Anna's Extraordinary Experiments with Weather

A Guide for Teachers and Parents

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THEMES

STEAM

Biography

SUB-THEMES

Women in Science

Weather and Climate

Story Discussion Guide

Children will:

- Learn about the life and contributions of Indian scientist Anna Mani.
- Understand how weather instruments work and why they matter.
- Be inspired by a real woman scientist's journey from childhood passion to professional impact.
- See science as a space for exploration and creativity
- Develop appreciation for accurate weather and climate observation

Lesson plan

This lesson uses Anna's biography to spark curiosity about science, especially weather and instruments. It connects classroom knowledge with real-world science careers.

Learning Outcome

Before Reading:

- What kind of questions do you like asking about the world?
- Have you ever watched a weather report?
- What do you know about how it works? Can you name a woman scientist?

During Reading :

- Pause when Anna receives books for her birthday—ask: What would you ask for?
- Ask: What weather tools do you think Anna invented or used

After Reading:

- What made Anna curious as a child?
- How did her curiosity help her become a scientist?
- Why is studying weather important?
- What would you like to invent to help people?

Activities:

- DIY Weather Station: Create a simple weather tool (rain gauge, wind sock) using craft materials.
- Scientist Timeline: Map Anna's life milestones and link them to what she learned or contributed.
- Weather Journal: Students track daily weather and make simple observations.

Expected Outcomes

Children will recognize how observation and curiosity lead to discovery, feel inspired by a role model in science, and develop interest in weather, tools, and climate issues.

Applicable SDGs

SDG 4: Quality Education

SDG 5: Gender Equality

SDG 9: Industry, Innovation and Infrastructure SDG 13: Climate Action

SDG Explanation

SDG 4: Encourages education and learning through biographies of real scientists.

SDG 5: Celebrates a woman's achievements in a STEAM field, breaking gender barriers.

SDG 9: Highlights scientific advancement and innovation in meteorology.

SDG 13: Introduces climate and weather as critical themes in scientific research.

Curriculum Alignment

The Plant Whisperer – a young girl follows her love of plants into science Sailing Ships and Sinking Spoons – fun weather-related experiments

The Big Dreamer – environment and science through youth action

The River Warrior – using science to clean and protect nature

The Scoop on Inventors – African American inventors of practical items of daily use

ABOUT ZAMASAMA

Zamasama is a nonprofit initiative that curates children's stories from diverse cultures and lived experiences around the world. It gives children a window into other communities—and a mirror that affirms their own, helping children recognize the shared humanity that connects us across differences.

Through narratives that gently challenge biases and broaden worldviews, Zamasama helps children see difference not as a barrier but as a bridge. Through the power of stories, we sow the seeds of pluralism that can grow into a more harmonious world for all.