

SECONDARY LESSON PLAN

Soldier to Healer: Sir Walter Raleigh's Medicinal Garden at the Tower (History/PSHE)

LEARNING OBJECTIVES

For students to:

- Learn about Sir Walter Raleigh through the story of his imprisonment in the Tower of London and his medicinal garden;
- Understand that Raleigh's physical and mental health suffered during his imprisonment and identify some of the causes of this;
- Learn about some of the plants Raleigh used in his remedies and contemporary beliefs concerning their healing properties;
- Use primary sources in an historical enquiry;
- Understand continuity and change in the history of medicine by recognising that plants are still used today in pharmaceutical drugs and herbal remedies.

CURRICULUM LINKS

KS3: History

Pupils should:

- Extend and deepen their chronologically secure knowledge and understanding of British, local and world history;
- Identify significant events, make connections; draw contrasts;
- Pursue historically valid enquiries ... and create relevant, structured and evidentially supported accounts in response.

KS4: GCSE History

AQA

Paper 2: Shaping the nation

Section A, Option AA: Health and the people, c1000 to the present day

Section B, Option BC: Elizabethan England, c1568-1603

Edexcel

Paper 1: Thematic study

Option 11: Medicine in Britain, c1250–present

Paper 2: British depth study

Option B4: Early Elizabethan England, 1558-88

OCR, History B

Depth study: The Elizabethans, 1580-1603

KS3 and KS4: PSHE

Compulsory subject:

- Health education

BEFORE THE LESSON

Prepare a PowerPoint presentation to include discussion questions and activity instructions (*optional*).

Photocopy or print:

- Sufficient copies of Activity Resources for students to share in pairs or small groups
- Sufficient copies of Supporting Materials for students to share in pairs.

Room set-up

It is envisaged that students will work in small groups (3-4) for some activities and in pairs for others.

INTRODUCTION

Explain that in this lesson students will be investigating one of the most famous prisoners in the Tower of London. The lesson will focus on the ways in which he tried to keep himself and his family well during his imprisonment. They will be using evidence, including primary sources, to explore the use of plants in medical remedies at the time, and contemporary beliefs about the healing properties of some of them. This will enable them to draw some conclusions about medicine, healthcare and wellbeing over 400 years ago, and make comparisons with the present day.

ACTIVITY 1

Starter: How do we keep ourselves healthy today?

The aim of this activity is for students to think about medicine, healthcare and wellbeing today, in order to make comparisons later in the lesson.

Note: You may wish to include vaccinations under 'prescription medication'.

Pack resources: Activity Card 1 | AR1

ACTIVITY 2

Who was Sir Walter Raleigh?

The aim of this activity is to introduce students to the character and life of Sir Walter Raleigh, with the emphasis on him as a man of action and a high achiever.

Depending on the reading level of the students, you may wish to read the biography (SM1) as a class or them to take turns reading the different sections in their groups.

You may want to highlight some of the controversial aspects of Raleigh's character and achievements, such as his recklessness and arrogance, his jingoism, and his role in England's colonial history.

Pack resources: Activity Card 2 | SM4

ACTIVITY 3

How did Raleigh keep himself well in the Tower?

The aim of this activity is for students to investigate Raleigh's health and wellbeing in the Tower of London through evidence including primary sources, and to complete a written task.

The fact sources sheets (SM2 and SM3) are designed to be read independently by Year 9 and GCSE students, although they may need support with some of the archaic language in the sources. Younger students and EAL learners will need support.

The task activity (AR2) is designed to be flexible. It is envisaged that students will complete one or two tasks in the lesson in their workbooks, files or on electronic devices. You can allocate the same or different tasks to students, according to their ability and/or relevance to their programme of study. You may wish to set an additional task as homework.

Pack resources: Activity Card 3 | AR2 | SM2 | SM3

ACTIVITY 4

Plenary: How does healthcare today compare with that in the 1500s and early 1600s?

The aim of this activity is for students to reflect upon what they have learned in the lesson by comparing and contrasting healthcare, medicine and wellbeing in Raleigh's time with today.

Note: Raleigh tried to take his own life while in the Tower. You may, or may not, think it appropriate to share this fact with your class.

