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| **Math 4** |
| **Subject: Math****Unit: Fractions of a Set** |
| **Learning Target:** Students willname and record fractions for the parts of a set. |
| **Curriculum Outcomes:** **N8** Students will demonstrate an understanding of fractions less than or equal to one by using concrete, pictorial, and symbolic representations to name and record fractions for the parts of a set. |
| **Screencast Support:** View the **screencasts -** Fractions of a Whole and Fractions of a Set. |
| **Resources/AT Tips:** **-Screencast** – [Fractions of a Whole](https://www.youtube.com/watch?v=C6iG4YGy3jI) and [Fractions of a Set](https://www.youtube.com/watch?v=SnF73mqqXGw) -iPads-[Online fraction / decimal games](http://www.sheppardsoftware.com/math.htm#decimals)-Showme App  -Explain Everything App -cooperative [**game**](#cooperativegame)-two sided counters-recording paper-‘[Step](#Stepbystep) by Step’ Activity Sheet |
| **Lesson Procedure** | **21st Century Skills** |
| **I do:** **Activate Prior Knowledge*** Place 10 students at the front of the room, a mix of boys and girls. For example, ask, “How many students are in the group?” (10) How many are girls? (7) How many are boys? (3) What fraction of the group are boys? (3 tenths) Girls? (7 tenths)
 |  find, validate remember, understand  communicate  |
| **You do:*** Create bags of two sided counters. Have students pick a partner. Create a chart for all students that have 3 columns: Number of counters pulled out, Numbers that are red, and the number that are yellow.
 |   collaborate, communicate analyze, synthesize  |
| **We do:** * Students do the activity 5 times each, discussing as they take turns recording their responses.
* Next, ask partners to draw different coloured counters for each other – they name the fractions, using either paper **or** the ShowMe **or** Explain Everything app.
* Have students view the screencast, [Fractions of a Set.](https://www.youtube.com/watch?v=SnF73mqqXGw)
* Play the cooperative game on p. 183 of the Math Sense 4 text.
 |   collaborate, communicate analyze, synthesize critical thinking evaluate, leveragecreate,  citizenship |
| **We share:*** Ask students to **explain** their strategies for finding fractions of a set.
* Have them **demonstrate** by drawing fractions of a set using either their iPads or paper and demonstrate.
 |   collaborate, communicate analyze, synthesizecritical thinking evaluate, leverage create, publish citizenship |
| **Differentiation** |
| **Adaptations:** * Any student needing adaptations or support can **Replay** the screencast [**Fractions of a Whole**](https://www.youtube.com/watch?v=C6iG4YGy3jI) **and Fractions of a Set** as needed.
* Continue having students play with counters or paper plates to develop greater ‘fraction of a set’ awareness.
 | **Enrichment:** * Have students determine when a person might want to find a fraction of a set in the ‘real world’?
* Have them recreate a new set of fraction cards for the cooperative game.
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| **Assessment:** * Have these students work through the ‘step by step’ activity sheet.

Teacher rotates, listens, and records students’ successes and needs as they work to discover fractions of sets with partners.  |
| **Teacher Reflection:** This concept needs time to practice. Allowing the students to work together allows you to roam, listen and support the students. Bring out any concrete materials to demonstrate fractions of a set.   |

**Name Date**

**Fractions of a Set**

**Step 1** Draw 16 pies.
Use a circle to show each pie.

**Step 2** How many pies make up  of 16? \_\_\_\_\_\_\_\_\_\_\_\_

 Colour these pies brown to show apple pies.

**Step 3** How many pies make up  of 16? \_\_\_\_\_\_\_\_\_\_\_\_

 Colour these pies blue to show blueberry pies.

**Step 4** How many pies are left that are not apple or blueberry? \_\_\_\_\_\_\_\_\_\_
How do you know?

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Cooperative Game

