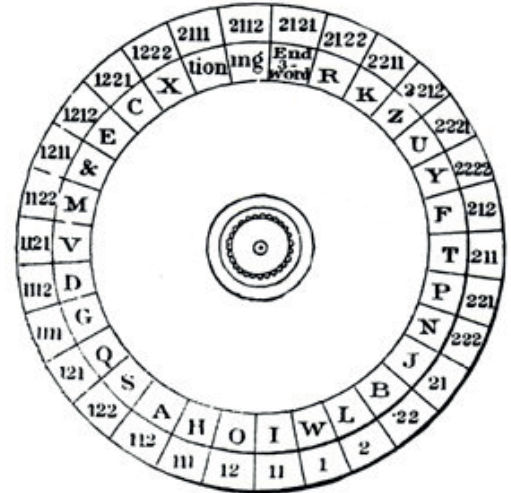
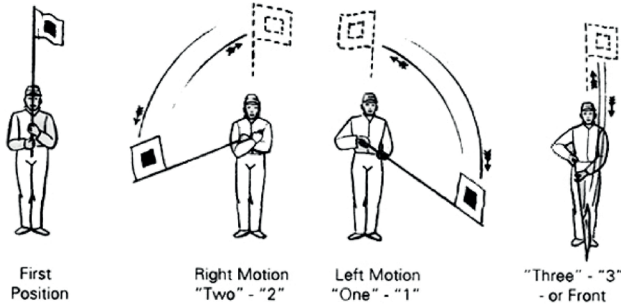


SIGNAL FLAGS WITH BUDDY BISON

In early American wars, soldiers had to develop creative ways of communicating without modern technology. U.S. Army surgeon, Major Albert Myer, developed a method of flag signaling which was adopted by the U.S. Army in 1860. When the U.S. split into factions during the Civil War, the Confederate Army had to change their signaling method to maintain secrecy. Thus the method evolved to include codes and ciphers as a means of scrambling messages.



SOURCE: NATIONAL PARK SERVICE

The flags used by soldiers varied in size and color to increase visibility under different weather conditions.

The soldiers would hold the flags in first position, then swing them to the left, to the right, or down the front to indicate a number before ending in first position. Each series of movements represents a letter or phrase, which the soldiers could translate using a cipher.

Soldiers used codes and ciphers to encrypt their messages. The outer wheel of the cipher represents the series of flag movements. The inner wheel translates those movements. Moving either wheel creates a new code to interpret.