Pack resources: Activity Card 4 | AR1

IDEAS FOR ADDITIONAL ACTIVITIES

These activities could be set as homework or extension tasks, or instead of one of the activities suggested in the lesson plan. You could also use them if you want to plan follow-up lessons.

Gruesome Guide

Find out more about diseases and medical treatments in Britain during the 1500s and early 1600s. Create your own 'Gruesome Guide' to the period in the style of the *Horrible Histories* series. Include text and cartoon drawings under headings such as 'Disgusting Diseases', 'Terrible Treatments' and 'Revolting Remedies'.

Women and medicine

Research the role of women in medicine in the 1500s and 1600s and write up your findings. Include the work of 'wise women', midwives and female apothecaries. Why do you think some female healers were discredited and even persecuted as 'witches'?

Modern Herbal

Investigate plants used in pharmaceutical drugs and herbal remedies today. Create your own Herbal of 4-6 plants including pictures, descriptions and medical uses today. Include any information about how they are, or were, also used as medical remedies in non-European cultures.

Medical pioneers

Find out why these people are important figures in the history of medicine and healthcare in Britain:

- William Harvey; Edward Jenner; Florence Nightingale; Mary Seacole; Alexander Fleming; Rosalind Franklin

Write short biographies of two of them, then compare and contrast their achievements.

Letter from the future

Write a letter to Sir Walter Raleigh from a student in the 21st century (this can be yourself or an imaginary character). Tell him about times you have felt anxious, stressed, depressed or angry and what has caused this. Does this help you to understand how he felt in the Tower?

Explain the strategies you use to improve your mental health and wellbeing. These might include: talking to a friend, family member, teacher or health professional; going for a walk or run; taking a break from schoolwork; doing relaxation and breathing exercises; joining a club or taking up a hobby; eating less junk food; helping someone else; writing down three things that went well that day or that you are thankful for.

ACTIVITY CARD 1

Pack resources: AR1

Starter: How do we keep ourselves healthy today?

Students to work in small groups. Give out one copy of AR1 to each group.

Working with your group, discuss different things you can do to keep yourself physically and mentally well. Then think about remedies you can buy from a pharmacy or health store, and medications a doctor can prescribe, to maintain good health or treat illness. Record **THREE** ideas in each section.

Keep the activity relatively quick and fast paced; students should record their ideas in a few short words, not complete sentences.

Ask the groups to feedback one suggestion. Ideas might include:

- **Physical health:** eat a balanced diet; practice good hygiene; exercise regularly
- **Mental wellbeing:** take breaks from studying; go for a walk; meet up with friends
- **Shop bought remedies:** vitamin tablets; herbal supplements; pain relief medication (e.g. aspirin, paracetamol)
- **Prescription medications:** antibiotics (e.g. penicillin); asthma medications (e.g. Salbutamol); insulin injections

Did any groups put the same idea in different sections? (e.g. exercise in both physical health and mental wellbeing)

ACTIVITY CARD 2

Pack resources: SM4

Who was Sir Walter Raleigh?

Students to work in small groups or pairs. Give out and read Raleigh's biography (SM4).

Ask students to discuss the questions in groups or pairs. They do not need to write responses.

- **Why do you think Sir Walter Raleigh is an important figure in British history?**
- **What evidence is there that he was:**
 - a) ambitious
 - b) brave
 - c) reckless
- **Do you admire his achievements? Why or why not?**

Ask students to share some of their ideas.

ACTIVITY CARD 3

Pack resources: AR2 | SM2 | SM3

How did Raleigh keep himself well in the Tower?

Explain that students will be using a fact sheet and primary sources to complete a written task. They will investigate Raleigh's imprisonment in the Tower of London and the ways in which he tried to keep himself and his family physically and mentally healthy.

Students can discuss ideas in their pairs or small groups but are to complete the written tasks individually.

Give out the information sheets (SM2 and SM3) and the list of tasks (AR2).

Allocate students one or two tasks, supporting them as appropriate to complete these.

ACTIVITY CARD 4

Pack resources: AR1

Plenary: How does healthcare today compare with that in Raleigh's time?

Ask students to look back at the sheets they completed at the start of the lesson (AR1).

