

Genetics

1. Study traits in pea plants.
2. Look at mutations in fruit flies.
3. Create a family tree for traits.
4. Explore CRISPR gene editing.
5. Compare Mendelian and non-Mendelian traits.
6. Research a hereditary disease.
7. Do DNA fingerprinting.
8. Examine gene expression and the environment.
9. Study epigenetics and traits.
10. Look at color vision genetics.

Ecology

11. Survey local plants and animals.
12. Study pollution in water.
13. Investigate invasive species effects.
14. Plan a habitat restoration.
15. Analyze plant diversity in an area.
16. Research climate change effects on wildlife.
17. Explore keystone species.
18. Study pollinators and plants.
19. Examine nutrient cycles in ecosystems.
20. Look at habitat fragmentation effects.

Human Biology

21. Measure heart rate after exercise.
22. Explore the human microbiome.
23. Research nutrition's impact on health.
24. Study sleep deprivation effects.
25. Examine stress on the immune system.
26. Test how pH affects enzymes.
27. Analyze blood types.
28. Study smoking's impact on lungs.
29. Research caffeine effects.
30. Explore diet choices and health.

Cell Biology

31. Investigate osmosis in plant cells.
32. Study yeast cellular respiration.

33. Test pH effects on enzymes.
34. Observe cell cycle stages.
35. Look at temperature effects on cell membranes.
36. Study stem cells and healing.
37. Test photosynthesis rates in light.
38. Compare different cell types.
39. Analyze antibiotics on bacteria.
40. Explore cell signaling.

Plants

41. Test light effects on plant growth.
42. Study roots and nutrient uptake.
43. Research water's impact on growth.
44. Test fertilizers on plants.
45. Study photosynthesis in plants.
46. Observe plant reactions to gravity.
47. Analyze herbicide effects on plants.
48. Research pollinators and plant reproduction.
49. Test temperature effects on seeds.
50. Study plant adaptations to environments.

Microbiology

51. Test disinfectants on bacteria.
52. Study bacteria in nutrient cycling.
53. Investigate antibiotic resistance.
54. Examine yeast in bread making.
55. Explore microbes and health.
56. Study soil bacteria.
57. Test probiotics.
58. Analyze temperature effects on bacteria.
59. Study microbes in cleaning up oil spills.
60. Research diversity of microorganisms.

Evolution

61. Explore fossil evidence for evolution.
62. Study natural selection in species.
63. Research adaptive traits.
64. Investigate genetic drift in populations.
65. Analyze evolutionary relationships using DNA.
66. Study environmental changes on evolution.
67. Research co-evolution of species.

68. Explore mutations in evolution.
69. Investigate human evolution.
70. Study sexual selection.

Animal Behavior

71. Research environmental enrichment on behavior.
72. Study instinct vs. learning in animals.
73. Test foraging behavior in animals.
74. Explore social structures in animals.
75. Examine stress on animal health.
76. Research pheromones in communication.
77. Study habitat loss on behavior.
78. Investigate bird migration patterns.
79. Analyze play in animal development.
80. Study predator-prey interactions.

Biotechnology

81. Explore genetically modified organisms (GMOs).
82. Research biotechnology in agriculture.
83. Discuss ethics of cloning.
84. Study stem cells in medicine.
85. Analyze biopharmaceuticals.
86. Test bioremediation techniques.
87. Explore CRISPR in genetic engineering.
88. Research biotechnology in food.
89. Analyze gene therapy for diseases.
90. Study synthetic biology.

Animal Physiology

91. Test temperature effects on metabolism.
92. Study hormones in behavior.
93. Examine respiratory adaptations.
94. Research diet effects on physiology.
95. Study altitude's impact on health.
96. Analyze body size and metabolic rate.
97. Explore reflex actions in animals.
98. Research animal adaptations to extreme conditions.
99. Study cardiovascular systems of animals.
100. Analyze environmental toxins on health.

