National Mathematics Day Activity

Title of activity	Scytale
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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:

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Scytale

A scytale is a cylinder around which a strip of paper is wrapped. A message is written along the length of the scytale.

The strip of paper is then unwrapped and what is left is a thin piece of paper with a list of random letters. Now the same sized cylinder is needed to read it!

A scytale is a form of transposition cipher. It was first mentioned by the Greek poet Archilochus in the 7th century BC, and was later used by the Spartans in the 5th century BC. It helped Lysander defeat the Persians in 404 BC by warning him of an imminent attack, which he was able to repulse. The scytale is believed to be the first military crypto device.

- Wrap a strip of paper 1cm wide around a pen/pencil (a triangular or hexagonal pencil is easier!), sticky taping both ends to hold the paper in place. Write a message on the paper, writing one letter per strip along the length of the pen/pencil. When you get to the end of the line, rotate to the next line (like an old fashioned typewriter). When the message is written, unravel it and give it to someone to read.

- Try your message on different size cylinders. It should be nonsensical!