- Which of today's aids to physical and mental wellbeing were available to Raleigh in the Tower?
- Which were not? How did this affect his wellbeing?
- Are you surprised that a man who had been a soldier and adventurer suffered from anxiety and depression in the Tower? Why or why not?

Ask students to think about some of the plants Raleigh used in his remedies.

- Do you know of any pharmaceutical drugs today that are derived from plants?
(e.g. aspirin contains salicylic acid derived from tree bark; drugs used to treat some heart conditions contain digitalis, derived from foxgloves; morphine and codeine are derived from opium poppies.)
 - Do you, or your family, ever use herbal remedies?
(e.g. lemon balm or chamomile tea to relieve stress; echinacea to treat or prevent colds and flu; ginseng to boost general health)
 - What do you think are the major advances in healthcare in Britain since Raleigh's time?
-

Physical health	Mental wellbeing	Shop-bought remedies	Prescription medication
<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div></div>

Your teacher will explain which activity, or activities, they want to you complete. You need to use the information sheets **Prisoner and apothecary** and **Raleigh's remedies** to help you.

1. Imagine that you have visited Raleigh in the Tower of London. Write a letter to a mutual friend explaining the conditions he is held in. What concerns do you have for his physical and mental health?
2. According to Source C (resource sheet **Raleigh's remedies**), which plant, or plants, would Raleigh have used in a cordial if he was suffering from:
 - a bite from a mad (rabid) dog
 - suspected food poisoning
 - memory loss
 - the plague
 - any contagious disease
 - depression

Set out your answers in the form of a two-column table with the headings: 'Medical condition' and 'Remedy'.

List **one** remedy that you think would have been completely ineffective, and **one** that you think may have been helpful. Give reasons for your choices.

3. Raleigh's '*Great Cordial*' would have been very expensive.
 - a. Explain why you think this was, giving specific examples from the sources.
 - b. Which ingredient do you think would have been the most expensive and why?
 - c. Which ingredients do you think would have been widely available?
 - d. How effective do you think the cordial was in keeping Raleigh and his family well in the Tower? Give reasons for your answer.
 - e. What did people do if they couldn't afford to buy expensive cordials?
4. Create a wordsearch using **twelve** ingredients from Raleigh's '*Great Cordial*' (Source B in resource sheet **Raleigh's remedies**). Use a dictionary or the internet to find out more about each of them.

5. What evidence is there in Source A (resource sheet **Raleigh's remedies**) that Raleigh's mental health suffered during his imprisonment? Write a paragraph explaining what you think were some of the causes of this. Consider both his physical environment and reasons he had to be anxious or angry. How do you think the activities of gardening and making remedies benefitted his mental health?

6. The Tower of London has recreated Raleigh's Garden in the courtyard of the Bloody Tower. Create a poster to encourage tourists to visit it. The poster should be aimed at people who have an interest in health and wellbeing but no prior knowledge of Sir Walter Raleigh or of medicine in the past. Include text and images.

Who was Sir Walter Raleigh?

Sir Walter Raleigh was an explorer, a soldier, a Member of Parliament, a royal official, a landowner, an apothecary, a writer and a poet. He is also one of the most famous prisoners in the history of the Tower of London.

Raleigh the adventurer

As a young man Raleigh served as a soldier in France and Ireland. In the 1580s he led voyages to North America with letters patent to set up English colonies there. In the 1590s Raleigh took part in the war against Spain, helping to capture the Spanish port of Cadiz and to defend England against the Spanish Armada.

Raleigh the Royal favourite

Raleigh was handsome and charming, which made him a great favourite with Elizabeth I, but his pride and boasting also made him enemies at court. The Queen knighted him in 1584 and gave him many rewards, including houses, estates and official positions. However, she was furious when she discovered that he had secretly married one of her ladies-in-waiting. Raleigh was imprisoned in the Tower of London and, although released after a few months, banished from court for five years.



© National Portrait Gallery, London

DID YOU KNOW?

England and Spain were at war from 1585 until 1604 when a peace treaty was signed in London.

Raleigh is said to have once thrown his cloak over a puddle so that the Queen could walk across without getting her feet wet!



