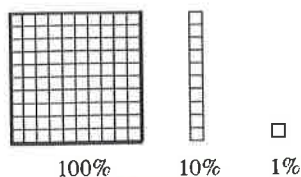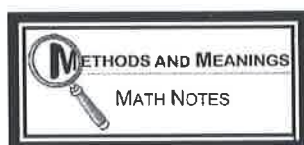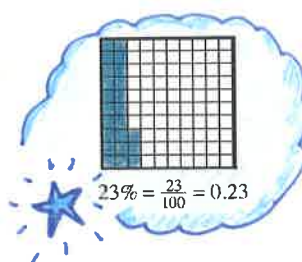## METHODS AND MEANINGS
MATH NOTES

100% Blocks

- Base Ten Blocks can also be used to represent percents. The three basic blocks represent 100%, 10%, and 1%, as shown at right.

100%   10%   1%

- A percent is a way of expressing a number as a fraction out of 100. In the example shown at right, 23 out of 100 squares are shaded to represent 23% or 23 hundredths.

$$23\% = \frac{23}{100} = 0.23$$

METHODS AND MEANINGS
MATH NOTES

Percents

A percent is one way to write a portion of 100. It can always be written as a fraction with a denominator of 100 and/or as a decimal.

Commonly Used Percents

$$100\% = \frac{100}{100} = 1$$

$$75\% = \frac{75}{100} = \frac{3}{4} = 0.75$$

$$50\% = \frac{50}{100} = \frac{1}{2} = 0.5$$

$$25\% = \frac{25}{100} = \frac{1}{4} = 0.25$$

$$10\% = \frac{10}{100} = \frac{1}{10} = 0.1$$

$$1\% = \frac{1}{100} = 0.01$$

Useful Percents to Remember

$$80\% = \frac{80}{100} = \frac{4}{5} = 0.8$$

$$60\% = \frac{60}{100} = \frac{3}{5} = 0.6$$

$$40\% = \frac{40}{100} = \frac{2}{5} = 0.4$$

$$20\% = \frac{20}{100} = \frac{1}{5} = 0.2$$

$$33\tfrac{1}{3}\% = \frac{33\frac{1}{3}}{100} = \frac{1}{3} = 0.\overline{3}$$

$$66\tfrac{2}{3} = \frac{66\frac{2}{3}}{100} = \frac{2}{3} = 0.\overline{6}$$

⭐ **Key Idea:** You can write percents as fractions and decimals too!

(ex) $38\% = \dfrac{38}{100} = 0.38$

$8\% = \dfrac{8}{100} = 0.08$