

Instructional Lesson Plan

Content Area(s)/Course/Grade Math Grade 6

Unit: Represent and Solve Equations and Inequalities.

Lesson Topic:
Represent and Solve Equations and Inequalities.

Approx. Date/s:
January

Diversity Integration Topic:
Use equations and inequalities to determine the amount of vehicles that can be supported by a bridge.

NJSL Standard/s:

- **6.EE.B.5:** Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
- **6.EE.B.6:** Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
- **6.EE.B.7:** Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all nonnegative rational numbers.
- **6.EE.B.8:** Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a realworld or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.

Textbook, Materials, Resources:
Computer to research bridges, worksheet

Lesson Objective:

Students will be able to determine the amount of vehicles that can be on a bridge at one time using an inequality to solve.

Instructional Delivery

Culturally Responsive Teaching strategy:
Making Learning contextual: Connecting to real world situations

Procedures:

- Teacher will go over how engineers have to research how much weight a bridge can hold in order to know how many vehicles the bridge can support and the different types of bridges.
- Students will research a bridge from one of the countries their family is from.
- They will research about the type of bridge, the amount of weight this bridge can hold and if the bridge has been closed before due to mother nature.
- The students will then determine how they can make the bridge safer. Using equations and inequalities the students will determine if the type of bridge they chose is the best, but looking up information on two other types of bridges.

Assessment/Evaluation

Formative/Summative:

Teacher will grade turned in worksheets and projects

Closure:

Students will have a class discussion on what they learned from the different types of bridges in the class

Teacher's Name submitting plan: Math Department

Date submitted:12/12/22