© National Portrait Gallery, London



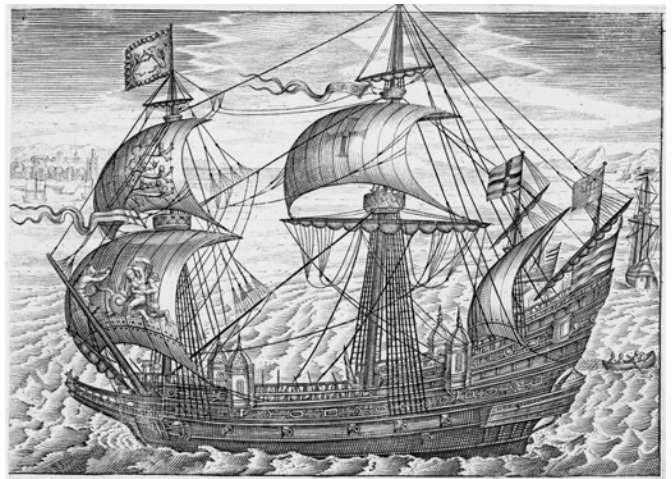
© National Portrait Gallery, London

Raleigh the prisoner

After Elizabeth died in 1603, she was succeeded by her cousin James VI of Scotland, who became James I of England. James was not popular, and Raleigh was accused of being involved in a plot against him. Although probably innocent, he was convicted of treason and sentenced to death. At the last minute, the King reduced Raleigh's sentence to life imprisonment in the Tower of London.

Raleigh's final expedition

The Spanish had long told stories of an ancient lost city in South America, said to be made of gold. Raleigh had earlier explored what is now Guiana and eastern Venezuela in search of it, without success. In 1616 he was released from the Tower and ordered by the King to lead an expedition to Guiana to search for gold. It was a disaster. Raleigh failed to find gold, his forces massacred settlers in a Spanish colonial town and his son Walter was killed.



© National Maritime Museum, Greenwich, London

Raleigh's final days

The King was furious with Raleigh for breaking the peace treaty with Spain. On his return to England, the death sentence was reinstated. Raleigh was imprisoned again in the Tower and executed outside the Palace of Westminster on 29 October 1618. It is said that the final words he spoke were to his executioner: 'Strike, man, strike.'

DID YOU KNOW?

The Spanish called the legendary lost city of gold in South America El Dorado, meaning 'the gilded one'.

Word power!

APOTHECARY

someone who made up medicines and ointments from plants and minerals

LETTERS PATENT

documents from a monarch granting rights and privileges

Talking points

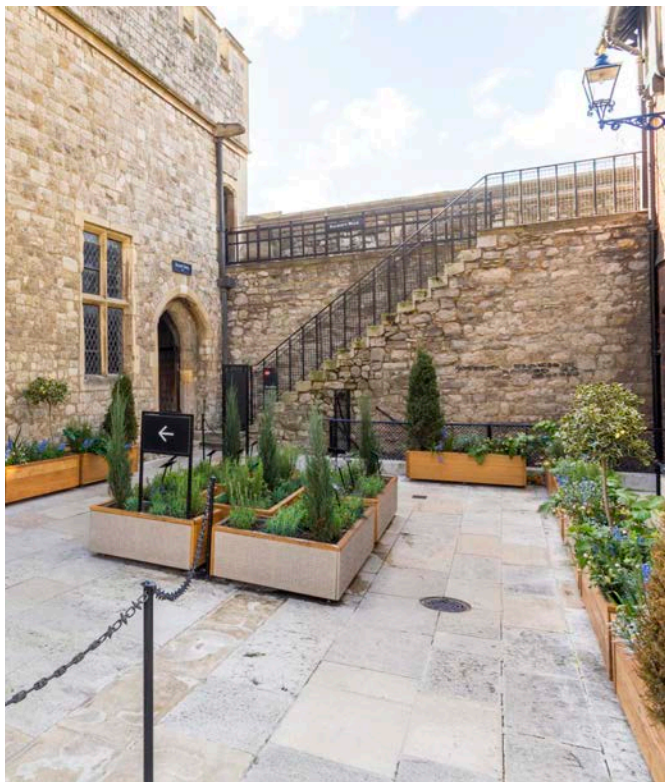
Why do you think Sir Walter Raleigh is an important figure in British history?

