Science of Life Explorations

The Fruit Belt:

Fruity Math
Fruity Math

1. One medium apple has 1/5 of our daily need for dietary fiber. It gives about 5 grams of dietary fiber each day.

Using multiplication, how many grams of dietary fiber do we need each day?

2. You harvested some apples, grapes, and strawberries from your orchard and vineyard. You decide to share them with your two of your friends. You divide your fruit into three groups.

How many fair (equal) shares of strawberries are shown?  
How can you make the portions fair?

Are the grapes divided fairly?  ______  Are there any fair shares?_____

How many fair shares of apples are shown? ______

3. Your apple orchard did very well this fall. You decide to sell 3/8 of your apples to be made into juice, 1/8 of your apples as sliced and frozen, 3/8 of your apples are made into applesauce, and 1/8 of your apples are made into jelly.

Color in the pie chart using:

Blue for juice
Red for sliced and frozen
Yellow for applesauce
Green for jelly
* New York is:
  - in 2nd nationwide for APPLE production
  - in 3rd nationwide for GRAPE production
  - in 7th nationwide for STRAWBERRY production

* The top 5 “most produced” apple varieties in NY are Empire, Idared, McIntosh, Red Delicious, and Red Rome.

* 57% of NY apples are processed into juice, cider, sauce, pie filling, canned/dried/frozen slices, vinegar, jelly, apple butter, and mince meat.

* Cortland, Empire, Jonagold, and Macoun apple varieties were created at the NY State Agricultural Experiment Station in Geneva, NY.

* To slow down oxidation of cut apples we can cook them, add an acidic juice to them, or keep them in water.

* Apples and strawberries have no fat, sodium or cholesterol in them.

* Grapes have phytonutrients which help prevent cancer and heart disease.

* Strawberries have 140% daily requirement of vitamin C and 20% daily requirement of Folic Acid (B-9).

* Removing blossoms on strawberry plants and pruning grape vines help the plants grow bigger and produce more fruit.

* Table grapes are good tasting and eaten fresh, wine grapes are better for fermenting and making wine.

* Three types of strawberries: June-bearers, double-cropping, and day-
Fruity Math

1. One medium apple has 1/5 of our daily need for dietary fiber. It gives about 5 grams of dietary fiber each day.

Using multiplication, how many grams of dietary fiber do we need each day? 

5 grams \times 5 = 25 

25 grams 

2. You harvested some apples, grapes, and strawberries from your orchard and vineyard. You decide to share them with your two of your friends. You divide your fruit into three groups.

How many fair (equal) shares of strawberries are shown? zero

How can you make the portions fair? give two to each

Are the grapes divided fairly? no Are there any fair shares? no

How many fair shares of apples are shown? three

3. Your apple orchard did very well this fall. You decide to sell 3/8 of your apples to be made into juice, 1/8 of your apples as sliced and frozen, 3/8 of your apples are made into applesauce, and 1/8 of your apples are made into jelly.

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Fruity Math:

Students should complete this page individually. Discuss the idea of a “fair share” and what it means. What can be done to divide the grapes fairly? Students may consider removing the grapes from the stems of the fourth bunch and distributing them equally. means each column in a box gets an equal amount of fruit. Can everything always be divided equally? Encourage students to discuss ‘fairness’.