Emanuel Project
ART INTERVENTIONS FOR AT-RISK YOUTH

Math
Decimals

YOUTH ART PROJECT FOR:

DECIMALS

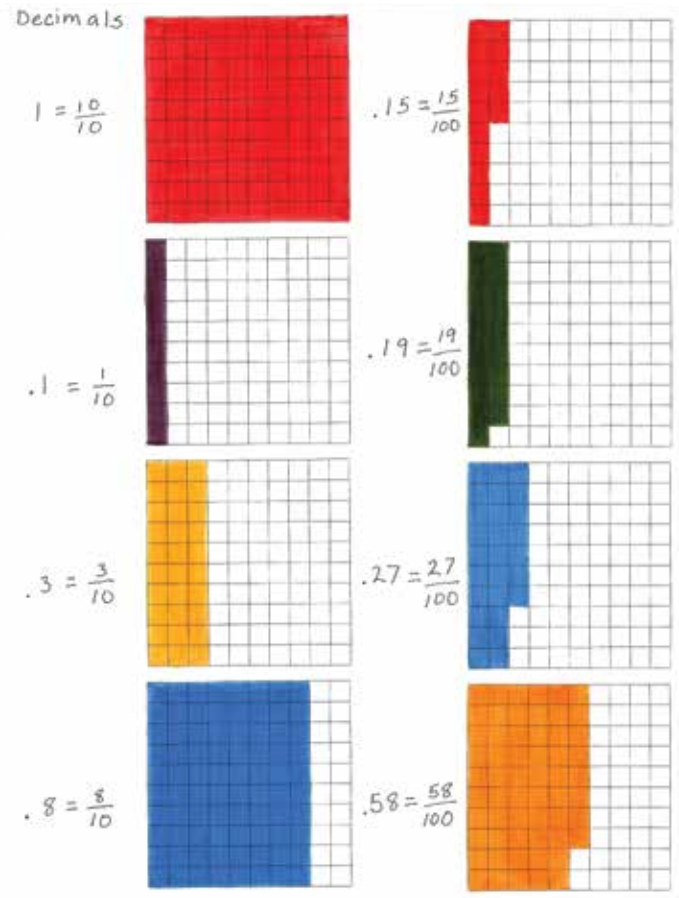
OBJECTIVE

Students will learn about decimals.

Set up/prep time:	Activity time:
30 minutes	2-3 hours

Materials Needed:

Colored markers, pencil, copies of worksheet



COMMON CORE STATE STANDARD

CCSS.Math.Content.4.NF.C.6 Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

PRE LESSON ASSESSMENT

Do a pre lesson assessment to determine what knowledge the students already have about decimals.

VOCABULARY

Decimal, Fraction

RELEVANT RESOURCES

Content

http://en.wikipedia.org/wiki/Decimal
http://www.coolmath.com/prealgebra/02-decimals/01-decimals-place-value-01.htm
http://www.aaamath.com/dec42cx2.htm

Art

http://www.room16.net/math/decimals-/
http://www.coolmath.com/prealgebra/02-decimals/04-decimals-converting-fraction-to-decimal-01.htm
http://scimathmn.org/stemtc/sites/default/files/images/frameworks/math/4.1.2B/image027.jpg

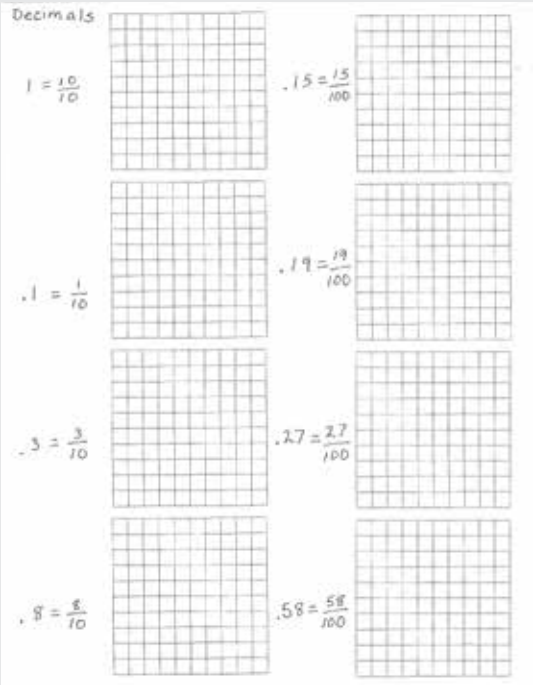
Students will engage in:

