

National Mathematics Day Activity

Title of activity	Dancing men cipher
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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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Dancing men cipher

[primary/secondary]

Jules Verne wrote his famous book 'Journey to the Centre of the Earth' in 1864. A runic cryptogram was used to provide the first step on this epic adventure.

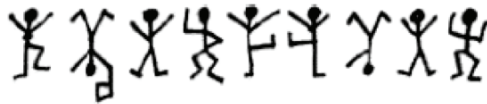
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Sir Arthur Conan Doyle used a cipher in 'The Adventures of the Dancing Men', which featured Sherlock Holmes, his famous detective. In the story, mysterious messages were sent to a woman called Elsie. Sherlock Holmes used two facts to help him solve these messages. Firstly he knew that the letter 'e' is the most common letter in the English language. Secondly, Holmes believed that it was likely that Elsie's name would appear.

Message 1 from Criminal to Elsie



Message 2 from Criminal to Elsie



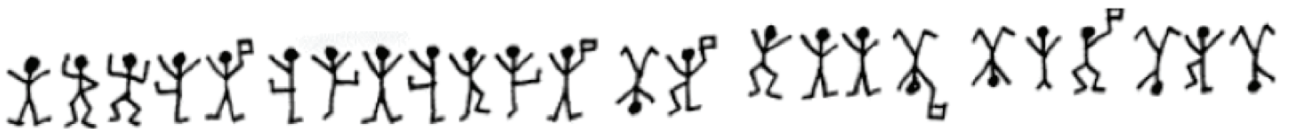
Message 3 from Criminal to Elsie



Elsie's Message to the Criminal



Message 4 from Criminal to Elsie

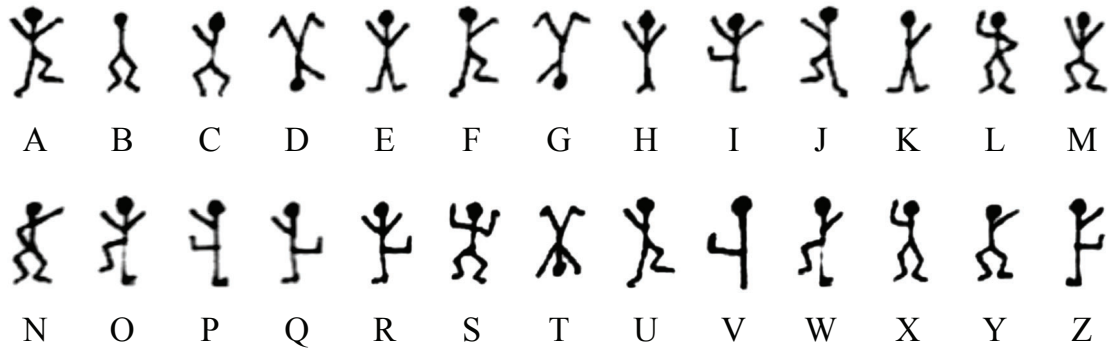


Sherlock Holmes' message to the Criminal



- Can you identify which figure might represent the letter 'e'?
- Why is there a flag with some of the figures?
- Can you do as well as Sherlock Holmes in deciphering the messages?!

The dancing man cipher is another form of a substitution cipher.



- Can you now decipher the messages between the criminal and Elsie?
- What does this message say?



- How would this word look if it were written using the Dancing men cipher?
deduction

- Can you write your own message using the Dancing men cipher?