# **TNSCST Project Ideas For Science**

List of useful TNSCST Project Ideas For Science top score high marks:

# **Environmental Science Projects**

- 1. Make a small rain gauge so you can measure rain each day.
- 2. Start a compost bin and watch how food scraps turn into soil.
- 3. Build a simple water filter from sand and charcoal.
- 4. Make a mini solar oven with a cardboard box and foil.
- 5. Create a wind vane to see which way the wind blows.
- 6. Grow the same plant in different soils to see which one grows best.
- 7. Build a tiny greenhouse using plastic bottles and tubs.
- 8. Make a bird feeder from recycled items and count the birds that visit.
- 9. Test different materials to see which one breaks down fastest in soil.
- 10. Create the water cycle inside a clear plastic bag with a little water.
- 11. Plant seeds under bright light and in shade to watch their growth.
- 12. Build a small terrarium with tiny plants and watch how they change.
- 13. Collect soil from different spots near your house and test each one.
- 14. Build a worm farm and watch worms make rich soil.
- 15. Make a simple barometer using a jar and a balloon to watch air pressure.
- 16. Roll seed bombs to plant flowers in empty lots.
- 17. Use test strips to check water from different taps or puddles.
- 18. Build a rainwater collector to water your plants later.
- 19. Make a bug hotel to attract helpful insects to your garden.
- 20. Create a small solar-powered pump to water plants.

- 21. Test which kitchen scraps make the best plant food.
- 22. Show how erosion works with a tray of soil and flowing water.
- 23. Build a simple anemometer to measure wind speed.
- 24. Test different covers to see which one keeps soil warm.
- 25. Show how water pollution spreads in a clear box.
- 26. Make seed starters from egg cartons and old newspapers.
- 27. Purify water using only natural materials like sand and charcoal.
- 28. Test which plants clean dirty water best.
- 29. Show how landslides happen with a pile of soil on a board.
- 30. Make biodegradable pots from newspaper to start seedlings.
- 31. Build a solar still to turn dirty water into clean water.
- 32. Create a weather station with tools you make at home.
- 33. Test how much water different plants drink as they grow.
- 34. Show how floods change land with sand and water in a tray.
- 35. Create a display that shows what happens during a drought.
- 36. Build a rainwater system for your school garden.
- 37. Test how mulch helps soil keep water for plants.
- 38. Make a display to show how ocean currents move water.
- 39. Build a model to show how tsunamis form and hit coasts.
- 40. Make a small dam to show how rivers can be controlled.
- 41. Test which plants grow best in each season in Tamil Nadu.
- 42. Show how mangroves protect the coast with a simple model.
- 43. Make leaf rubbings to learn about different leaf shapes.
- 44. Build a solar dehydrator to dry and save fruits.

- 45. Test what happens when river water meets ocean water.
- 46. Create a model to show how groundwater moves underground.
- 47. Make a display of the water cycle as it happens in Tamil Nadu.
- 48. Build a simple hygrometer to measure how much moisture is in the air.
- 49. Test how acid rain affects different kinds of plants.
- 50. Create a mini wetland in a tray to see how it cleans water.

## **Simple Physics and Engineering Projects**

- 51. Build a rubber-band car that zooms forward.
- 52. Make a balloon rocket that flies along a string.
- 53. Create a pulley system to lift heavy things.
- 54. Build a strong bridge using only popsicle sticks.
- 55. Make a marble run to show gravity and stored energy.
- 56. Test different fabrics for a parachute that lands safely.
- 57. Build a catapult to launch small objects straight.
- 58. Make an electric circuit with a battery and a bulb.
- 59. Create a maze game with paperclips and magnets.
- 60. Build a toy boat and see how much weight it can hold.
- 61. Make a simple kaleidoscope with mirrors and beads.
- 62. Create a pinhole camera to project an image on paper.
- 63. Build a lever to move heavy objects with less effort.
- 64. Make a windmill that spins when you blow on it.
- 65. Build a water wheel that turns with flowing water.
- 66. Create a thermometer from colored water in a straw.

