

ATL Project Ideas For Students

List of top ATL Project Ideas For Students:

Category 1: Fun with Electronics

1. Build a glowing bracelet that lights up in the dark.
2. Make a fan that turns on when it's too hot.
3. Create a musical keyboard using fruits as keys.
4. Design a robot that moves when you clap loudly.
5. Build a tiny car that avoids walls automatically.
6. Make a light-up greeting card for birthdays.
7. Create a flashlight that works without batteries.
8. Build a sensor that tells if plants need water.
9. Design a game controller from old bottle caps.
10. Make a doorbell that plays your favorite song.
11. Build a spinning top that glows while moving.
12. Create a mini traffic light for model cities.
13. Make a nightlight that changes colors slowly.
14. Build a sound meter to check loudness levels.
15. Design a wristband that buzzes during exercise.
16. Make a toy car powered by solar energy.
17. Build a weather station to track rain and sun.
18. Create a talking clock with funny voices.
19. Make a treasure box that opens with a secret knock.
20. Build a flying drone shaped like a butterfly.
21. Design a phone stand with built-in charging lights.
22. Make a motion detector for your bedroom door.
23. Build a vibrating alarm clock under your pillow.
24. Create a pen that lights up while writing.
25. Make a helmet that flashes when biking at night.
26. Build a small projector for movie nights.
27. Design a fridge magnet that shows temperature.
28. Make a wearable heart rate monitor for sports.
29. Build a wireless speaker shaped like an animal.
30. Create a toy train that follows a line.
31. Make a glowing fish bowl for pet goldfish.
32. Build a security camera for your toy room.
33. Design a windmill that powers a tiny bulb.
34. Make a magic wand that controls LED lights.
35. Build a shoe that counts your daily steps.
36. Create a mini piano with colorful buttons.
37. Make a glowing umbrella for rainy days.
38. Build a digital photo frame with animations.
39. Design a lamp that shines like a rainbow.
40. Make a toy rocket that launches safely.

Category 2: Cool Science Experiments

41. Build a volcano that erupts fizzy lava indoors.
42. Make slime that changes color in sunlight.
43. Create a balloon-powered hovercraft on smooth floors.
44. Build a crystal garden that grows overnight.
45. Make invisible ink to write secret messages.
46. Design a tornado inside a clear plastic bottle.
47. Build a homemade compass for treasure hunts.
48. Make a cloud in a jar using warm water.
49. Create a lemon battery to power a small bulb.
50. Build a sundial to tell time outdoors.
51. Make a paper airplane launcher for long flights.
52. Design a parachute for action figures to float down.
53. Build a mini greenhouse for growing herbs.
54. Make a soap-powered boat that moves on water.
55. Create a density tower with colorful liquids.
56. Build a periscope to see around corners.
57. Make a rubber band guitar for fun tunes.
58. Design a water filter to clean muddy water.
59. Build a thermometer using alcohol and food dye.
60. Make a pendulum clock to measure seconds.
61. Create a bubble machine with recycled parts.
62. Build a kaleidoscope with shiny beads inside.
63. Make a simple seismograph to detect shakes.
64. Design a catapult to launch marshmallows far.
65. Build a working lung model with balloons.
66. Make a pinhole camera to take pictures.
67. Create a magnetic levitation train track.
68. Build a constellation projector for starry nights.
69. Make a DNA model using candy pieces.
70. Design a heat-sensitive color-changing mug.
71. Build a spinning zoetrope for animated drawings.
72. Make a homemade barometer for weather forecasts.
73. Create a glowing jellyfish in a glass jar.
74. Build a robotic arm from cardboard tubes.
75. Make a bioplastic bag from potato starch.
76. Design a mirror maze for laser beam games.
77. Build a hydraulic lift for heavy toys.
78. Make a lava lamp with oil and water.
79. Create a working model of the solar system.
80. Build a spinning top with magnetic balance.

