

HUGK12 Activity

Title: *How old am I?*

Author: Lauren Denkins- Taffe

DCPS Standards:

Goals:

Students will understand how dimensional analysis is used in everyday activities and is not just used in scientific experiments.

Objectives:

1. Do a simple dimensional analysis problem by finding out the number of seconds in the students age..
2. Perform a simple dimensional analysis conversion by determining the number of pizzas needed for a pizza party by knowing the number of slices and the cost of the pizza, how many people are attending the party and how much each person will eat. All values are determined by the students.

Prerequisite Knowledge:

Background

Dimensional analysis is very important to scientist in solving problems and making measurements. Because dimensions are key in understanding units and the correctness of a measurement, scientist use dimensional analysis to convert units to useable forms.

Essential Questions:

1. Do you know off the top of your head how many seconds are in 14 years?
2. How can we break down years to eventually find seconds?

Laboratory Materials:

White board
Calculator
Markers

Differentiating Instruction

English Language Limited (ESL) students should have no problems with this activity.

Rationale:

This activity is designed to have students become familiar with dimensional analysis in everyday life.

Research Activity:

Students will participate in calculating the answers by determining the age to convert and the pizza party factors needed for calculation.

Then the students will use a calculator to find the answers.

We will discuss the answers to go over the logic.

Evaluation and Assessment:

Students will be able to create their own dimensional analysis word problems and solve them correctly. They will share them with the entire class.