

Cracking Codes: Cryptology for Kids

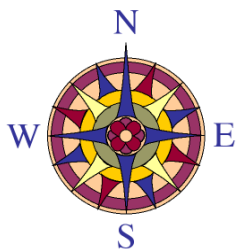
Dates: September 11, 2013 - October 23, 2013 (7 weeks)

Instructor: Sarah Hogue

Objective: Students will learn the language of spies and secret agents in this children's cryptology class. Cryptology is the science of secret writing which uses math and reasoning such as number patterns, sequences, and symbols to create and decode mystery alphabets. Each week students will learn one or more ciphers and will practice using them to write coded messages to each other and to decode class examples. Code systems in Quarter 1 include Caesar ciphers, alphabet and symbol cipher disks, the Pigpen cipher, and various transposition ciphers.

Preliminary Course Outline

<u>Week</u>	<u>Theme/Topic</u>
1	Lesson I – Cipher Disks <ul style="list-style-type: none">• History of Cipher Disks• Alphabet Cipher Disks (Caesar Cipher or backward)• Make Your Own Cipher Disks (Caesar Cipher)
2	Other Substitution Ciphers <ul style="list-style-type: none">• Symbol Ciphers• “The Adventures of the Dancing Men”• Make Your Own Cipher Key• Develop Your Own Secret Message
3	The Pigpen Cipher <ul style="list-style-type: none">• History of the Pigpen Cipher• Use the Pigpen Cipher to Solve Riddles



Compass Homeschool Enrichment LLC

- 4 Transposition Ciphers
- Changing Order (Backward Phrase Versus Backward Word)
 - Adding Nulls to Produce Groups of Four
- 5 Transposition Ciphers
- Twisted Path Ciphers
 - Plow Path, Spiral, Diagonal
 - Develop Your Own Secret Message
- 6 Cracking the Code
- Substitution Versus Transposition Cipher
 - Start Simple – Caesar Cipher
 - Using Frequency Charts to Determine Key
- 7 Cracking the Code
- Transposition Ciphers
 - Start Simple – Backward Messages
 - Breaking Twisted Path Ciphers

Compass Homeschool Enrichment LLC

PO Box 21, Centreville, VA 20122

Office: 703-544-5332 Fax: 703-562-1930

E-mail: admin@compassclasses.com Website: www.compassclasses.com