Category 3: Creative Art and Crafts

81. Make a painting robot that splashes colors randomly.
82. Build a shadow puppet theater with LED lights.
83. Create a mosaic art piece from broken tiles.

84. Make a spinning pottery wheel for clay models.
85. Design a graffiti wall with glow-in-the-dark paint.
86. Build a kinetic sculpture that moves with wind.
87. Make a DIY kaleidoscope with shiny foil.
88. Create a sand art bottle with layered colors.
89. Build a miniature house from popsicle sticks.
90. Make a dreamcatcher with glowing strings.
91. Design a stained-glass window with tissue paper.
92. Build a marble run with twists and turns.
93. Make a wearable mask with LED decorations.
94. Create a pop-up book about space adventures.
95. Build a custom puzzle from family photos.
96. Make a 3D-printed keychain shaped like a heart.
97. Design a tie-dye shirt with natural dyes.
98. Build a wind chime with recycled cans.
99. Make a piñata filled with candies and surprises.
100. Create a stop-motion animation film with toys.
101. Build a jewelry box with hidden compartments.
102. Make a paper quilling artwork of animals.
103. Design a mural with eco-friendly paints.
104. Build a diorama of a jungle scene.
105. Make a friendship bracelet maker tool.
106. Create a lantern with cut-out patterns.
107. Build a photo frame with pressed flowers.
108. Make a candle holder with melted crayons.
109. Design a tote bag with hand-painted designs.
110. Build a scrapbook with memories and stickers.
111. Make a snow globe with tiny figurines.
112. Create a canvas painting with sponge stamps.
113. Build a terrarium with small plants inside.
114. Make a decorative bowl from old magazines.
115. Design a bookmark with glowing edges.
116. Build a hanging mobile with origami shapes.
117. Make a fairy garden in a shoebox.
118. Create a personalized calendar with drawings.
119. Build a tree sculpture from wire and beads.
120. Make a glitter jar for calming moments.

Category 4: Smart Home Gadgets

121. Build a smart mirror that displays weather updates.
122. Make a voice-controlled table lamp for reading.
123. Create a fridge organizer with LED labels.
124. Build a pet feeder that dispenses food on time.
125. Make a curtain opener that works with sunlight.
126. Design a smart lock for your toy chest.
127. Build a plant pot with automatic watering.
128. Make a noise-canceling headset for studying.

129. Create a bed warmer for cold winter nights.
130. Build a Wi-Fi signal booster for better internet.
131. Make a smart trash bin that opens hands-free.
132. Design a desk fan that adjusts its speed.
133. Build a smoke detector for kitchen safety.
134. Make a laundry folder for quick chores.
135. Create a vacuum cleaner for small spills.
136. Build a digital cookbook with recipes.
137. Make a spice rack with glowing labels.
138. Design a shower timer to save water.
139. Build a closet light that turns on inside.
140. Make a remote control for all your gadgets.

Category 5: Outdoor Adventures

141. Build a birdhouse with a live camera inside.
142. Make a solar oven to cook s'mores outside.
143. Create a bug hotel for friendly insects.
144. Build a kite with LED lights for night flying.
145. Make a fishing rod with a glowing tip.
146. Design a portable hammock for picnics.
147. Build a tree swing with sturdy ropes.
148. Make a camping stove with tin cans.
149. Create a water purifier for hiking trips.
150. Build a treasure map with GPS clues.
151. Make a waterproof backpack for rainy hikes.
152. Design a solar charger for outdoor gadgets.
153. Build a tent with glowing edges at night.
154. Make a portable grill for backyard BBQs.
155. Create a trail marker with blinking lights.
156. Build a floating dock for swimming pools.
157. Make a garden sprinkler with recycled bottles.
158. Design a bike light that flashes signals.
159. Build a sandbox with hidden treasures.
160. Make a frisbee that glows in the dark.