Genetics and Evolution

101. Study genetic variation and evolution.
102. Investigate population bottlenecks.
103. Research a species' evolutionary history.
104. Analyze gene flow between populations.
105. Study adaptive traits' genetic basis.
106. Explore speciation mechanisms.
107. Research hybridization in evolution.
108. Investigate conservation of endangered species.
109. Study artificial selection effects.
110. Analyze genetic recombination.

Plant-Animal Interactions

111. Study pollinators' role in reproduction.
112. Examine herbivory on plant growth.
113. Research plants and mycorrhizal fungi.
114. Test plant defenses against herbivores.
115. Analyze competition among plants.
116. Study seed dispersers and plants.
117. Investigate invasive plant impacts.
118. Explore predator-prey relationships.
119. Study symbiosis in ecosystems.
120. Research climate change effects on interactions.

Bioinformatics

121. Analyze genetic sequences.
122. Study drug discovery using bioinformatics.
123. Research computational models in biology.
124. Identify mutations in genomic data.
125. Predict protein structures.
126. Explore databases in research.
127. Study evolution using bioinformatics.
128. Analyze gene expression data.
129. Explore machine learning in biology.
130. Study personalized medicine impacts.

Human Impact

131. Study urbanization effects on ecosystems.
132. Research agriculture's impact on biodiversity.
133. Examine climate change on coasts.
134. Analyze pollution's effects on wildlife.
135. Study conservation efforts.

136. Research plastic waste impacts on oceans.
137. Investigate deforestation and climate.
138. Explore sustainable agriculture.
139. Study health and environment link.
140. Analyze renewable energy's effects on ecosystems.

Health and Disease

141. Study diet's impact on heart health.
142. Research genetics in cancer.
143. Analyze vaccine effectiveness.
144. Study lifestyle and diabetes.
145. Explore mental and physical health connections.
146. Investigate antibiotic resistance mechanisms.
147. Analyze disease spread (epidemiology).
148. Study stress effects on health.
149. Research public health initiatives.
150. Examine environmental toxins on health.

Marine Biology

151. Study ocean acidification effects.
152. Research overfishing impacts.
153. Analyze coral reef health.
154. Study marine protected areas.
155. Examine plastic pollution in oceans.
156. Research marine organism adaptations.
157. Analyze ocean currents and climate.
158. Study phytoplankton's role in oceans.
159. Investigate sea level rise effects.
160. Research oil spill impacts on marine life.

Neuroscience

161. Study exercise on brain health.
162. Research sleep and memory.
163. Analyze stress effects on the brain.
164. Investigate drugs and neural pathways.
165. Study neurotransmitters and behavior.
166. Explore brain adaptations to environments.
167. Research brain structure and function.
168. Analyze aging and cognitive function.
169. Study reflex actions and the nervous system.
170. Investigate technology's impact on brain development.

Biochemistry

171. Test pH effects on enzyme activity.
172. Study ATP's role in cells.
173. Research protein structure and function.
174. Analyze sugar's effect on yeast fermentation.
175. Study lipids in cell membranes.
176. Investigate metabolic pathways.
177. Test temperature effects on enzymes.
178. Research vitamins in biochemical processes.
179. Analyze heavy metals on enzymes.
180. Study photosynthesis biochemistry.

Plant Physiology

181. Study plant hormones and growth.
182. Research water availability effects.
183. Test light effects on photosynthesis.
184. Analyze root structure and nutrient uptake.
185. Study plant stress responses.
186. Research soil composition on growth.
187. Test stomata in gas exchange.
188. Study herbivory on plant health.
189. Explore secondary metabolites in defense.
190. Analyze fertilizer effects on growth.

Conservation Biology

191. Research habitat loss on biodiversity.
192. Study conservation organizations' roles.
193. Analyze endangered species recovery.
194. Research captive breeding programs.
195. Study climate change and conservation.
196. Explore public awareness in conservation.
197. Analyze sustainable resource management.
198. Study ecological restoration impacts.
199. Research international conservation agreements.
200. Investigate community involvement in conservation.