

Association of Anaesthetists of Great Britain and Ireland
The Anaesthesia Heritage Centre

Educational Booklet Key Stage Three

Teacher's Guide

Produced by Jane Rugg BA

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Objectives

- 1) To explore how past events effected society today.
- 2) To communicate facts and ideas through discussion and debate.
- 3) To encourage thinking about how Victorian scientists thought and worked, and to relate ideas and evidence.
- 4) To use primary material to increase understanding of past events.

The booklets are aimed at Key Stage Three. Booklet 1 is for average to higher ability children whereas Booklet 2 is aimed at those working below average.

Contents of Educational Booklet

1) The History of Anaesthesia

This page aims to engage the children by asking them to reflect upon their own experiences of operations and anaesthesia. It also explains that anaesthesia did not begin in the Victorian period but plants and substances with alcoholic properties were being experimented with in ancient history.

2) Dentistry

It was in dental surgery that many experiments into the use of anaesthetics began. In the loan box a nasal mask is included so this page provides an explanation of why this would have been used and the pictures illustrate how it would have been worn by the patient.

3) James Young Simpson

4) John Snow

Both figures were influential in advancements in surgery. Their approaches however were very different and so this provides an area of discussion. The activities included aim to encourage children to compare the work of the two doctors. John Snow features highly in the national curriculum due to his contributions to the improvement of public health.

5) Childbirth

This page aims to provide an example of how anaesthesia was used. Simpson and Snow both administered anaesthesia in childbirth, and Snow was especially interesting as he gave chloroform to Queen Victoria during the births of Prince Leopold in 1853 and Princess Beatrice in 1857.

6) Anaesthesia Today

To end the booklet the final page compares anaesthesia in the Victorian period to the much safer methods that are in use today. The chart for the children to complete highlights these improvements.

The Anaesthesia Heritage Centre

Sponsored by Abbot Laboratories

The Association of Anaesthetists of Great Britain and Ireland has brought together the Association's museum, archives and library in an Anaesthesia Heritage Centre for specialists as well as interested members of the public.

The Anaesthesia Heritage Centre comprises the archives, library and museum of the Association. The collections work together to help date, explain and illustrate each other and are therefore a unique resource for research into the history of anaesthesia. The museum collection contains over 3000 objects relating to the story of anaesthesia. Its collections date from 1774 to the present day and provide a detailed insight into the history of medicine relating to anaesthesia and anaesthetic equipment as well as pain relief and resuscitation.

Additionally, the museum also contains pull-out drawers for smaller objects and flipbooks giving biographies of the pioneering anaesthetists who made important contributions to anaesthesia as well as details of the larger machines in the collection that are not on display.

The Association of Anaesthetists of Great Britain and Ireland

The Association was founded in 1932 by Dr Henry W Featherstone (1894-1967). Originally anaesthetists were usually poorly thought of by other specialists. They were also badly paid and relied on surgeons for referrals to administer anaesthesia for private patients, and to collect and pay their small fees.

The Association represents the medical and political aspirations of anaesthesia in the UK and Ireland and has close contact with many other countries. It promotes and encourages other bodies to further the academic and clinical advance of anaesthesia and the welfare of anaesthetists. It has initiated or promoted all major developments in British or Irish anaesthesia. The Association was involved in the introduction in 1935 of the Diploma in Anaesthesia (DA), and the organisation and the considerable expansion in members and the training of specialist anaesthetists for the armed forces in the World War Two. The Association's journal, *Anaesthesia*, was first published in 1946.

The Association was closely involved in negotiations preceding the establishment of the National Health Service in 1948. As a result, anaesthetists received equal status to other consultants in the NHS. The Faculty of Anaesthetists of the Royal College of Surgeons of England, (from 1992, the independent Royal College of Anaesthetists) was founded at the instigation of the Association in 1947. The association also supported the foundation of the Faculty (now College) of the Royal College of Surgeons in Ireland in 1959.

The Association continues to develop. It continues to raise the profile and enhances the image of anaesthetists to the public. The Association adopted the motto "*in somno securitas*" (safe in sleep) when it was granted the right to bear arms in 1945 by King George VI. The Association continues to protect the interests of anaesthetists and patients alike.