Category 6: Games and Toys

161. Build a board game with electronic dice.
162. Make a spinning top tournament set.
163. Create a foam dart blaster for target practice.
164. Build a memory card game with sounds.
165. Make a mini bowling alley with pins.
166. Design a ring toss game with LED rings.
167. Build a puzzle cube with magnetic pieces.
168. Make a balloon dart game for parties.
169. Create a treasure hunt kit with clues.
170. Build a foosball table from cardboard.

171. Make a mini golf course with obstacles.
172. Design a slingshot game with targets.
173. Build a domino set with glowing tips.
174. Make a tic-tac-toe board with magnets.
175. Create a stacking tower game with blocks.
176. Build a pinball machine with marbles.
177. Make a bean bag toss game for fun.
178. Design a race track for toy cars.
179. Build a spinning wheel for prizes.
180. Make a jigsaw puzzle with custom pictures.

Category 7: Community Helpers

181. Build a braille printer for visually impaired kids.
182. Make a wheelchair ramp for dollhouses.
183. Create a sign language translator app.
184. Build a hearing aid amplifier for elders.
185. Make a guide cane with sensors.
186. Design a talking book for blind readers.
187. Build a recycling sorter for classrooms.
188. Make a water filter for community wells.
189. Create a solar lamp for villages.
190. Build a first aid kit organizer.
191. Make a donation box with counting lights.
192. Design a lost-and-found tracker app.
193. Build a public bench with charging ports.
194. Make a noise monitor for libraries.
195. Create a food sharing fridge for schools.
196. Build a bike repair station for parks.
197. Make a compost bin for school gardens.
198. Design a bus stop with USB chargers.
199. Build a street light with motion sensors.
200. Make a playground swing for wheelchairs.

Category 8: Future Innovations

201. Build a drone delivery system for snacks.
202. Make a virtual reality headset from cardboard.
203. Create a self-driving toy car with sensors.
204. Build a hologram projector for presentations.
205. Make a gesture-controlled TV remote.
206. Design a smartwatch with fitness tracking.
207. Build a facial recognition door lock.
208. Make a voice assistant for homework help.
209. Create a 3D printer for cookie shapes.
210. Build a robot that cleans whiteboards.
211. Make a brainwave-controlled game controller.
212. Design a teleportation simulator game.

213. Build a weather drone for storm tracking.
214. Make a personal assistant robot buddy.
215. Create a time capsule with AR features.
216. Build a space rover for Mars exploration.
217. Make a floating home concept model.
218. Design a vertical farm for urban areas.
219. Build a pollution-absorbing air purifier.
220. Make a flying ambulance drone prototype.

Category 9: Environmental Solutions

221. Build a river-cleaning robot to collect trash.
222. Make a biodegradable phone case from plants.
223. Create a solar-powered water fountain for birds.
224. Build a portable air quality tester for parks.
225. Make a reusable straw with a built-in cleaner.
226. Design a rainwater harvester for school gardens.
227. Build a compost bin that tracks waste levels.
228. Make a wind turbine to charge small devices.
229. Create a plastic bottle shredder for recycling.
230. Build a floating island to clean lake water.
231. Make a tree planter drone for reforestation.
232. Design a beach cleaner with rotating brushes.
233. Build a solar oven to bake cookies outdoors.
234. Make a seed bomb launcher for planting trees.
235. Create a smart bin that sorts recyclables.
236. Build a rooftop garden with automatic watering.
237. Make a noise pollution meter for cities.
238. Design a bicycle-powered phone charger.
239. Build a greenhouse with temperature control.
240. Make a paper-making kit from old newspapers.
241. Build a river-cleaning robot to collect trash.
242. Make a biodegradable phone case from plants.
243. Create a solar-powered water fountain for birds.
244. Build a portable air quality tester for parks.
245. Make a reusable straw with a built-in cleaner.
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252. Design a beach cleaner with rotating brushes.
253. Build a solar oven to bake cookies outdoors.
254. Make a seed bomb launcher for planting trees.
255. Create a smart bin that sorts recyclables.
256. Build a rooftop garden with automatic watering.
257. Make a noise pollution meter for cities.

