

# TEACHING CHARACTER

THROUGH THE PRIMARY CURRICULUM

A CROSS-CURRICULA APPROACH  
TO TEACHING CHARACTER

## AN AMBITION TO CURE

MAIN NARRATIVE

VIRTUE: CURIOSITY - SUBJECT: SCIENCE

CURIOSITY

RESILIENCE

AMBITION

FOCUS

CONFIDENCE



THE  
JUBILEE CENTRE  
FOR CHARACTER & VIRTUES

CURIOSITY

FOCUS



## GERTRUDE ELION

American **pharmacologist** and **biochemist** Gertrude Elion is famous for her scientific discovery of drugs that treat many diseases and infections. She was born in New York in 1918 and developed an ambitious thirst for knowledge from an early age.

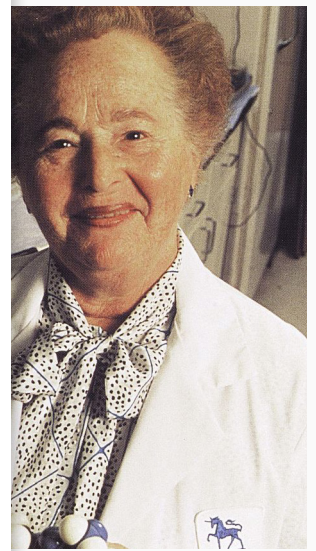
Growing up, Elion loved school, and **excelled** in many subjects. When she attended college, she found it difficult to choose a subject to **specialise** in, as there was so much she wanted to learn and so much she wanted to explore. Her mind was filled with all the ideas and new things she could learn. Her grandfather had died of cancer when she was only 15, and Gertrude was driven to find a cure for this terrible disease. This was where her 'ambition to cure' began and she chose to study science at college.

Elion was eager to continue her education further. Even though she was very well **qualified**, she could not find a job in a **research laboratory**. At that time, it was unusual to employ women in such roles. Elion did not let this stop her from continuing to learn, and she worked part time as a teacher whilst studying for her master's degree. She eventually found a job as a laboratory assistant. To begin with, she worked for free, and by the end she was only getting paid \$20 a week (about £14). Money was not important to Elion, she just wanted to learn. Elion continued to work in the day and do work on her degree in the evening. In 1941, she was the only female in her class to graduate with a master's degree in **chemistry**.

The beginning of World War II created a shortage of **chemists** in laboratories. Job opportunities arose and Elion took a job with George Hitchings. Hitchings encouraged Elion to continue to build her knowledge in the area, and challenged her by giving her new tasks and responsibilities. This didn't faze Elion and she was given freedom to investigate and research other areas of science. She began studying **microbiology, biochemistry** and **pharmacology**.

The work fascinated Elion. She was exploring new concepts where little was known. She was at the cutting edge of modern science. She needed to know more. She could sense they were close to producing a way to make new drugs. New drugs which could possibly cure old diseases. Over their careers, Elion and Hitchings developed a collection of new drugs that were effective against leukaemia, gout, malaria and other infections. Their success was aided by their innovative research methods, which marked a huge change from other scientific techniques of the time.

Elion did not stop there; she continued her research into other drugs. She enjoyed her work so much she didn't feel the need for much else. She never married, but her curiosity did spread to include a love of travel. Elion gained many **promotions** and many awards throughout her career, including the 1988 Nobel Prize in Medicine. Even after her retirement, she refused to stop studying. She worked as a consultant and gave advice to several different organisations who were trying to produce new drugs. She also worked as a Research Professor at Duke University trying to spread her knowledge and love of science to students. Gertrude Elion had spent her life in the pursuit of knowledge so she could help cure some of the worst diseases and infections known to man.



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### GLOSSARY

#### BIOCHEMIST

someone who studies biochemistry

#### BIOCHEMISTRY

the chemistry of living things

#### CHEMIST

someone who studies chemistry

#### CHEMISTRY

is the study of matter and the chemical changes that matter undergoes

#### EXCELLED

to be extremely good at something

#### INNOVATIVE

introducing new ideas and creative thinking

#### LABORATORY

a room or building equipped for scientific experiments, research or teaching

#### MICROBIOLOGY

science that deals with microorganisms

#### PHARMACOLOGIST

someone who studies pharmacology

#### PHARMACOLOGY

medicine concerned with the uses and effects of drugs

#### PROMOTION

somebody going to higher rank or position

#### QUALIFIED

being trained to perform a job

#### RESEARCH

to investigate something

#### SPECIALISE

concentrate on and become expert in a particular subject