- 67. Make a compass using a needle and a magnet.
- 68. Build a periscope with mirrors to see around corners.
- 69. Create a balance scale to weigh small items.
- 70. Make a turbine from plastic spoons and water.
- 71. Build a pendulum and track its swings.
- 72. Make a stethoscope to hear heartbeats clearly.
- 73. Create a sound amplifier with cups and string.
- 74. Build a model to show how gears fit and turn.
- 75. Test paper airplane designs to see which one flies farthest.
- 76. Make a camera obscura to project outdoor scenes inside.
- 77. Create a balloon hovercraft with an old CD and a balloon.
- 78. Build a solar spinner that turns in sunlight.
- 79. Make a Newton's cradle with balls and string.
- 80. Show how pulleys make lifting easier with a simple model.
- 81. Build a microscope using a drop of water and a phone.
- 82. Create a hydraulic arm with syringes and tubes.
- 83. Make a flashlight from a battery, wire, and a small bulb.
- 84. Build a model to show how inclined planes help move things.
- 85. Make a spring scale to measure push or pull force.
- 86. Create a device to show centripetal force with a small ball.
- 87. Build a simple telegraph with wire and a battery.
- 88. Display how sound waves travel through air.
- 89. Show Bernoulli's principle with paper and blowing air.
- 90. Build a seismograph to record small vibrations.

- 91. Show how levers change the direction of force.
- 92. Make a balloon-powered boat to glide on water.
- 93. Build a model to show how friction slows things down.
- 94. Create a gyroscope from a CD and a string.
- 95. Make a slingshot to see stored and moving energy.
- 96. Build a simple electric motor with wire and a battery.
- 97. Show how light bends when it moves through water.
- 98. Make a homemade telephone with cups and string.
- 99. Show how sound travels through solids with a model.
- 100. Create a water rocket from a plastic bottle.

#### **Chemistry and Materials Science Projects**

- 101. Make slime and test what changes how stretchy it gets.
- 102. Grow crystals from sugar or salt and watch them form.
- 103. Test different fruits like grapes or red cabbage to see color change.
- 104. Build a small volcano that oozes foam with baking soda and vinegar.
- 105. Write secret messages with lemon juice and heat to reveal them.
- 106. Drop different items in water to see which one dissolves fastest.
- 107. Mix soap and water to blow bubbles and test wand shapes.
- 108. Show how plants drink colored water in a clear stem.
- 109. Freeze juice, oil, and water to see which one hardens first.
- 110. Make fizzy bath bombs with baking soda and citric acid and watch them fizz.
- 111. Show how soap breaks apart oil on a dish.
- 112. Test materials like cloth or plastic to see which one repels water best.
- 113. Mix milk and vinegar to make sticky glue and test it.

- 114. Freeze plain and salty water to see how salt changes freezing.
- 115. Use cabbage juice to test if liquids are acids or bases.
- 116. Heat metal rods in warm water to see which one gets hot fastest.
- 117. Shake cream until it turns into butter and watch the change.
- 118. Leave nails and bolts in water to see which one rusts first.
- 119. Mix red, yellow, and blue paints to see what new colors appear.
- 120. Layer oil, syrup, and water in a jar to see a density column.
- 121. Wrap items in cloth or foil to test which keeps heat best.
- 122. Drop soap in milk with food coloring to see swirling patterns.
- 123. Put limestone in vinegar to watch bubbles form.
- 124. Test bread or cereal with iodine to see which has more starch.
- 125. Soak fabric pieces in dye to see which holds color best.
- 126. Mix cornstarch and water to make oobleck and press it to feel hard or soft.
- 127. Try cleaning stains with soap, baking soda, or vinegar to see which works best.
- 128. Boil salted and plain water to see how salt changes boiling time.
- 129. Stir sugar in cold and hot water to see which one dissolves faster.
- 130. Mix milk and vinegar to make a small piece of plastic.
- 131. Blow bubbles to see how soap films form shapes.
- 132. Cover boxes with foam, cloth, or cardboard to test sound blocking.
- 133. Make a poster that shows how yeast puffs up bread dough.
- 134. Create plastic from milk and vinegar and test its strength.
- 135. Soak cloth in water and test which breaks more easily when wet.
- 136. Heat, cool, and evaporate water in a cup to show liquid, ice, and steam.
- 137. Sprinkle salt on ice to see how it melts faster.

