



NAME _____

Directions: Answer the following questions using the information provided. Show your work. If additional space is needed, please attach a separate piece of paper and correctly identify the problem it correlates to. If you are creating a table or graph, be sure to include titles and labels.

The African fruit bat and Indian straw bat natural habitat is in East Africa, In the wild, it feeds on juice from fruits: mangos, bananas, papayas, figs, sapotes and guavas. If you were a zookeeper this is one possible menu you might use in the preparation and feeding of the bat colony (about 130 bats per day):

FRUIT BAT MENU	Grams	Kilograms (kg)
Apples	1950g	1.95 KG
Pear	1150g	1.15 KG
Oranges	900g	0.9 KG
Peeled banana	2300g	2.3 KG
Grapes	900g	0.9 KG
Yam (cooked)	775g	0.775 KG
Cantaloupe (not peeled)	2000g	2.0 KG
Carrot (cooked)	775g	0.775 KG
Romaine	850g	0.850 KG
Kale	250g	0.25 KG



1) Convert each ingredient into kilograms. Label each decimal answer with the food name.
(example: 1950g of apples = 1.95kg of apples)

2) Note the amount of romaine and kale in the menu. If these two foods come in 1 kilogram (kg) packages, what percent of the whole package would the zookeeper use in one day? Show your work and label answers for each food.

0.85 X 100 = 85% OF ROMAINE

0.25 X 100 = 25% OF KALE

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- 3) The colony of fruit bats has dramatically decreased in size! It has gone from 130 bats to 97.
- a. Using estimation, what would be a reasonable answer for the amount of cooked yam needed to feed ninety-seven bats.

$97 / 130 = .746 \times 100\% = 74.6$ OR ABOUT 75% OF THE COLONY IS LEFT
75% OF YAMS = $0.775 \times 0.75 = 0.580$ KG

- b. Use your calculator to design a menu for this colony of ninety seven bats. **(a separate sheet may be needed)**

Apples	1.46 KG
Pear	0.860 KG
Oranges	0.675 KG
Peeled banana	1.725 KG
Grapes	0.675 KG
Yam (cooked)	0.580 KG
Cantaloupe (not peeled)	1.5 KG
Carrot (cooked)	0.580 KG
Romaine	0.6375 KG
Kale	0.1875 KG

- 4) a. What operation (+, -, x, divide) would you use to determine how much food it would take to feed 130 bats instead of 97?

_____ **MULTIPLICATION(_X_)** _____

- b. Figure out more than one method to solve this problem. Show your work for each method. Use the oranges as an example.

ANSWERS COULD VARY. HERE IS ONE POSSIBLE METHOD:
ORANGES = $0.9 \text{ KG} \times 75\% = 0.675 \text{ KG}$

- 5) You must present your menu for the larger colony of bats to a class of 7th graders visiting the Zoo. Design a chart with pictures for each food or ingredient. It should make an attractive, eye-catching display to illustrate how zookeepers design and prepare menus for their animals. **(a separate sheet may be needed)**

ANSWERS WILL VARY