

## Make It@Home: Scytale

### A. Materials

- 2 Cardboard tube found inside of paper towel/toilet paper rolls (*Juice cans or a broom handle also work well for this activity.*)
- 1 Long strip of paper, about 2 cm wide (*Adding machine paper or the margins from an old newspaper work well for this activity.*)
- Pen/Marker
- Tape

### B. How To Make A Scytale

**NOTE:** *It is important that both you and your friend have the same size scytale (cardboard tubes) to encipher and decipher each other's messages with. Therefore, you will need to give the second cardboard tube to your friend once you have completed this activity.*

1. Tape one strip of paper to the end of the cardboard tube.
2. Wrap the remaining length of the paper around the tube in a spiral fashion. Make sure that the edges meet without overlapping. Secure the second end of paper to the tube with another piece of tape.
3. After the paper is secure, write the message across the strip of paper – just as if you were writing on a normal piece of paper from left to right. Make sure you write one letter per pass of paper. When you reach the end of a line, rotate the scytale slightly away from you and begin the next line of your message.
4. Once the message has been written, unwrap it and you will simply see a bunch of scrambled letters on the paper. Your message has been encrypted!



### C. How To Decrypt Your Message

**NOTE:** *To be able to decrypt a message made from a scytale, you have to have the same size scytale as the person sending the message.!!*

1. Wrap the strip of paper around a scytale of the same size until the letters align and reveal the secret message.