system?
141. How do astronauts train in water to practice for space?
142. Why do galaxies spin slowly without getting tangled?
143. How do moon craters last for millions of years?
144. What makes Saturn’s rings bright and colorful from far away?
145. How do eclipses block the sun or moon completely?
146. Why do some planets have many moons while Earth has one?
147. How do space stations get oxygen for astronauts to breathe?
148. What makes Neptune look blue compared to other gas giants?
149. How do rockets avoid crashing into space junk floating around?
150. Why do astronauts use radios to speak in space?
151. How do scientists take pictures of planets with telescopes?
152. What makes Uranus spin sideways instead of standing up like Earth?
153. How do moon landers slow down to land safely?
154. Why do stars burst into supernovas when they die?
155. How do astronauts wash their hair without water floating away?
156. What makes the Milky Way look like a cloudy stripe?
157. How do space cameras work in extreme cold and heat?
158. Why do rockets have parts that fall off during flight?

159. How do astronauts work out to stay strong in zero gravity?
160. What makes Pluto a dwarf planet instead of a normal one?

Daily Life & Fun

161. How do bubbles form when you blow on soapy water?
162. Why do pancakes puff up when you cook them?
163. What makes popcorn pop when it is heated in the microwave?
164. How do swings keep moving back and forth for many minutes?
165. Why do ice cubes crack when you drop them in water?
166. What makes slime stretch and be squishy but not break?
167. How do magnets pull paper clips through thin paper?
168. Why do cookies turn golden brown when baked in ovens?
169. What makes soda fizz when you open a bottle?
170. How do paper airplanes glide farther than crumpled paper?
171. Why do rainbows appear only when it is sunny and rainy?
172. What makes chocolate melt faster in your hand than in the air?
173. How do erasers erase pencil marks without tearing paper?
174. Why do balloons float when filled with helium but not with air?
175. What makes yawns pass from one person to another?
176. How do whistles make loud sounds with just your breath?
177. Why do pencils write on paper but not on glass?
178. What makes ice cream stay cold even when it is soft?
179. How do scissors cut paper but not your fingers?
180. Why do markers smell different even if they seem alike?

181. What makes sand feel rough between your toes?
182. How do keys open doors with tiny ridges inside?
183. Why do apples turn brown after you bite them?
184. What makes wind blow harder on some days than others?
185. How do puzzles fit together well when solved right?
186. Why do crayons color smooth on paper but not on walls?
187. What makes bubbles round instead of square or triangular?
188. How do fans make cool air by spinning their blades?
189. Why do spoons show your reflection upside down?
190. What makes snowflakes have unique shapes instead of copies?
191. How do doors creak when they are opened slowly but not fast?
192. Why do firecrackers burst with loud noises and sparks?
193. What makes glue dry sticky instead of remaining wet?
194. How do coins jingle in pockets while paper money does not?
195. Why do books have page numbers in order?
196. What makes shadows follow you when you walk outside?
197. How do shoelaces stay tied until you untie them?
198. Why do kites fly higher when the wind blows stronger?
199. What makes dough rise into soft bread with yeast?
200. How do stamps stick to envelopes without falling off?

STEM Research Topics for High School Students

1. How very dirty air harms Manila's city plant species.

2. Solar phone charger with recycled parts.
3. Eco pack from Philippine seaweed.
4. How well do moringa seeds purify water.
5. Cell phone app tracking local life.
6. 3D-made limbs for animal healing.
7. Rainwater catch systems for country groups.
8. Fixing coral reefs with fake structures.
9. How loud sounds can change Manila's bird numbers.
10. Arduino flood alarm system.
11. Lagundi (chasteberry) leaves can fight germs.
12. Tall gardens in city high-rise blocks.
13. Plastic trash fuel study.
14. Bamboo is a green building material.
15. A robot chat helper for teen mental care.
16. Sun desalination for coastal towns.
17. Eat bugs as a protein source in Filipino food.
18. Cheap air tester made with Raspberry Pi.
19. How TikTok can change STEM learning interest.
20. Earth heat potential in Luzon.
21. Soilless farming with coconut fiber.
22. Phone microscope to find water germs.
23. Eco-friendly pads made from abaca fiber.
24. How volcanic ash can change crop harvests.
25. Simple ways to cut food waste.