- ☐ Listening
- ☐ Speaking
- ☐ Reading
- ☐ Writing
- ☐ Partner Work
- ☐ Cooperative Learning
- ☐ Whole Group Instruction
- ☐ Visuals
- ☐ Hands on
- ☐ Technology Integration
- ☐ A Project
- ☐ Centers
- ☐ Simulations
- ☐ Activities

"In any moment of decision, the best thing you can do is the right thing, the next best thing is the wrong thing, and the worst thing you can do is nothing." -Theodore Roosevelt

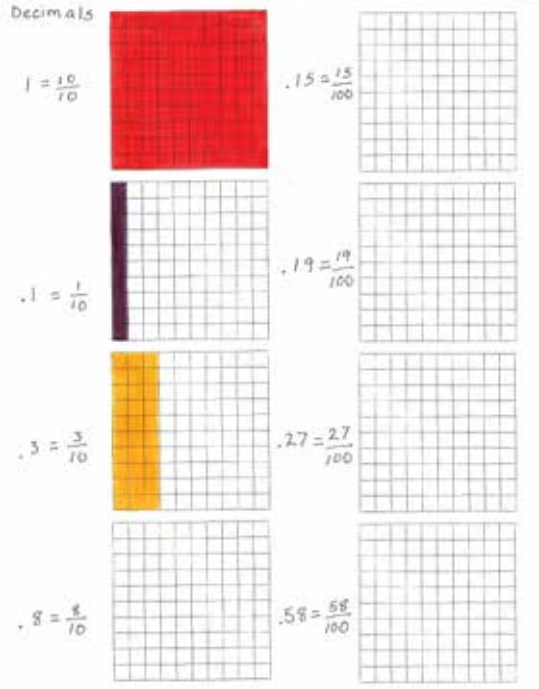
STEP 1

Each student will need their own copy of the template that has been provided. Next to each group of boxes, have the students write what decimal values, you, as the teacher, would like them to practice. For each decimal have the students put that number over 100. For some single-digit decimals, the number can be placed over 10 instead, so it is simplified. Refer to the example in image one if needed.



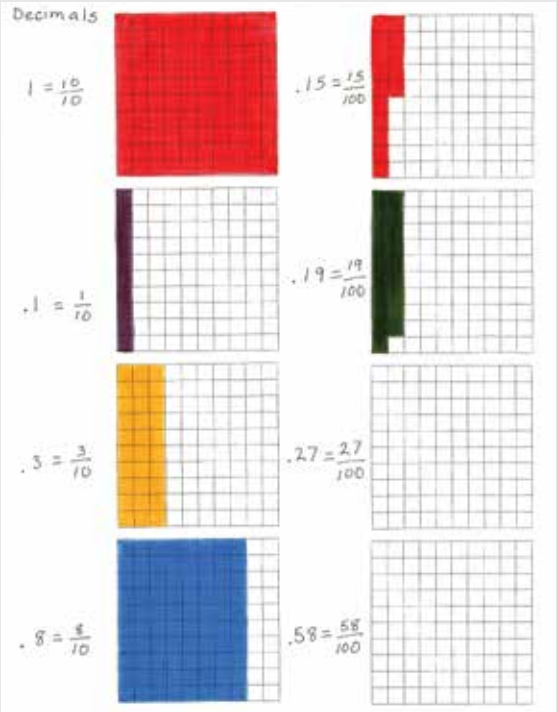
STEP 2

To better understand decimals, explain to the students that the placement of decimals matters. For example, the number directly to the right of the decimal is in the tenth place. The next place to the right is the hundredths, then the thousandths, and so forth. Have students practice saying the decimals correctly aloud. For example 0.1 is correctively pronounced as one tenth.
Continuing with the lesson, have the students look at all the fractions that have a ten in the denominator. Have them color one bar for every tenth. Have the students color their boxes according to the fractions that have ten in the denominator. For example, if the fraction is 1/10, have the students color an entire row of boxes to visually represent one tenth.



