

MATHEMATICS

SEPT 2013



Time: 15-30 min



CCSS.Math.Content.8.EE.B.5

Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.



EXTENSION:

For more info, see page 15:
http://pacificaquaa.org/Aqua_Curriculum.pdf

Graphing Proportional Relationships

Practical application of classroom knowledge.

Scenario: 24 hours ahead of time place bucket of water next to aquaponics system. The following day, students measure: 1) the dissolved oxygen and 2) the temperature of the water in the bucket as well as the water in the aquaponics system.

Students should express the data in both a linear and bar graph.

See Extension Resources for information on how temperature affects the metabolic rate of organisms. Discuss use of oxygen by organisms in the aquaponics and the relationships between dissolved oxygen and temperature. Why are levels different? What is causing the difference?