- 138. Drop tablets in warm and cold water to see which fizzes more.
- 139. Grow sugar crystals on a string over days to make rock candy.
- 140. Place papers in water to see which one absorbs water fastest.
- 141. Bury paper, leaves, and plastic in soil to see which one disappears first.
- 142. Spray perfume in the air and smell how far it travels.
- 143. Test wires of copper and aluminum to see which one lights a bulb best.
- 144. Measure how fast gases disappear in cold and warm water.
- 145. Use plants like turmeric or beetroot to make homemade dyes and test them.
- 146. Pour colored water through a coffee filter to see color layers.
- 147. Wrap cups in wool, tin foil, or cloth to see which one keeps drink warm.
- 148. Drop candy shells in water to see which shell dissolves fastest.
- 149. Put a card on top of a full glass and turn it upside down to show how water stays inside.
- 150. Show how water climbs up a thin straw against gravity by capillary action.

## **Biology and Life Science Projects**

- 151. Grow bean seeds in cups with light and in the dark and measure their height.
- 152. Build a simple heart model with tubes to show how blood moves.
- 153. Leave slices of bread out and see which one grows mold first.
- 154. Make a flower model showing petals, stem, and roots.
- 155. Wash your hands with soap and water and use glitter to show germs removed.
- 156. Grow plants under a lamp or in shade to see which way they bend toward light.
- 157. Build a model of the digestive system using tubes and bags.
- 158. Sort foods into groups like grains, fruits, and proteins on a chart.
- 159. Soak eggshells in soda, vinegar, and water to see which one stains teeth.

- 160. Make a lung model using balloons and bottles to show breathing.
- 161. Press your fingers for prints and show how each is different.
- 162. Water plants with juice, soda, or water to see which one grows best.
- 163. Build a cell model with clay for nucleus, membrane, and parts.
- 164. Tie strings to sticks to show how muscles pull bones in pairs.
- 165. Play loud and soft sounds and use a heart monitor app to see heartbeat change.
- 166. Make an eye model with lenses to show how we focus.
- 167. Build a simple blood-flow chart with arrows showing one-way valves.
- 168. Use iodine on orange slices to test vitamin C presence.
- 169. Make an ear model with tubes and a balloon to show sound waves.
- 170. Show how skin acts as a barrier by testing water on bare and covered skin.
- 171. Weigh plants before and after a day to see how much water they lose.
- 172. Use straws and tape to model how joints bend bones.
- 173. Taste salty, sweet, sour, and bitter on tongue maps to show taste buds.
- 174. Plant seeds in salty and plain soil to see which sprouts better.
- 175. Build a brain model with clay showing parts for thinking and moving.
- 176. Measure breathing rate before and after jumping jacks to show exercise effects.
- 177. Grow yeast in sugar water and in plain water to see which bubbles most.
- 178. Carve tooth shapes from clay to show biting, tearing, and grinding teeth.
- 179. Feed worms different foods and count how much soil they make.
- 180. Test crackers, bread, and rice with iodine to see which has starch.
- 181. Tap a finger on your knee and watch the leg kick to show reflexes.
- 182. Compare different bird beaks by using tweezers to pick up items.
- 183. Shine red, blue, and green lights on plants to see which helps them grow best.