26. Wind power chance in coastal villages.
27. Solar cells dyed with local fruits.
28. Clever watering system for rice farms.
29. Turning old electronics into art.
30. Drones help plant trees in Palawan.
31. Garlic fights germs compared to store cleaners.
32. Solar UV water cleaner device.
33. How social media can shape STEM job dreams.
34. Cheap water filter using rice hulls.
35. Mango peel bioplastic creation.
36. How caffeine can change student focus.
37. Sun-lit street lamps with motion sensors.
38. City heat buildup seen in Metro Manila.
39. Coconut water turned into a probiotic drink.
40. Using CRISPR for local crop disease fight.

Qualitative Research Topics for STEM Students in the Philippines

1. What Manila youth think about climate change.
2. Obstacles in STEM learning for country kids.
3. Gender bias in Philippine STEM work.
4. How K-12 changes affect STEM skill prep.
5. Strong family support always boosts girls in STEM success.
6. Difficulties with online school during the virus.
7. Local beliefs affect vaccine doubts.

8. Kids' stories from robotics clubs.
9. Kids' opinions on GMO crops.
10. Social media can help push STEM job dreams.
11. Stories of LGBTQ+ kids in STEM class.
12. What Filipino teens think of AI rules.
13. Difficulties in getting STEM grants.
14. How Typhoon Odette greatly raised nature care.
15. Kids' opinions on nuclear power in the Philippines.
16. Local old wisdom truly helps today's medicine.
17. Reasons for entering STEM contests.
18. Teachers' views on real STEM labs.
19. Filipino scientists inspire as strong role models.
20. Parents' views on STEM job picks.
21. Kids' stories from coding camps.
22. Kids' views on mental health in STEM.
23. How TikTok science posts can change learning.
24. Problems that student makers meet.
25. How faith can help mold science teaching.
26. Kids' views on clean energy rules.
27. Kids' tales from school science fairs.
28. Kids' views on fair climate in city and country.
29. Hurdles for girls to join robot teams.
30. Anime and manga spark STEM interest.
31. Kids' views on funding space trips.

32. Old healers help in health care.
33. How Taal Volcano bursts can affect local STEM studies.
34. Kids' views on copying in projects.
35. Trouble in getting lab tools.
36. Kids' stories from flipped classes.
37. Kids' opinions on GMOs in farms.
38. Science museums truly help school learning.
39. Teens' views on online safety.
40. How DepEd’s STEM lessons can shape job picks.

STEM Strand Research Topics

1. Using calculus to model car flow in Metro Manila.
2. Physics of Filipino games like sipa and sungka.
3. Test chemicals in local herb cures.
4. How study habits closely link to STEM scores.
5. Study of coral bleaching in Boracay.
6. Designing a bike made from bamboo.
7. Algorithm to predict dengue outbreaks.
8. Shapes in old Filipino buildings.
9. Study germs in good bacteria foods.
10. How one-time plastics badly affect Manila Bay nature.
11. Robot helpers for floods in risky zones.
12. How coconut oil can work as biofuel.
13. Math in folk dances like tinikling moves.

14. Tilapia aquaculture biotechnology study.

15. Physics of wind flow in Ilocos wind farms.

16. Tech to count rice grains by picture.

17. Study of diabetes spread in city and country.

18. 3D model showing Mayon Volcano lava flow.

19. Data check on jeepney rider safety.

20. Nano tech boosts local sunscreen.

21. Study why STEM kids delay work.

22. Astronomy of Philippine stars in native culture.

23. Heat in street food carts.

24. Genes in local rice types.

25. Computer learning to guess typhoon routes.

26. Study chemicals in Pinoy food keepers.

27. Physics in old Filipino martial art arnis.

28. GIS map of Metro Manila’s green spots.

29. Biomedical engineering for cheap prosthetics.

30. Cryptography to protect online tests.

31. Math behind jeepney fare rules.

32. Study of mangrove tree planting.

33. Brain study of kids multitasking.

34. Robots help pick coconuts.

35. Study chemicals in local coffee roasting.

36. Study forces in habal-habal rides.

37. Study spread of leptospirosis in floods.

38. 3D printing old Filipino artifacts today.
39. Math behind trends in Philippine stocks.
40. Tech in making abaca fiber production.

Qualitative Research Topics for Students

1. Reasons for picking STEM over other subjects.
2. How good teachers help spark wonder.
3. How bullying can affect school work.
4. Kids' views on homework help.
5. Stories of new kids who moved schools.
6. How social media can change study ways.
7. Difficulties in juggling clubs and schoolwork.
8. Kids' views on school rules.
9. How friends help in team work.
10. How school clothes affect personal style.
11. Kids' honest opinions on school help for feelings.
12. Stories of kids with learning troubles.
13. Views on school grading.
14. How sports can boost school success.
15. Problems that school leaders meet.
16. How school lunch food can affect health.
17. Kids' thoughts on sex classes.
18. Views on school safety steps.
19. Kids' stories from mixed school lessons.

