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| FRACTIONS | 7.16.2018 |

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| Subject |  | Overview |
| |  | | --- | | Mathematics | | Prepared By | | [Instructor Name] | | Grade Level | | 1 | |  | This lesson plan covers teaching content for;   1. Identification of 1/2 2. Identification of 1/4 |

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| Materials Required  * Orange or lemon * Cupcake * 2 chocolate bars * Knife/Scissors (for dividing items) * Fraction Quiz worksheet * Fraction Coloring worksheet * Crayons * Paper plates * White paper (one per student) |
| Additional Resources  * <https://www.pinterest.com/paelly/fractions-for-first-grade/?lp=true> * <https://weareteachers.com/make-teaching-fractions-easier/> * <http://learn.mindset.co.za/sites/default/files/resourcelib/emshare-show-note-asset/4289_fdoc.pdf> * <http://themoffattgirls.com/teaching-simple-fractions/> |
| Additional Notes |

| Objectives |  | Teacher Guide |  | Teacher Guided Practice |
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| By the end of this unit, pupils should be able to:   1. Recognize, find and name a half as one of two equal parts of an object, shape or quantity 2. Recognize, find and name a quarter as one of four equal parts of an object, shape or quantity. 3. Understand fractions as numbers between whole numbers. 4. Understand fractions as part of a whole. 5. Cut a given object and shape into given parts   and label them appropriately.   1. Fold shapes into halves and quarters, color a half or a quarter. |  | **Day 1/Lesson 1- 20 Mins**   * 1. Show your students a chocolate bar and tell them that you're going to divide this into three equal parts as well.   2. Divide the chocolate bar using your knife.   3. Tell a student volunteer to take two of the three pieces and ask the class some questions to gauge comprehension. For example: How much of the chocolate bar has been taken? How do you know?   4. Choose a student to come to the front of the class and write a fraction that represents the pieces that were taken from the chocolate bar. The volunteer should write 2/3 on the board.   5. Choose students to call out the definitions for numerator and denominator again.   6. Repeat this process, dividing the cupcake into four equal parts.   7. After some practice, draw a circle on the board. Below the circle, write the fraction 3/4.   8. Ask a student volunteer to shade in the correct number of parts on the circle, so that the visual matches the fraction 3/4.   9. Guide the class in helping the volunteer, asking questions such as: How many parts should the circle be divided into? How can you tell? How many of those parts should be shaded in? Why?   10. Ensure that your volunteer correctly divides the circle into four equal parts, and shades in three of them.   11. Explain to the class that the fraction 3/4 is the same as a circle divided into four equal parts, with three of those parts shaded in. |  | **Day 1 Lesson 1- 15 mins**   1. Provide children with cut outs of a hexagon, an equilateral triangle, an isosceles triangle and ask them to find how many ways they can fold them into halves.   **Day 2, Lesson 2 -10 Mins**   1. Develop the idea of finding a quarter, asking pupils to cut or fold paper into 2 equal parts. 2. Now cut or fold each half into two equal parts. How many parts do you now have? 3. You now have four equal parts. Record on each of the four parts one quarter with symbol 1/4. 4. Just like the explanation on half, tell the pupils why the denominator of a quarter is 4. 5. The denominator gives the number of equal parts that one whole is divided into. Show on the board 6. Introduce the word numerator and explain that the numerator tells you how many   of the parts you have.  **Day 2 Lesson 2 -15 Mins**   1. Draw a circle on the board. Below the circle, write the fraction 3/4. 2. Ask a student volunteer to shade in the correct number of parts on the circle, so that the visual matches the fraction 3/4. 3. Guide the class in helping the volunteer, asking questions such as: How many parts should the circle be divided into? How can you tell? How many of those parts should be shaded in? Why? 4. Ensure that your volunteer correctly divides the circle into four equal parts, and shades in three of them. 5. Explain to the class that the fraction 3/4 is the same as a circle divided into four equal parts, with three of those parts shaded in. |
| **Introduction/Instruction**  1. Explain to your class that today, they will be learning about fractions. Define a fraction as a part of a whole. 2. Draw a picture of a common fraction on the board, to better illustrate the concept to your students. **(5 Mins)** |  | **Day 2 /Lesson 2 – 15Mins**   1. Draw a big circle on the board. Then, draw a line down the middle of the circle, and divide it into 2 equal parts. 2. Point out to the students that the circle was one whole piece and has now been divided into two equal parts. 3. Inform the students that when they take a whole shape and divide it into equal parts, the parts are fractions, or parts of the whole. 4. Take a paper plate and ask the students how they can divide the circle into halves. 5. While they are guessing, hold the plate in front of you and fold the shape in half, making sure the edges are even. 6. Then, open it up, and show it to the students. 7. Ask one of the students to come up and point to both halves. 8. Tell the students the plate has now been divided into halves. |  | **Day 4 Lesson 4- 15 Mins**   1. Give the pupils practice in sharing into 4 equal sets by giving them items to share. 2. Initially give them sets that are multiples of 4 so that the sharing will always result in a whole number. 3. Now introduce sharing of say 13 oranges. Ask: “How can you share this spare orange?” 4. Pupils need to come to the idea that the extra orange could be cut into four equal parts or quarters and shared so that each person have 3 1/4 oranges. 5. Extend the idea to sharing of 14 oranges and explain how the set of leftovers could be shared i.e. two pupils share one orange to have 3 1/2 each. |
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| Assessment Activity  1. Pupils should be able to find half and quarter of a regular shape like rectangle, square and circle by folding. 2. They should be able to   use the symbols 1/2 and 1/4. |  | Assessment Activity  1. Invite the students to come up and select a shape from the board. 2. Tell them that they are going to divide their whole shapes into 2 equal parts or halves. 3. Remind them as they divide their shapes to make sure that the edges are together and even. 4. When they are finished making creases down the middle, have them open their shapes up. Point out that they should see two equal parts. 5. Instruct them to write the words one half on each section |  |  |
| Summary |  |  |  |  |