- 184. Watch caterpillars turn into butterflies in a jar.
- 185. Cut open fruit to show seeds inside and label them.
- 186. Plant beans at room and cold temperatures to see which sprout faster.
- 187. Use a jar with air hole to show how fish breathe in water.
- 188. Watch ants work together to carry food on a board.
- 189. Test bread, cheese, and fruit for bacterial growth over days.
- 190. Build a blood vessel model with straws to show veins carry blood back.
- 191. Show how leaves use light to make food by mixing baking soda and water under a lamp.
- 192. Play music near plants and measure their height compared to quiet ones.
- 193. Stack sticks to build a little skeleton frame and show support.
- 194. Press different animal paws into clay to show foot shapes.
- 195. Shine white and black paper in sunlight to see which one heats up more.
- 196. Drop seeds in wind or water to see how they travel in different ways.
- 197. Lay out pictures of reptiles and mammals to list their differences.
- 198. Fill containers with sand or clay and watch how worms move through.
- 199. Paint a model animal green or brown to show how camouflage hides it.
- 200. Draw local animals and note special features they use to live here.

#### Astronomy and Earth Science Projects

- 201. Build a model of the solar system with balls for each planet.
- 202. Make a sundial and use its shadow to tell the time each hour.
- 203. Show day and night by spinning a painted ball in sunlight.
- 204. Draw moon phases on paper each night and label them.
- 205. Build a clay volcano and pour baking soda mix to show an eruption.

- 206. Layer playdough to show Earth's crust, mantle, and core inside a ball.
- 207. Connect star stickers to draw constellations on dark paper.
- 208. Keep a moon journal and sketch its shape every evening.
- 209. Stack clay to show how mountains rise over long time.
- 210. Draw puffy, wispy, and blanket clouds on a poster and label them.
- 211. Shake a tower of blocks to show how earthquakes make buildings wobble.
- 212. Make a simple weather station with rain gauge and wind vane.
- 213. Use a tug-of-war rope to show how tides pull water with moon's gravity.
- 214. Tilt a globe to show how seasons change as Earth moves around sun.
- 215. Glue rocks onto a board to show igneous, sedimentary, and metamorphic types.
- 216. Use a ball and paper to cast shadows and show solar and lunar eclipses.
- 217. Layer sand and soil in a jar and pour water to show how fossil fuels form.
- 218. Drop small stones through a funnel of air to show meteors burning up.
- 219. Place Earth in a chart to show its spot in the solar system.
- 220. Layer colored sand to show soil forming in layers over time.
- 221. Build a small waterfall in a tray to show how rivers carve land.
- 222. Carve a cave in clay to show how water erodes rock underground.
- 223. Build a sandy beach in a box and add waves with water to show erosion.
- 224. Stack layers of clay to show how sedimentary rock builds up in layers.
- 225. Carve ice blocks to show how glaciers slide and shape valleys.
- 226. Use gravel and sand to show how water moves underground in aquifers.
- 227. Rub two clouds made of cotton and see how lightning might form with static.
- 228. Stir water in a bowl to show how hurricanes spin and pull air in.
- 229. Draw the rock cycle arrows and glue small rock samples under each.

- 230. Press leaves and shells into clay to show how fossils form over time.
- 231. Paint stars in red, white, and blue to show how star colors relate to temperature.
- 232. Use a funnel of warm and cool air to show how tornadoes start spinning.
- 233. Wrap a magnet around a ball to show Earth's magnetic field protects us.
- 234. Shine a flashlight on dark paper to show how city lights hide stars.
- 235. Roll a ball around a ring to show how planets orbit the sun.
- 236. Drop different objects to show how gravity pulls them at the same speed.
- 237. Hunt for shiny pebbles to show how gemstones form deep under Earth.
- 238. Glue cotton balls on dark paper to show puffy, wispy, and layered cloud types.
- 239. Use water and sand in a box to show how waves shape coastlines.
- 240. Run water over a pile of sand to show how rivers carve canyons.
- 241. Paint tan and red areas on clay to show how deserts form from low rain.
- 242. Press thin layers of dough to show how ocean floors have trenches.
- 243. Shine light through a prism to show how rainbows appear in sky.
- 244. Fill a glass with water and shine light to show why sky looks blue.
- 245. Stack colored paper layers labeled with Tamil Nadu soil types.
- 246. Attach a string to a ball to show how comets orbit the sun in long tails.
- 247. Draw twinkling stars by turning lights on and off behind cotton clouds.
- 248. Spin a globe under a lamp to show how Earth's spin makes day and night.
- 249. Layer plastic wrap and balloons to show how ozone layer blocks UV.
- 250. Use arrows on a map to show how wind patterns move weather across Earth.