What evidence is there that he was:

a) ambitious b) brave c) reckless

Do you admire his achievements? Why or why not?

Sir Walter Raleigh was imprisoned in the Tower of London for 13 years. As a high-status prisoner he was given comfortable rooms and special privileges. These even included having his wife, Bess, and son, Walter, living with him at times. He was housed in what was originally called the Garden Tower because it overlooked the **Lieutenant of the Tower's** garden. Later it became known as the Bloody Tower because it was believed two young princes had been murdered there.



The site of Raleigh's garden, outside the door to his cell.

© Historic Royal Palaces

FACTS!

1. Raleigh's wealth meant that he could afford expensive furnishings, good food, books and three servants.
2. He was allowed visitors and to meet up with other high-status prisoners.
3. Bess Raleigh gave birth to their son Carew while her husband was a prisoner.

DID YOU KNOW?

In the 1500s several herbals were published in English, which included information on the medical uses of different plants.

Most apothecaries were men and trained through apprenticeships.

4. During his imprisonment Raleigh wrote poetry and his most famous book, 'The History of the World'.
5. He was allowed to exercise on top of the wall connecting the Bloody Tower with the Lieutenant's House. This walkway is still known as 'Sir Walter Raleigh's Walk'.
6. Raleigh was also allowed to exercise in the Lieutenant's Garden and to have an area where he grew plants.
7. Some of the plants he grew were traditionally used in herbal medicine. Others were exotic ones grown from seeds he had collected on his expeditions.



© Historic Royal Palaces



© Museum of London

8. Raleigh grew and smoked tobacco introduced to England from South America.
9. Raleigh was allowed to convert an old hen house in the garden into a laboratory. He used this to brew his own herbal remedies and medicines.

DID YOU KNOW?

Wives of apothecaries shared the work in their husband's shops and sometimes took over the family business when their husbands died.

Many women made home remedies using ingredients bought from apothecaries, grown in their gardens or found in the countryside.



© Historic Royal Palaces

10. Raleigh became well known for his **cordials**. These included his 'Great Cordial', which he claimed would work on all natural causes of ill health, and another believed to be good for women who had just given birth.

Word power!

APPRENTICE

someone learning a trade by working for a skilled person

CORDIAL

pleasant tasting medicine

HERBAL

book containing the names and descriptions of plants

**LIEUTENANT OF
THE TOWER**

senior official at the Tower who had charge of important prisoners

SOURCE A Extracts from letters written by Raleigh in the Tower



Raleigh's study in the Bloody Tower

"... I am every second or third night in danger either of sudden death or of the loss of my limbs and sense, being sometimes two hours without feeling or motion of my hand and whole arm."

"[I am] daily in danger of death by the palsy; nightly, of suffocation, by wasted and obstructed lungs. And now, the plague being come at the next door unto me, only the narrow passage of the way between."

"...it cannot be called a life but only misery drawn out and spun into a long thread without all hope of other end than death."

SOURCE B Extract from recipe for Raleigh's 'Great Cordial'



Betony © Wellcome Collection

- Rasped hart's horn, one pound
- Six ounces of the flesh of vipers, with their hearts and livers
- Flower of borage and bugloss, rosemary, marigold, betony, campion, sundew, gilliflower, elderflower: of each half a pound
- Of herbs water-germander, holy thistle, lemon balm, Cretan dittony, mint, marjoram, betony: of each twelve handfuls
- Of the grains of kermes recently reduced into a paste or reduction, of cubebs, greater cardamom, juniper berries, mace, nutmeg, cloves, saffron: of each two ounces
- Two pounds of candied white sugar, very finely pulverized

