

# Secret Messages

In this experiment you will use a red filter to absorb all colors other than red. Any picture you look at through the filter should appear red, black, and white. Use this knowledge to create coded messages that can only be deciphered with the filter.

## Materials Included:

- Red filter (any translucent piece of red plastic or acetate will work)
- Red pen
- Yellow Highlighter

## Additional household materials:

- Paper
- Pencil

1. First play with the red filter to look at the message below. Can you read it without the filter? How about with the filter? Try coloring a page with different colored crayons. Then look at what you've done through the filter. Which colors can you see? Which colors are hidden?
2. To create your own secret message, you will need a pencil, red pen, and yellow highlighter. First write your message with the pencil. It works best when you write lightly, and space your letters a little farther apart than usual.
3. Next, go over your message with the red pen using crosshatching marks. (See below to see how crosshatching works.)
4. Last, scribble over with the highlighter to add more noise. Your message should be hidden!