STEP 3

For every fraction that has 100 in the denominator explain to the students that each group of boxes has 100 squares, so each individual square represents one out of 100. Therefore, if the fraction calls for 19/100 have the students color 19 individual boxes to represent 19/100. Have the students practice correctly pronouncing these decimals with numbers in the hundredth place aloud. To finish, have the students color all their artwork as the fractions call for it while practicing saying the decimals aloud. Check for understanding so the students understand the correlation between fractions and decimals.



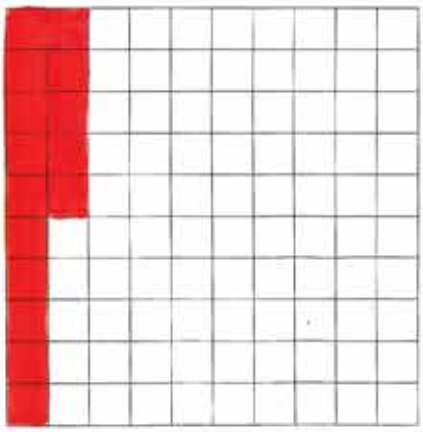
POST LESSON ASSESMENT

Do a post assessment to determine what new knowledge the students have gained.

Decimals

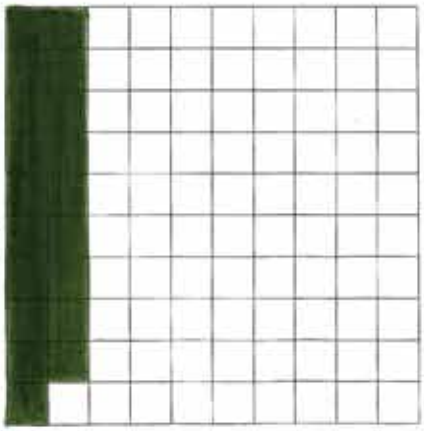
$1 = \frac{10}{10}$

$.15 = \frac{15}{100}$

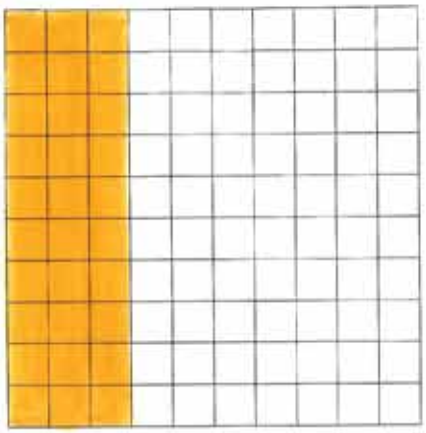


$.1 = \frac{1}{10}$

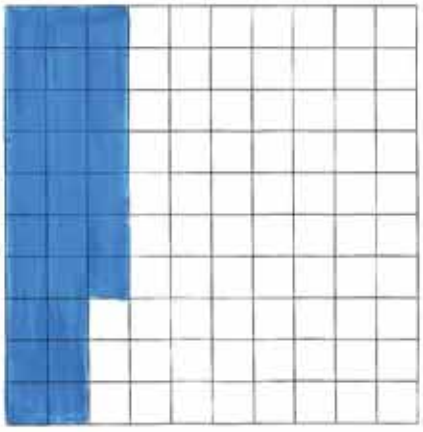
$.19 = \frac{19}{100}$



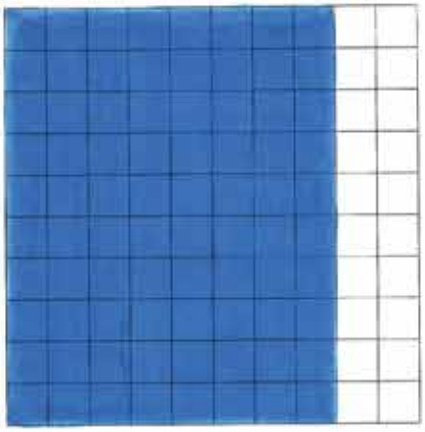
$.3 = \frac{3}{10}$



$.27 = \frac{27}{100}$



$.8 = \frac{8}{10}$



$.58 = \frac{58}{100}$