|  |
| --- |
| **Math 4** |
| **Subject: Math****Unit: Relating Fractional Parts of Different Wholes** |
| **Learning Target:**  Students will explore identical fractions for different wholes and different sets. |
| **Curriculum Outcomes:** **N8** Students will model and explain that for different wholes, two identical fractions may not represent the same quantity. |
| **Screencast Support:**  [Relating Fractional Parts of Different Wholes](https://www.schooltube.com/video/01f4e564483547aaa628/KJohnson%20Math%20Gr.%204%20Unit%205%20Lesson%205%20Relating%20Fractional%20Parts%20of%20Different%20Wholes%20and%20Sets)  |
| **Resources/AT Tips:** **-Screencast** – Relating Fractional Parts of Different Wholes -iPads- strips of paper - numberlines -fraction strips – visual comparison -Showme App  -Explain Everything App  |
| **Lesson Procedure** | **21st Century Skills** |
| **I do:** **Activate Prior Knowledge*** Display each of the Cuisenaire Rods **or** the fraction [comparison strips](#comparisons) using the interactive tools on the Smartboard **or** use the concrete rods in the classroom. Ask students to explore them to determine parts of a whole. (halves, thirds, etc)
 |  find, validate remember, understand  communicate  |
| **You do:*** As an example, use the tenths fraction comparison chart below. This visually demonstrates the fraction comparison to benchmarks 0, 1/2, and 1.
* Present an orange rod as one whole. Ask students to find a rod that shows ½ of the rod. Draw a picture to show your thinking.
* Ask them to seek out other wholes and fractional parts by exploring rods.
 |   collaborate, communicate analyze, synthesize  |
| **We do:** * **Working with a partner**, have students locate the other rods so one rod represents ½ of the other rod.
* Have students compare the rods that represent one half. Have them compare the rods that represent one whole. Ask them to **draw** what they discover, then **discuss** their findings.

View the [**screencast**](https://www.schooltube.com/video/01f4e564483547aaa628/KJohnson%20Math%20Gr.%204%20Unit%205%20Lesson%205%20Relating%20Fractional%20Parts%20of%20Different%20Wholes%20and%20Sets) , **Relating Fractional Parts of Different Wholes.*** After viewing screencast, have students’ work with a partner to complete questions 1,2, and 3 from the textbook, p.187.
 |   collaborate, communicate analyze, synthesize critical thinking evaluate, leveragecreate,  citizenship |
| **We share:*** Have students discuss and present their comparison strip findings.
* Students can draw fraction representations using the apps mentioned above.

Students should determine that the size of the fraction is related to the size of the whole. |   collaborate, communicate analyze, synthesizecritical thinking evaluate, leverage create, publish citizenship |
| **Differentiation** |
| **Adaptations:** * Any student needing adaptations or support can **use other tools** such as string to help them understand that the size of the whole determines the size of the fraction.
* Have students work with a partner and explore further the Cuisenaire Rods so they can build a better understanding by building and visually representing parts of a whole.
 | **Enrichment:** * Students ready for enrichment can use additional paper strips to show other fractions, and then determine whether they are close to 0, ½, or 1.
 |
| **Assessment:** Ask students to name a fraction between ½ and 1, but closer to 1. Have them draw a picture to show the fraction on paper or use the apps **Explain Everything or Showme.** Have them explain how they chose the fraction to draw.Teacher rotates, listens, and records students’ successes and needs as they work to discover fraction benchmarks. |
| **Teacher Reflection:** Make sure the students are aligning one end of their fraction strip with 0 on the number line.Allowing the students to work together allows you to roam, listen and support the students. This further informs the direction of your instructional strategies.  |

Number Lines











**Pa****per** **Strips**

**Fraction Strip Compar****isons**

