

# Crayola.com Inspiring Ideas

## Code Maker & Breaker



### Crayola Supplies

- Scissors
- Fine Line Markers

### Other Supplies

- ruler
- construction paper
- recycled cereal boxes

## Why?

Kids explore alphabet letters, words, and metric measurements with colorful Code Makers and Breakers. Your whole family can create coded messages to decipher.

## How?

1. To make the code maker use Crayola® Scissors to cut a rectangle about 7 cm (3 inches) by 19 cm (7 1/2 inches) from recycled cereal box cardboard.
2. Fold the rectangle in half so the long ends meet. Snip into the fold at 3 cm (1 inch) from each end. Unfold. Cut into each snip to make a 4 cm (1 1/2 inches) opening centered and running parallel to each short end.
3. To make the code breaker, cut a 23 cm (9 inches) by 4 cm (1 1/2 inches) piece of construction paper to fit in the code maker's slots. Trim the sides of the code breaker so it will glide easily when you put it into the code maker.
4. Use Crayola® Fine Line Markers to mark 1 cm (1/2 inch) spaces to the right and left of the code maker. Write A through M to the left and N through Z to the right in the spaces.
5. Write the code letters on the code breaker strip so they line up with your code maker alphabet. You can make several codes by sliding the code breaker up so each letter is aligned with a different letter. Write the top two letters

that disappear in the new spaces at the bottom. Mark lines on the construction paper strip at the top to show how to line up the letters for the particular message you are sending, then be sure to tell the message's recipient at which line to arrange the code breaker.

## When and Where Suggestions?

- "My kids took their Code Makers to a restaurant so they could write secret messages to each other on paper placemats." Penelope G., mom of kids 7 and 9.
- "Older children write messages to each other while younger ones rest. Some kids invent symbols to use instead of letters." Seema K., family child care provider.

## Interesting Information

Cryptography is the study of making and decoding secret messages. When you substitute one letter for another letter you are actually using a cipher. A code is technically a message in which one word substitutes for another word.

## Safety Guidelines

Safety guidelines recommend this art project is suitable for children age 4 years and older. Close adult supervision is required to ensure children's safety.

ATTENTION: The cutting edges of scissors are sharp and care should be taken whenever cutting or handling. Adult supervision is recommended with all children.

## Related Books

Break the Code: Cryptography for Beginners by Bud Johnson

Codes, Ciphers, and Secret Writing by Martin Gardner

How to Write and Decode Secret Messages by Marvin Miller

## Related Videos

Encyclopedia Brown: The Case of the Burgled Baseball Cards.

Encyclopedia Brown: The Case of the Amazing Race Car

## Related Software

Hallmark Holiday Card Studio

Nancy Drew: Message in a Haunted Mansion by Her Interactive

## Related Games

Crayola® Stickers

Where in the World Is Carmen Sandiego?

Code Lab - Science Undercover

Spymaster Code Kit

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