

Teacher: Miss. Domonique Ragni
Lesson Plan Title: Equivalent Fractions
Grade Level: 3rd grade
Time allotted: 45 minutes

Lesson Overview:

Tell students that they are going to learn, how to identify equivalent fractions.

We need to learn equivalent fractions because you will use it when dividing money between people, mixing ingredients together (cooking), splitting a pizza for you and your friends. I will review what a numerator / denominator are by giving a flashcard with a fraction _____ (e.g. $\frac{1}{2}$), I will ask the class which is the numerator, and which number is the denominator, having the group chorally answer the correct value for each of the numerator/denominator. I will continue to keep showing them flashcards with fractions, identify the numerator and denominator until I see that they all understand which one is which.

Goals:

Students will recognize equivalent fractions.

Objectives:

Given a set of fraction strips containing an equivalent pair (e.g. thirds, sixths, tenths, halves) and the direction "show me an equivalent for _____ (e.g. $\frac{2}{3}$)", the student will place an equivalent fraction strip (e.g. $\frac{4}{6}$) next to the given strip for 7 consecutive trials without prompts, using a different set of fraction strips each time.

Given a set of fractions, containing equivalent fractions and non equivalent fractions, the student will be able to identify which fractions are equivalent.

Standards:

National Standards from the National Council of Teachers of Mathematics

(NCTM):

Number and Operations Standard

Understand numbers, ways of representing numbers, relationships among numbers, and number systems

In grades 3–5 all students should—

- recognize equivalent representations for the same number and generate them by decomposing and composing numbers
- develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers
- use models, benchmarks, and equivalent forms to judge the size of fractions;
- recognize and generate equivalent forms of commonly used fractions, decimals, and percents

Process strand:

Problem Solving Standard for Grades 3–5

Instructional programs from prekindergarten through grade 12 should enable all students to—

- build new mathematical knowledge through problem solving

New York State Learning Standard MST 3:

Content Strand: Number Sense and Operations

Students will understand numbers, multiple ways of representing numbers, relationships among numbers, and number systems.

3.N.14 Explore equivalent fractions ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$)

Process Strand:

Problem Solving Strand

Students will apply and adapt a variety of appropriate strategies to solve problems.

3.PS.12 Use physical objects to model problems

Materials:

Fraction strips

Examples of equivalent fractions

Examples of non equivalent fractions

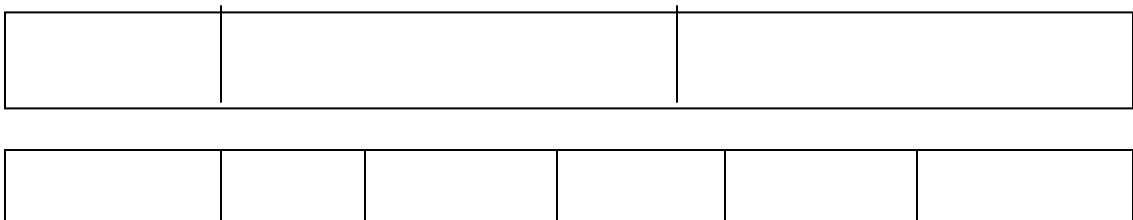
Development:

Equivalent fractions are fractions that are the same, the numerator and denominator are different, but they are equivalent because they have the same number of parts. So, if I have a pizza cut into 8 pieces and 4 are left and I have a pizza cut into 4 pieces and 2 are left, I have the same amount left in both pizzas. I can do the same with fraction strips. If I have 8 boxes and 4 of them are shaded in, and I have another 4 boxes and 2 of them are shaded in, I have an equal amount of shaded boxes.

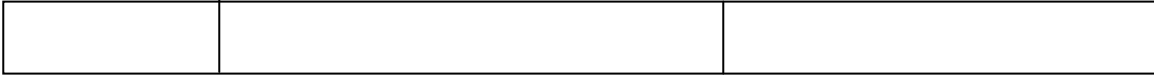
Guided Practice:

I will model examples of equivalent fractions in random order, showing them on the black board /and diagram of fraction strips and pies. I will use these examples:

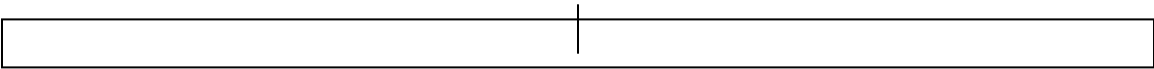
1.) $\frac{2}{3} = \frac{4}{6}$



2.) $\frac{1}{3} = \frac{3}{9}$



3.) $\frac{1}{2} = \frac{4}{8}$



Accommodations:

- For students with reading problems: A peer or I will read the poster.

- During independent practice, the students may use a pencil grip, scribe or keyboard as necessary.
- For students with behavioral problems: I will use
 - a.) structured classroom routines and schedules
 - b.) proximity control
 - c.) specific praise, reminders, and reprimands as needed for behavior in relation to classroom rules.

For students who need more support, I will design an individualized token system or contract.

- For students with high ability: I will allow the students to work on the classroom computer on the fraction tutorial website: <http://www.kidsolr.com/math/fractions.html> . On this website, the students will be able to quiz themselves to see how well they do on the computer game.
- For students who are English language learners: Provide peer tutoring during study hall and icons on all posters and worksheets.

Closure:

At the end of the lesson, the students and I will read the poster together. I will remind them that we need to be able to know what equivalent fractions mean so

when we are dividing money between people or cutting a pie of pizza evenly, we will know how to do it correctly. For example, if someone says “Can you cut the pizza into even slices for the six of us you will be able to correctly do it

Independent Practice:

Students will be given an assignment, where they have to identify whether the fractions given are equivalent or not.

Evaluation:

Diagnostic: In the beginning of class the students were assessed through their prior knowledge.

Formative: Throughout the lesson I will be checking for understanding when the students are completing their assignment. Asking them questions about their understanding of equivalent fractions.

Summative: The teacher will use the outcomes of the students independence practice of equivalent fractions

Reflection:

1. Did my anticipatory set grab my student’s attention?
2. Did my students have any prior knowledge of the equivalent fractions?
3. Did I allow enough time for the students to complete their assignment?
4. Do my students understand why equivalent fractions are important to learn about?

