Relate Fractions and Decimals
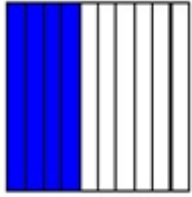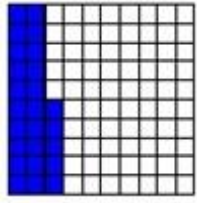
You can write a fraction or a decimal to tell what part is shaded.

Model	Fraction	Decimal			Read
		O	T	H	
	4 shaded parts / 10 parts	0	4		four tenths
		O	T	H	
	25 shaded parts / 100 parts	0	2	5	twenty-five hundredths

You can use a place value chart to help you understand thousandths.

Ones	.	Tenths	Hundredths	Thousandths
0	.	3	7	8

Use the place

digit to name

of the last

the decimal.
Decimal: 0.378

Read: three hundred seventy-eight thousandths

Examples:

A- Write the number as a fraction.

1) Seven shaded parts out of 10 parts

$$\frac{7}{10}$$

2) Eight dirhams of 20 fils

$$\frac{8}{20}$$

B- Write the number as a decimal.

3) $\frac{1}{5}$

$$\frac{1}{5} = \frac{1 \times 2}{5 \times 2} = \frac{2}{10} = 0.2$$

4) $\frac{4}{10}$

$$\frac{4}{10} = 0.4$$

5) $\frac{6}{20}$

$$\frac{6}{20} = \frac{6 \div 2}{20 \div 2} = \frac{3}{10} = 0.3$$

C- Write each decimal as a fraction.

6) 0.125

$$0.125 = \frac{0.125 \times 1000}{1000} = \frac{125}{1000} = \frac{1}{8}$$

7) 0.4

$$0.4 = \frac{0.4 \times 10}{10} = \frac{4}{10} = \frac{2}{5}$$

8) 0.155

$$0.155 = \frac{0.155 \times 1000}{1000} = \frac{155}{1000} = \frac{7}{45}$$

D- Write the decimals in sentences.

9) 0.456: <u>four hundred fifty-six thousandths</u>

10) 0.832: <u>eight hundred thirty-two thousandths</u>