

GIRLS WHO CHANGE THE WORLD

SEASON 1 · GIRLS WHO CHANGE SCIENCE

Meeting 1

Marie Curie: Invisible Energy

*A complete session preview
for prospective partners.*

WHAT YOU'RE ABOUT TO READ

One meeting, in full detail.

This document shows one meeting from Girls Who Change the World — in full detail. The structure, the story, the experiments, the rituals, the kit.

There are 20 meetings like this across 4 seasons. Each one is designed with this level of care.

By the end, you'll understand not just what we teach — but how it feels to be in the room.

4

SEASONS

20

MEETINGS

12

GIRLS PER COHORT

∞

MEMBERSHIP

THE INITIATION

Before the science, the ritual.

The room is dark. Twelve chairs. Twelve sealed envelopes.

The facilitator speaks: "You're here because you're curious."

THE SCIENTIST'S OATH

I promise to **look carefully**.

I promise to **ask questions**, even when others are silent.

I promise to be **precise**.

I promise not to be afraid of **mistakes**.

I promise to remember: **science belongs to everyone**.

"Now open your envelopes."

Inside: a Scientist's Notebook, an enamel pin badge, and a member card.

GWCTW-2026-S1-0001

THE STORY · ACT 1

The girl who was forbidden to learn.

Poland, 1880s. Women are banned from universities. Maria Sklodowska makes a pact with her sister: one works to pay for the other's education, then they switch.

Maria works as a governess for years, studying by candlelight at night.

Finally — a train to Paris. Fourth-class ticket. One pillow and dry bread.

DISCUSSION PROMPT · 30 SECONDS

Imagine being told you can't study what you love — simply because of who you are. What would you do?

Each girl writes for 30 seconds in her Scientist's Notebook before sharing.

THE STORY · ACT 2

The shed that changed the world.

In Paris, Marie and Pierre Curie work in a converted shed — no proper floor, leaking roof.

They process tons of uraninite ore by hand. Four years of grinding, dissolving, filtering, evaporating.

8 tons of ore



1 gram of radium

8 tons = the weight of two adult elephants.

1 gram = less than a sugar cube.

THE STORY · ACT 3

The glow.

Marie describes the beautiful blue glow of radium in the dark.

She keeps test tubes by her bed. Carries them in her pockets. Their fingers are cracked and burned.

They don't understand: the glow is killing them.

**Beautiful, mysterious,
and deadly.**

FACILITATOR · DESIGNED MOMENT

The facilitator dims the lights. Shows glow-in-the-dark material. Quietly says: "This is what Marie saw every night." Three seconds of silence. Then lights.

THE STORY · ACT 4

Two Nobels and no Academy.

-
- 1903** First woman to win a Nobel Prize (Physics).
-
- 1911** Second Nobel Prize (Chemistry) — to this day, the only person to have won Nobel Prizes in two different natural sciences.
-
- 1911** The French Academy of Sciences rejected her. Vote: 90 against, 52 for. Because she was a woman.
-
- 1914** Built mobile X-ray units ("petites Curies") and drove them to the front lines in WWI. Her teenage daughter Irène came with her.
-
- Always** She refused to patent her method: "Radium is an element. It belongs to everyone."
-
- Today** Her notebooks are stored in lead boxes. To read them, you sign a liability waiver. They will be radioactive for 1,500 more years.
-

THE LABORATORY

45 minutes of hands-on science.

EXPERIMENT 01 · 20 MIN

Invisible Energy

Electrostatics + magnetism

MATERIALS

Balloons, wool fabric, paper pieces, compass, magnet.

WHAT THEY DO

Charge a balloon with wool, attract paper. Move a compass needle through the table with a magnet. Measure deflection at different charges.

You can't see the charge, but you can measure its effect. Marie couldn't see radiation, but she proved: if you can measure it — it's real.

EXPERIMENT 02 · 25 MIN

Separating a Mixture

Mechanical + chemical separation

MATERIALS

Salt, sand, iron filings, magnet, cups, water, filter paper, heat source.

WHAT THEY DO

Receive a pre-mixed sample. Separate into three components: magnetic separation, dissolving + filtering, evaporation.

You separated a spoonful in 20 minutes. Marie separated 8 tons over 4 years. That's patience in science.

THE MEMBER KIT

What every girl receives.

Not a swag bag. A statement of belonging — designed with the same care as the program itself.

01

Scientist's Notebook

A branded Scientist's Notebook for the full season — from initiation to THE UNSEEN final. Hers to keep.

02

Open Orbit Pin Badge

Enamel pin in the season's color — Aurora purple for Science. Founding Members receive gold trim.

03

Member Card

Personalized, numbered. Every member's connection to the global GWCTW network.

04

Certificate of Membership

Awarded at season completion. Signed by the facilitator. A document she'll keep her whole life.

EXAMPLE MEMBER ID

GWCTW-2026-S1-0001

THE SEASON ARC

Five meetings. One arc.

Each season is a 5-meeting journey: four learning meetings with women scientists, followed by THE UNSEEN — a final project presentation and closing ceremony.

MEETING 1

Marie Curie

Invisible Energy

MEETING 2

Rosalind Franklin

Invisible Structures

MEETING 3

Lise Meitner

Invisible Power

MEETING 4

Chien-Shiung Wu

Invisible Symmetry

MEETING 5

THE UNSEEN

Final project · Ceremony · Certificates

THE FOUR SEASONS

Four worlds. Twenty women.

SEASON 01

SCIENCE

- Marie Curie
- Lise Meitner
- Rosalind Franklin
- Chien-Shiung Wu

SEASON 02

TECHNOLOGY

- Ada Lovelace
- Grace Hopper
- Hedy Lamarr
- Katherine Johnson

SEASON 03

MEDICINE

- Elizabeth Blackwell
- Virginia Apgar
- Florence Nightingale
- Tu Youyou

SEASON 04

PLANET

- Eunice Newton Foote
- Sylvia Earle
- Rachel Carson
- Wangari Maathai

4 seasons. 20 meetings. 20 scientists.

A progression system that keeps girls engaged for years.

FOR PARTNERS

This was one meeting. One of twenty.

Girls Who Change the World is designed to scale through licensed partners: science museums, schools, cultural centres, and education organisations.

Pilot partners — the first 10 organisations — receive their first year free, cohort fee only.

LIMITED PILOT PARTNER PLACES

GET IN TOUCH

hello@girlswhochangetheworld.org

girlswhochangetheworld.org



**GIRLS WHO
CHANGE THE WORLD**

See what others can't.

DESIGNED BY

Sofiko Bigvava

Founder, GWCTW · CEO, Experimentorium Science Museum

[linkedin.com/in/sofiko-bigvava](https://www.linkedin.com/in/sofiko-bigvava)