SOURCE C Seven plants used by Raleigh in his cordials

Plant	Contemporary belief	Source
ALOE VERA Originally from the Tropics	Applied ... upon the pulses ... it recreates the senses by the excellency of its smell	Nicaise Le Fèvre, <i>On Raleigh's Great Cordial</i> , 1664
ANGELICA Originally from Northern Europe	A 'remedy against poison and against the plague ... cures the bitings of mad dogs'	John Gerard, <i>The Herbal</i> , 1597
LEMON BALM Originally from the Mediterranean and Asia	'Makes the heart merry and joyful and strengthens the vital spirits'	John Gerard, <i>The Herbal</i> , 1597
MARIGOLD Originally from Europe	'Much used in possets, broths, and drink, as a comforter of the heart and spirits'	Nicholas Culpeper, <i>The English Physician</i> , 1652
ROSEMARY Originally from the Mediterranean	Taken 'against ... all the infirmities of the head ... to quicken the senses and memory'	John Gerard, <i>The Herbal</i> , 1597
SWEET ORANGE Originally from India	'There is nothing that does ... rejoice the heart ... and that more resists poisons ... than these noble rinds'	Nicaise Le Fèvre, <i>On Raleigh's Great Cordial</i> , 1664
TORMENTIL From Europe	'The juice of the herb ... resists ... contagious diseases ... expelling the venom ... from the heart by sweating'	Nicholas Culpeper, <i>The English Physician</i> , 1652

SOURCE D Etching of Barbados aloe plant



Coloured etching by J. Pass, c.1796

Word power!

CUBEBS	black peppercorns from Indonesia
HART'S HORN	horn from a male deer
KERMES	red dye made from insects found in the Mediterranean region
PALSY	paralysis
POSSET	thick, milk-based, drink

Sir Walter Raleigh was an English statesman, soldier, writer and explorer. He was one of the most notable figures of the Elizabethan era. He was a favourite in Queen Elizabeth I's court and is well-known for popularising tobacco in England. Raleigh was born into a protestant family in Devon, in 1554. As a young man he fought as a soldier in France and in Ireland.

He went on several expeditions to explore lands that were new to Europeans and attracted the attention of Queen Elizabeth I, who made him one of her 'favourites' in the royal court. He played the handsome courtier and wrote elegant poems in the Queen's honour. He was also a privateer and raided treasure from Spanish ships (most of which he gave to Elizabeth). The Queen rewarded Raleigh with land, property, business opportunities and a knighthood.

In 1585, Raleigh was granted a patent to colonise North America, sending a large expedition to Virginia (named after Elizabeth, who was known as the virgin queen). It was through this and future expeditions that tobacco was brought to England and began gain popularity.

In 1591, Raleigh married Bess, one of the Queen's maids of honour, in secret and without the Queen's permission. When Queen Elizabeth found out she was furious and imprisoned them both within the Tower of London. This imprisonment was short lived and, after playing a major role in defending England from the Spanish Armada in 1596, Raleigh was back in the Queen's favour.

However, when Queen Elizabeth I died in 1603, and her nephew King James I took the throne, Raleigh's luck started to run out. He found himself back at the Tower in 1603, accused of plotting against the new king.

Despite being sentenced to death, Raleigh remained a prisoner at the Tower until 1616, living in the Bloody Tower, at times with his wife and family. Their youngest son Carew was born while his father was a prisoner and baptised in St Peter's in February 1605.

Living under threat of execution and frequently ill, Raleigh became suicidal. In the winter of 1604, he wrote of his 'misery drawn out into a long thread without all hope'. His poor health left him struggling to speak and temporarily paralysed on his left side, possibly as a result of a stroke. Eventually, Raleigh's health and intellectual spirit returned. He built up a magnificent library and wrote his greatest book *The History of the World*.

During his imprisonment, Tower officials let Sir Walter Raleigh create his own medicinal garden. Here, he grew herbal ingredients for his medicines, including plants from the New World, such as sassafras trees and tobacco. Raleigh is credited with popularising smoking in England, much to the distaste of James I. He also converted a henhouse into a laboratory to make his remedies, including his 'Great Cordial' and 'Balsam of Guiana' using strawberry water and quinine.

Despite being a prisoner, Raleigh received regular visitors at the Tower, many of whom wanted to buy his medicines. He was allowed to talk with fellow prisoners, including Lord Cobham, Lord Grey and Henry Percy, the Earl of Northumberland. Percy was known as 'The Wizard Earl' due to his interest in alchemy and science. These men spent their time reading, writing and conducting experiments, creating a hub of intellectual activity within the Tower walls.

James I eventually pardoned Raleigh and released him in 1616 to search for gold in Guyana (in South America). However, the voyage was a huge failure and the King ordered Raleigh's execution. On October 29th 1618 Raleigh was beheaded at Westminster.