



# School Projects– Science Project Ideas

## Project 1: How Much Water Does a Tree Save?

**o Objective:** Compare the water needs of indigenous vs exotic tree species.

**o Steps:**

i. Choose two potted seedlings, one indigenous (e.g., Moringa), one exotic (e.g., eucalyptus).

ii. Water each with the same amount daily.

iii. Measure how much water drains out and how long the soil stays moist.

**o Learning:** Indigenous trees retain more moisture and use less water which is great for drought-prone areas.

## Project 2. Decomposition Race: Tree Leaf Breakdown

**o Objective:** Test how fast different tree leaves decompose in soil.

**o Steps:**

i. Collect dry leaves from 3 different indigenous trees.

ii. Bury equal amounts in labelled containers with moist soil.

iii. Check weekly for breakdown over 4–6 weeks.

**o Learning:** Some leaves break down faster and enrich soil more quickly.

## Project 3. Can Trees Lower Temperatures?

**o Objective:** Test whether areas with trees are cooler than bare areas.

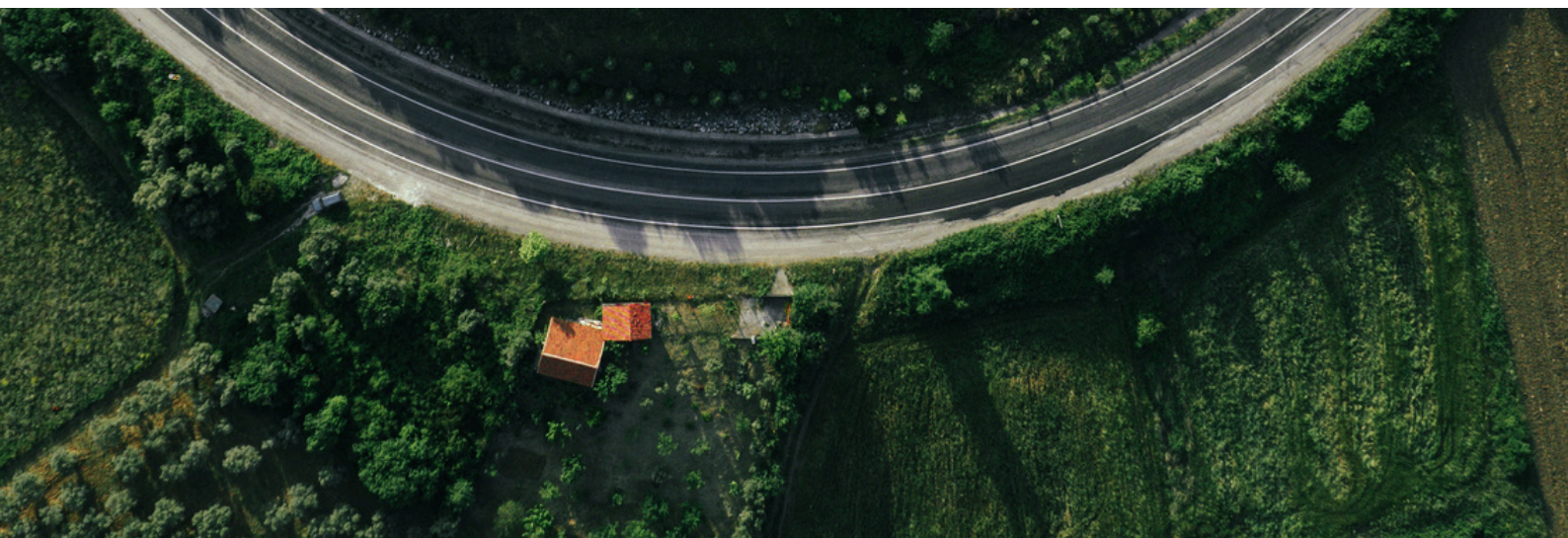
**o Steps:**

i. Measure surface temperatures under a tree, beside it, and in open sun at the same time each day.

ii. Use a thermometer or infrared temperature gun (if available).

iii. Record for 1–2 weeks.

**o Learning:** Tree cover reduces local temperature which is important for urban climate resilience.







## School Projects– Science Project Ideas

### Project 4. CO<sub>2</sub> Absorption Demonstration

o **Objective:** Show how trees absorb carbon dioxide.

o **Steps:**

- i. Use a sealed plant chamber (plastic bottle or container).
- ii. Place a seedling inside and expose to light.
- iii. Use CO<sub>2</sub> indicator (like limewater) to show reduction over time.

o **Learning:** Trees are natural carbon filters. Indigenous trees store carbon long-term.

### Project 5. Do Tree Roots Help Soil Hold Water?

o **Objective:** Demonstrate how roots reduce erosion and help water absorption.

o **Steps:**

- i. Use two clear containers: one with bare soil, one with a rooted seedling.
- ii. Pour equal amounts of water over both.
- iii. Observe drainage and erosion patterns.

o **Learning:** Roots from trees prevent runoff and help refill underground water.