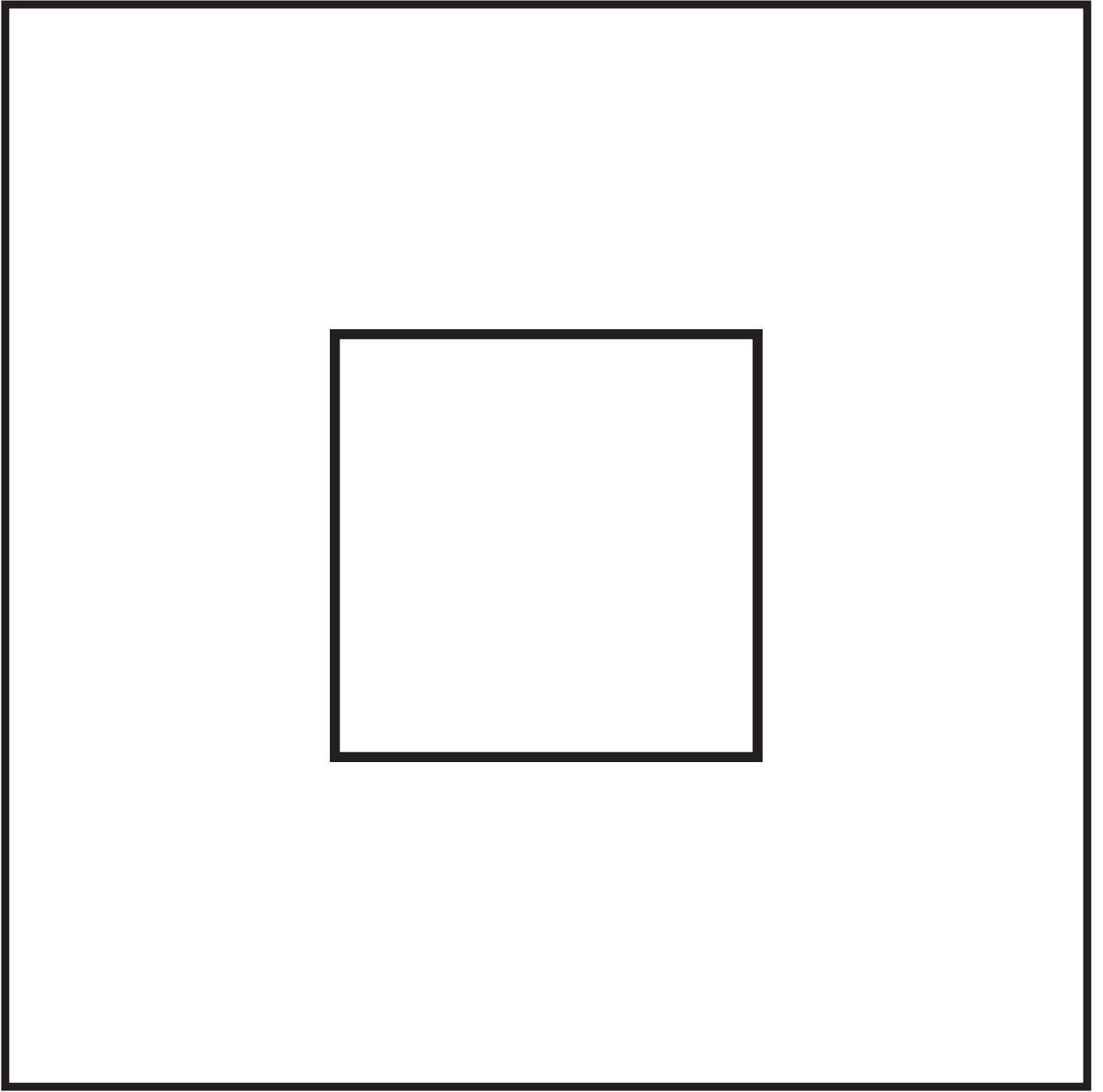
CREATE YOUR OWN FLAG SIGNALS WITH BUDDY BISON

SUPPLIES

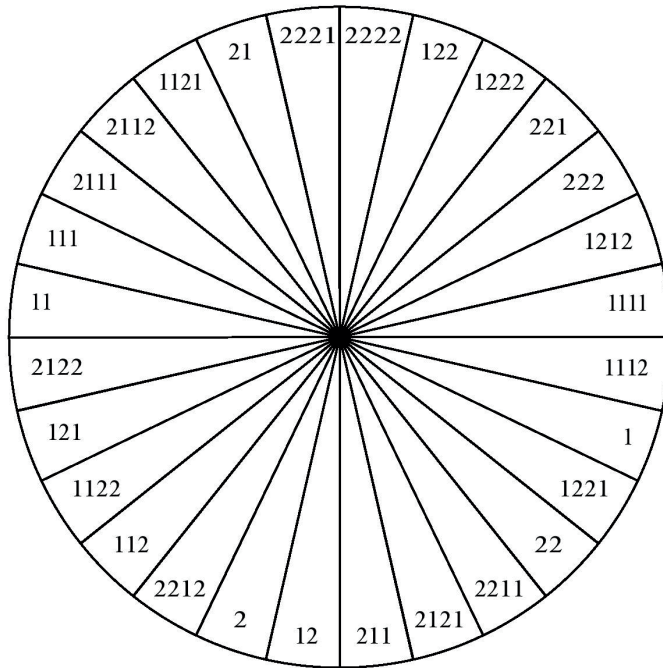
- Scissors
- Color pencils, markers, or crayons
- Tape
- A stick or pole approximately 12 in. long
- A round head fastener (or similar tool)
- Paper
- Pencil

1. Color in the flag shape on the next page to your liking and cut it out.
2. Fasten the shape to one end of your stick using tape. You now have a signal flag!
3. Cut out the inner and outer cipher wheels on the 3rd page.
4. Place the inner wheel in the center of the outer wheel and fasten them together using the round head fastener.
5. Rotate wheels to set your code.
6. Write out a message to signal to a partner and translate it using your cipher.
7. Give the cipher to your partner. Then, signal your message. Your partner can decode it using the cipher, pencil, and paper.





CIPHER DISK INNER WHEEL



CIPHER DISK OUTER WHEEL

