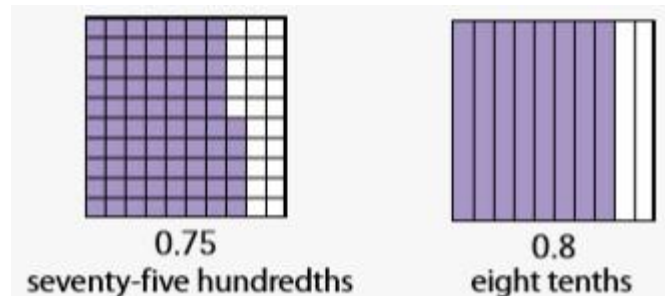


## 4<sup>th</sup> Grade: Compare Decimals

A model can help compare decimals when one decimal is in tenths and the other decimal is in hundredths.

The model shows 0.75 and 0.8



A greater area is shaded for 0.8 than for 0.75, so 0.8 is greater than 0.75.

A place-value chart can also be used to compare decimals in tenths and hundredths.

8 tenths equal 80 hundredths.  $\frac{8}{10} = \frac{80}{100}$

Ones	.	Tenths	Hundredths
0	.	7	5
0	.	8	0

The place-value chart shows that eighty hundredths, or eight tenths, is greater than seventy-five hundredths. Compare the digits in the tenths place:  $8 > 7$ .

$0.80 > 0.75$  and  $0.8 > 0.75$

**For example:**

Heath caught a bug that weighs 1.9 grams and Ty caught a bug that weighs 1.09 grams. Which bug weighs more?

**Look at how you could show your work using equivalent fractions.**

0.9 is nine tenths, or  $\frac{9}{10}$ .

0.09 is nine hundredths, or  $\frac{9}{100}$ .

$\frac{9}{10}$  is equivalent to  $\frac{90}{100}$ .

$\frac{90}{100} > \frac{9}{100}$ , so  $1.9 > 1.09$ .

**Solution** Heath's bug weighs more.