258. Design a bicycle-powered phone charger.
259. Build a greenhouse with temperature control.
260. Make a paper-making kit from old newspapers.

ATL Project Ideas for Class 9

1. Build a study lamp that runs on sunlight and has different brightness levels.
2. Make a smart watering system for school plants.
3. Create a small air cleaner for classrooms.
4. Build a home system that works with voice commands.
5. Make a tiny water-powered electricity generator.
6. Create a wearable fitness tracker using sensors.
7. Design a device that shows the water level in tanks.
8. Build a small earthquake simulator to check building safety.
9. Create a robotic arm to sort trash for recycling.
10. Make a UV light cleaner for mobile phones.
11. Design a parking system with lights to show empty spots.
12. Build a device to check how fast the wind is blowing.
13. Create a biogas plant model using kitchen scraps.
14. Design a digital stethoscope to check heartbeats.
15. Make a small cooler for drinks powered by the sun.
16. Build a wheelchair that moves with hand gestures.
17. Create a smart helmet that detects accidents.
18. Make an app to check noise levels in different places.
19. Design a vertical farming system with smart sensors.
20. Create a phone charger that works when cycling.
21. Build a projector that creates 3D holograms.
22. Make a braille learning kit with voice instructions.
23. Design a plant pot that waters itself.
24. Create a fingerprint-based attendance system.
25. Build a boat that runs on solar power.
26. Make a smart trash bin that weighs the garbage.
27. Design a band that helps prevent heatstroke.
28. Create a wireless doorbell with different sounds.
29. Build a drone to carry small packages.
30. Make a water filter that is cheap and useful in villages.
31. Design a street light that turns on when someone is near.
32. Create a small fan that charges with USB.
33. Build a device that checks soil moisture for farmers.
34. Make a virtual tour app for historical places.
35. Design a floating solar panel for water bodies.
36. Create a rain alarm to alert during outdoor activities.
37. Build a small robotic vacuum cleaner.
38. Make a DIY earthquake detector.
39. Design a solar-powered egg incubator.
40. Create a portable Wi-Fi device.

ATL Project Ideas for Class 7

41. Build a balloon-powered car using recycled things.
42. Make a fun electric circuit game.
43. Design a periscope to see from hidden spots.
44. Create a windmill that makes electricity.
45. Build a working model of human lungs.
46. Make a kaleidoscope using colorful beads.
47. Design a launcher to throw paper airplanes.
48. Create a floating train using magnets.
49. Build a lift using water pressure.
50. Make a glowing jellyfish inside a jar.
51. Design a solar oven to bake cookies.
52. Create a machine that makes bubbles.
53. Build a marshmallow-launching catapult.
54. Make a lava lamp using oil and water.
55. Design a model of the digestive system.
56. Create a flashlight using simple wires.
57. Build a parachute for small toys.
58. Make a pinhole camera for photos.
59. Design a projector to show stars on walls.
60. Create a small greenhouse for growing herbs.
61. Build a tiny robot that avoids obstacles.
62. Make a musical instrument using rubber bands.
63. Design a water filter using sand.
64. Create a tornado inside a bottle.
65. Build a shoebox guitar with real strings.
66. Make a puppet theater with shadow play.
67. Design a fan that runs on solar power.
68. Create a density tower using liquids.
69. Build a compass using a magnet.
70. Make a cloud in a jar with hot water.
71. Design a model of the water cycle.
72. Create a top that spins with magnets.
73. Build a small earthquake detector.
74. Make a glowing umbrella.
75. Design a battery using a lemon.
76. Create a small volcano that erupts.
77. Build an animation toy called a zoetrope.
78. Make a rainbow using glass prisms.
79. Design a solar-powered toy car.
80. Create a paper globe with continents.

ATL Project Ideas for Class 6

81. Build a bridge using popsicle sticks.
82. Create a pulley to lift books.
83. Design a fan that runs on batteries.
84. Make a balloon rocket that moves on a string.
85. Build a sundial to tell the time.

