

Size of Solar System vs. Size of Our Galaxy

Summary

Students will use an informational text to learn about the concept and practice their mathematical reasoning skills.

Time Frame

1 class periods of 45 minutes each

Group Size

Pairs

Materials

copies of [reading](#)(attached)

Instructional Procedures

Ask students to pair/share and discuss what a ratio is and why we use them.

Discuss the answers the pairs come up with. Provide several examples (boys vs girls in classroom, points earned vs points possible on an assignment).

Remind students that astronomical distances and sizes are difficult to understand and that a ratio sometimes makes them more manageable.

Ask students to show how the statement: "The Solar System is .0032% the size of the Milky Way" was mathematically calculated. They should come up with something like this (from the reading):

Now ask students to work in groups to model this ratio with real objects. See what they come up with. For example: If \$100,000 represented the Milky Way, the solar system would be less than .32 cent. in size

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)