Activities

Page 1 History of Anaesthesia

Picture 1

- How many Men had to hold down the patients? 6
- Why do you think this was necessary? *Surgery was so painful a patient would have struggled and tried to escape the surgeon's knife.*
- Why are there images of death in the background? *Few people survived surgery due to the pain and risk of infection.*

Picture 2

- Who do you think the man with a book in his hand is? *A member of the church. Clergyman.*
- Why would he have been at the operation? *In the event of a patient dying the last rites would have been given.*

	John Snow	James Young Simpson
When was he born?	<i>1813</i>	<i>1811</i>
Was his family rich or poor?	<i>Poor</i>	<i>Poor</i>
Where did he study?	<i>Hunterian School of Medicine</i>	<i>Edinburgh University</i>
He was most interested in how anaesthetics were inhaled? TRUE or FALSE?	<i>True</i>	<i>False</i>
What did Simpson discover? What did Snow invent?	<i>Snow designed an effective inhaler that controlled how much anaesthetic a patient received.</i>	<i>Discovered that chloroform could be used as an anaesthetic and was stronger than ether.</i>
How did he experiment with chloroform?	<i>Tested his inhaler on animals then himself.</i>	<i>Inhaled anaesthetics himself to discover their effects.</i>
How did he help poor patients?	<i>Gave his services to the poor often without charge.</i>	<i>Helped people who were ill even if they couldn't pay him.</i>
Did he think chloroform was safe or dangerous? He used anaesthetics in childbirth? TRUE or FALSE?	<i>Dangerous (if not used correctly) True</i>	<i>Safe True</i>

Page 4 **John Snow**

Primary Source

- 1) What Anaesthetic was used? *Vapour of Sulphur Ether*
- 2) In what country was this first used? *U.S.A/America*
- 3) What was extracted from a young lady? *Molar tooth from her lower jaw.*
- 4) How long did the patient take to wake up? *One minute*
- 5) Did the lady feel any pain? *No, just the coldness from the instrument used to extract her tooth.*

	Victorian Times	Today
How many drugs were usually used to anaesthetise a patient at any one time?	<i>Only one drug used in large amounts.</i>	<i>Many different drugs</i>
How was the amount of drugs used controlled?	<i>Hard to control (drops just placed on a handkerchief). Snow tried to control the amount of drugs used with his inhalers.</i>	<i>Modern technology (computers) controls the amount of anaesthetic depending upon the person's age and weight.</i>
How long did it take for a patient to wakeup?	<i>A long time</i>	<i>This can now be controlled by making sure a person is not given too much anaesthetic.</i>
Who would give the patient the anaesthetics?	<i>Anyone e.g. G.P., surgeon, medical student</i>	<i>An Anaesthetist</i>
What were the death rates in operations using anaesthesia?	<i>1 in 2,500 died from chloroform. 1 in 15,000 died from ether.</i>	<i>Less than 1 in 250,000</i>

Loan Box

If you have asked to borrow the loan box from the museum five objects should be inside with a laminated picture of the six and seventh (these objects are too dangerous for the children to handle).

The objects are: An Ether Bottle
Two types of Tongue Forceps
Mouth Props
Murray Mask
Nasal Mask
Schimmelbusch Mask

Two fact sheets are also provided. One sheet has pictures of all seven objects and the other has seven descriptions. The children can then be divided into groups and it is the responsibility of each group to look at and handle the anaesthesia equipment in order to decide what description fits each object.

Object Description Sheet 1 is for average to higher ability children and Sheet 2 is for those children working at a lower ability.

Museum Details

Anaesthesia Heritage Centre
Association of Anaesthetists of Great Britain and Ireland
21 Portland Place
London
W1B 1PY
Tel: 020 7631 8806/8811

Opening Times

The Heritage Centre is open Mondays to Fridays from 9.30am to 5.00pm
Appointment recommended.
There is no entrance charge, but charges do apply for some services.

Access Information

The Anaesthesia Heritage Centre is accessible via an outside staircase from street level to the basement, and for disabled visitors via the main reception and lift.
Information about the exhibition is available in large print on request.

Public Transport

Tube stations: Oxford Circus, Regents Park, Great Portland Street.
Train stations: Euston, St Pancras/King's Cross.
Busses: 7, 8, 10, 18, 25, 27, 30, 55, 73, 88, 98, 176, 205, 553 and C2.

For more information please email heritage@aagbi.org

Acknowledgements

With special thanks to Ms Elaine Ward at Hall Mead Secondary School and Dr David Zuck.