#### **Technology and Innovation Projects**

251. Build a simple robot that moves with small motors and batteries.

- 252. Create a board game that teaches how computers use 0s and 1s.
- 253. Make a small panel of foil and wires to show how solar panels make power.
- 254. Build a phone projector with a box and a magnifying glass lens.
- 255. Draw an app screen on paper that helps people solve a daily problem.
- 256. Show radio waves by tuning a small speaker and antenna from a tin can.
- 257. Build a toy car that runs on a small solar cell when the sun shines.
- 258. Take apart a battery and draw how its parts make electricity.
- 259. Make a box that shows how computers store data on disks or chips.
- 260. Build a straw and cloth filter to clean muddy water.
- 261. Show touchscreen layers by stacking clear plastic sheets and foil.
- 262. Send messages between two cans and a string to show Wi-Fi basics.
- 263. Build a small windmill with paper blades and a toothpick axle.
- 264. Show speaker parts and test how they make sound from wires.
- 265. Take apart an old camera and draw how it captures light as pixels.
- 266. Use syringes and tubes to make a small hydraulic arm that lifts items.
- 267. Show how a fridge uses coils and a pump to keep things cold.
- 268. Cut up an old TV screen to show how pixels make pictures.
- 269. Build an alarm using a battery, wire, and a buzzer.
- 270. Print a QR code and show how scanning it gives information.
- 271. Glue toothpicks to make a model of a 3D printer's moving part.
- 272. Build a cardboard hand that moves with strings to show a robotic hand.
- 273. Show microphone parts and test speaking into wires and magnets.
- 274. Build a paper helicopter to show how drones stay balanced in air.
- 275. Draw block-code steps on cards to show how simple programs run.

- 276. Show LED parts and test lighting them with a small battery.
- 277. Wrap wire around a nail and connect to a battery to spin a motor.
- 278. Pump water with a bottle, tube, and rubber band to show a water pump.
- 279. Show how a toy satellite uses batteries and antennas to orbit a model Earth.
- 280. Build a pulley and rope elevator in a box to show how lifts work.
- 281. Draw a school water filter design that cleans rainwater for drinking.
- 282. Show how an air conditioner uses coils and fans to cool air.
- 283. Build a small tank model that floats and sinks with a balloon ballast.
- 284. Draw a simple model of an electric car motor and battery pack.
- 285. Show how fingerprint scanners use light or touch to read prints.
- 286. Make a small rocket from a straw and film canister to show launch.
- 287. Build a paper wind turbine that spins in a breeze to show green power.
- 288. Show how a dam model uses water flow to turn a small wheel.
- 289. Build a doorway that opens when a string sensor is pulled.
- 290. Draw a room with sensors that turn lights on when someone moves.
- 291. Show parts of a prosthetic arm with cardboard and strings to lift small things.
- 292. Use cups and strings to build a simple video-call toy phone.
- 293. Make a tester with wires and a light to check water quality.
- 294. Show how wing shape makes planes lift by blowing under a paper wing.
- 295. Build a clear box with mirrors to show a 3D hologram effect.
- 296. Stack blocks on a shaking board to test earthquake-safe building shapes.
- 297. Show how a photo's pixels turn on and off by drawing a grid of dots.
- 298. Build a small bridge of popsicle sticks and test weight it holds.
- 299. Make a model of waves in pipes to show how wave energy can power turbines.

300. Show how electric cars cut pollution by comparing exhaust and battery power.