86. Create a glowing star chart.
87. Design a moving model of the solar system.
88. Make a paper boat that can float.
89. Build a simple stethoscope using a tube.
90. Create a pinwheel that moves in the wind.
91. Design a thermometer using alcohol.
92. Make a kaleidoscope with shiny foil.
93. Build a clock using shadows.
94. Create a water xylophone with glass jars.
95. Design a small greenhouse using plastic bottles.
96. Make a toy parachute.
97. Build a homemade barometer.
98. Create a circuit with a buzzer.
99. Design a model of the human heart.
100. Make a paper plane that flies far.
101. Build a crane using water pressure.
102. Create a drum set with cans.
103. Design a wind chime from recycled things.
104. Make a simple telescope.
105. Build a small catapult.
106. Create a lantern that glows.
107. Design a working lung model.
108. Make a paper helicopter.
109. Build a simple electric motor.
110. Create a rain gauge.
111. Design a floating island with plants.
112. Make a small waterfall.
113. Build a shoebox house with lights.
114. Create a pendulum clock.
115. Design a model of the eye.
116. Make a paper mask of an animal.
117. Build a marble run.
118. Create a shadow puppet show.
119. Design a small water pump.
120. Make a kaleidoscope with mirrors.

ATL Project Ideas for Class 10

121. Build a door lock that works with face recognition.
122. Create a drone to check farms from the air.
123. Design a smart mirror that shows the weather.
124. Make a robotic hand that moves with gestures.
125. Build a small ECG machine to check heartbeats.
126. Create a virtual reality headset using cardboard.
127. Design a toy car that drives itself using sensors.
128. Make a 3D hologram display.
129. Build a smart pillbox that reminds people to take medicine.
130. Create a water filter that runs on solar power.

131. Design a wearable device to help with posture.
132. Make a small air quality monitor.
133. Build a fingerprint-based attendance system.
134. Create a noise-blocking headphone model.
135. Design a smart watering system with IoT.
136. Make a DIY 3D printer for small objects.
137. Build a game controller that works with brain signals.
138. Create a model of a low-cost robotic hand.
139. Design a floating solar panel for rivers.
140. Make a solar-powered cooker for outdoor use.
141. Build a smart dustbin that sorts waste.
142. Create a UV light sanitizer for baby bottles.
143. Design a helmet with GPS tracking.
144. Make a water purifier for hiking trips.
145. Build a small robotic vacuum cleaner.
146. Create a voice-controlled home assistant.
147. Design a bike light that runs on solar power.
148. Make a parking system with smart cameras.
149. Build a Wi-Fi booster for better signals.
150. Create a smart garden with automatic lights.
151. Design a portable phone sanitizer.
152. Make a wind turbine to produce power.
153. Build a smart lock for lockers.
154. Create a heart rate monitor that can be carried.
155. Design a solar-powered cooling box.
156. Make a TV remote that works with hand gestures.
157. Build a drone to carry first-aid kits.
158. Create a smart board eraser robot.
159. Design a small air cooler for cars.
160. Make a solar-powered backpack charger.

ATL Project Ideas for Class 8

161. Build a simple electric car using motors.
162. Create a model of the human breathing system.
163. Design a calculator that runs on solar power.
164. Make a magnetic fishing game for kids.
165. Build a small lift that works with water pressure.
166. Create a glowing fish tank.
167. Design a model of how blood moves in the body.
168. Make a hovercraft using a balloon and a CD.
169. Build a speaker using a paper cup.
170. Create a water clock to tell time.
171. Design a bug zapper that runs on sunlight.
172. Make a top that lights up while spinning.
173. Build a mini fan powered by a battery.
174. Create a model of the human nervous system.
175. Design a wind-powered car.

