# National Mathematics Day Activity

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Each cipher and code activity has a suggested level: lower primary, upper primary or junior secondary. However, many of the activities can be enjoyed by students (and teachers!) of all ages.

For more information about this resource, please contact:

![AAMT Logo]

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Mary, Queen of Scots

Cryptography was used by political rulers in 16th century Europe to send coded messages. Mary, Queen of Scots (1542–1587) employed a cipher secretary handle her ‘secret’ correspondence in an attempt to communicate with her supporters while she was imprisoned in England.

Anthony Babington, a young Catholic rebel, wanted Mary, Queen of Scots, to bless his plan to assassinate the regent, Queen Elizabeth. Sending messages to each other using a substitution cipher was to be their downfall. Mary was found guilty of treason and beheaded. Babington was also executed. This was known as the Babington Plot.

In this cipher, the letters are substituted for symbols.

\[
\begin{align*}
\text{A} & \rightarrow \text{a} \\
\text{B} & \rightarrow \text{b} \\
\text{C} & \rightarrow \text{c} \\
\text{D} & \rightarrow \text{d} \\
\text{E} & \rightarrow \text{e} \\
\text{F} & \rightarrow \text{f} \\
\text{G} & \rightarrow \text{g} \\
\text{H} & \rightarrow \text{h} \\
\text{I} & \rightarrow \text{i} \\
\text{J} & \rightarrow \text{j} \\
\text{K} & \rightarrow \text{k} \\
\text{L} & \rightarrow \text{l} \\
\text{M} & \rightarrow \text{m} \\
\text{N} & \rightarrow \text{n} \\
\text{O} & \rightarrow \text{o} \\
\text{P} & \rightarrow \text{p} \\
\text{Q} & \rightarrow \text{q} \\
\text{R} & \rightarrow \text{r} \\
\text{S} & \rightarrow \text{s} \\
\text{T} & \rightarrow \text{t} \\
\text{U} & \rightarrow \text{u} \\
\text{V} & \rightarrow \text{v} \\
\text{W} & \rightarrow \text{w} \\
\text{X} & \rightarrow \text{x} \\
\text{Y} & \rightarrow \text{y} \\
\text{Z} & \rightarrow \text{z}
\end{align*}
\]

- What does this message say?

\[
\text{S V n i E i V A}
\]

- How would this word look if it were written using the cipher of Mary, Queen of Scots?

Sovereign

- Can you write your own message using Mary’s cipher?
- Produce your own version of a substitution cipher.