20. How strong parent pressure affects job picks.
21. How art adds to STEM learning.
22. Kids' opinions on climate protests.
23. Problems with traveling to school.
24. Kids' views on library books.
25. Real abroad student stories.
26. How school events can boost school pride.
27. Kids' thoughts on no tech in class.
28. Views on teacher favorites.
29. How strong peer help boosts school success.
30. Kids' real stories from science shows.
31. How K-pop can affect kids' actions.
32. Views on school neatness.
33. Problems with study in typhoon times.
34. Kids' views on LGBTQ+ welcome.
35. Social media can really cause bullying.
36. Views on school trips.
37. Stories from kids in robotics clubs.
38. How school rules change creative thinking.
39. Kids' thoughts on online versus in-person classes.
40. Views on job advice programs.

Qualitative Research Topics for Grade 11 STEM Students

1. Problems moving from junior to senior high.

2. Views on STEM strand difficulty.
3. How research projects can clear career paths.
4. How senior high choices can change interests.
5. Stories about thesis ideas.
6. Views on college readiness.
7. How good friends affect class picks.
8. Problems with time use in STEM.
9. How teachers can guide thesis work.
10. Views on lab safety lessons.
11. Stories from team research work.
12. How parent hopes cause student stress.
13. Kids' opinions on STEM job pay.
14. Views on DepEd’s STEM curriculum.
15. How internships can boost learning skills.
16. Problems mixing STEM work and fun.
17. Kids' views on gender in STEM class.
18. Stories using web research tools.
19. How thesis due dates can affect feelings.
20. How social media can aid thesis work.
21. Kids' views on copying rules.
22. Views on STEM and non-STEM peers.
23. Stories from coding lessons.
24. Problems with getting science articles.
25. How science fairs boost strong drive.

26. Kids' views on college tests.
27. How senior high can shape leader skills.
28. Views on mixed subject studies.
29. Views on lab equipment supply.
30. Real stories using data tools.
31. How family can help choose thesis subjects.
32. Problems in sharing research results.
33. Views on mentor quality.
34. How senior high can boost smart thinking.
35. Kids' views on GMO label rules.
36. Kids' views on climate lessons.
37. Stories using online labs.
38. How culture can shape right research ways.
39. Problems for country kids in STEM.
40. Views on world and local research goals.

Experimental Research Topics for STEM Students

1. How caffeine can change plant growth.
2. Cassava plastic biodegradability study.
3. Calamansi vs. store sanitizer shows strong germ-fighting strength.
4. Solar cooker works with recycled materials.
5. How classical music can change plant growth.
6. Banana peel biodegradable foam creation.
7. How light color can affect algae growth.

8. Antioxidant levels in local honey and store brands.
9. Home water filters work vs. commercial ones.
10. How vinegar helps take off rust.
11. Study plant growth under LED versus sunlight.
12. Turmeric paste kills germs effectively.
13. How heat can change battery life.
14. Eco packaging from pineapple fibers.
15. How loud sounds change chicken egg output.
16. Wind turbine blade shape efficiency study.
17. How pH can change papaya enzyme work.
18. Sun distillation of seawater.
19. Oregano oil stops fungus growth.
20. How fertilizer type can change tomato harvest.
21. Cornstarch makes biodegradable plastic.
22. How salt levels change electrolysis work.
23. Natural mosquito repellent works vs. chemical ones.
24. How light color can change plant photosynthesis.
25. Soap strongly fights germs vs. sanitizer.
26. Coconut husk creates biodegradable sponge.
27. How magnets can change seed sprouting.
28. Solar air cooler design.
29. How pH levels change yeast fermentation.
30. Recycled paper works better vs. plastic bags.
31. How caffeine can change Daphnia heart beats.

32. Cassava starch makes biodegradable glue.

33. How heat can change vitamin C in calamansi.

34. Home compost works vs. commercial compost.

35. How light pollution can change firefly actions.

36. Garlic extract kills germs well.

37. Eco diapers from banana fibers.

38. How saltwater can change concrete strength.

39. Solar phone charger efficiency.

40. How heavy metals can affect tilapia survival.