176. Make a glowing bracelet with tiny lights.
177. Build a scissor lift using water pressure.
178. Create a DIY earthquake detector.
179. Design a nightlight that runs on solar power.
180. Make a paper volcano that erupts safely.
181. Build a model of the human bones.
182. Create an umbrella that glows at night.
183. Design a solar-powered toy boat.
184. Make a train that moves using magnets.
185. Build a claw that picks up objects with water pressure.
186. Create a DIY kaleidoscope using mirrors.
187. Design a model of the human ear.
188. Make a glowing lantern using LED lights.
189. Build a simple electric circuit tester.
190. Create a windmill that lights up a bulb.
191. Design a small fan for desks powered by sunlight.
192. Make a glowing aquarium.
193. Build a small electric bell.
194. Create a model of how kidneys work.
195. Design a solar-powered fountain.
196. Make a star chart that glows in the dark.
197. Build a small bridge that lifts using water pressure.
198. Create a simple electric motor.
199. Design a phone stand that runs on solar power.
200. Make a paper lantern that glows.

ATL Lab Project Ideas

201. Build a smart watering system using IoT.
202. Create a small air quality test kit.
203. Design a water heater powered by the sun.
204. Make a biodegradable phone case from cornstarch.
205. Build a robotic arm for assembly work.
206. Create a 3D hologram display for schools.
207. Design a helmet that sends alerts after accidents.
208. Make a portable water cleaner for emergencies.
209. Build a drone to check the environment.
210. Create a virtual reality learning system.
211. Design a smart lock for school lockers.
212. Make a small solar-powered charger.
213. Build a fingerprint-based attendance system.
214. Create a model of a low-cost artificial limb.
215. Design a whiteboard that follows voice commands.
216. Make a UV sanitizer for school tools.
217. Build a solar-powered cooler for food storage.
218. Create a garden system with automatic watering.
219. Design a tool that moves slides with hand gestures.
220. Make a small air conditioner for rooms.

221. Build a dustbin that checks weight before disposal.
222. Create a noise detector for cities.
223. Design a street light powered by sunlight.
224. Make a heart rate monitor that fits in a pocket.
225. Build a parking system that works with sensors.
226. Create a small phone cleaning box.
227. Design a backpack that charges with solar power.
228. Make a remote-controlled TV using hand gestures.
229. Build a drone for carrying light items.
230. Create a smart watering system with IoT.
231. Design a small oven powered by the sun.
232. Make a set of eco-friendly utensils.
233. Build a helmet with a GPS tracker.
234. Create an air purifier for cars.
235. Design a bug zapper that runs on solar power.
236. Make a Wi-Fi booster that is easy to carry.
237. Build a smart lock for bikes.
238. Create a water filter for village use.
239. Design a fan that works on solar power.
240. Make a small solar-powered lamp for camping.

ATL Project Ideas for Class 11

241. Build a drone to help in disasters.
242. Create a virtual reality training tool.
243. Design a smart irrigation system with AI.
244. Make a small ECG machine for clinics.
245. Build a security system that unlocks with face scans.
246. Create a 3D hologram display for presentations.
247. Design a water purifier that runs on sunlight.
248. Make a robotic hand controlled by gestures.
249. Build an air quality monitor that fits in a pocket.
250. Create a smart pillbox with reminders.
251. Design a posture corrector that can be worn.
252. Make a portable water purifier for camping.
253. Build a dustbin that sorts trash automatically.
254. Create a UV sanitizer for baby bottles.
255. Design a helmet with GPS for tracking.
256. Make a solar cooker for outdoor use.
257. Build a robotic vacuum cleaner for homes.
258. Create a voice-controlled home assistant.
259. Design a solar-powered bike light.
260. Make a parking system that uses cameras.
261. Build a Wi-Fi booster for weak signals.
262. Create a garden with smart lighting.
263. Design a portable phone sanitizer.
264. Make a DIY 3D printer for small objects.
265. Build a game controller that runs on brain waves.

266. Create a floating solar panel for rivers.
267. Design a solar-powered backpack charger.
268. Make a drone to carry first-aid kits.
269. Build a robot that erases whiteboards.
270. Create a small air conditioner for cars.