

# Food Label Relay

**Skills:** Math, Language Arts

**Objective:** Students will use math skills while learning about good nutrition and fitness.

## Background

Food labels tell us exactly what is in the food we are eating. Some people need to know this because they have health problems and have to avoid some foods. Some people can't eat certain foods for religious reasons. Most people who read labels just want to know what's in their food so they can avoid foods that are bad for them and get plenty of the foods that are good for them.

Until recently, most food manufacturers were required to do no more than provide a list of all the ingredients that went into their products. Some didn't even have to do that. The makers of standard foods like macaroni, ketchup and jelly weren't required to list all their ingredients as long as they followed a certain recipe. Jelly makers didn't have to say what all went into their jelly, as long as they made sure that they used at least 45 percent fruit. If they used any less, they couldn't call it jelly. Most people knew that jelly was about half fruit and half sugar, because not too long ago many people made their own jelly.

Even though the recipe for standard foods haven't changed much, people these days aren't so familiar with what goes into them, so they want the ingredients listed on the package. A law passed in 1993 says even manufacturers of standard foods have to list all their ingredients.

The first ingredient on the list will be the main ingredient. On a jar of jelly, the first ingredient listed may be fructose or sucrose. Those are two kinds of sugar. If they are first on the list you know there is more sugar in the jelly than anything else. The next ingredient on the list will probably be some kind of fruit. That means after sugar there is more fruit than anything else.

Another law says food manufacturers have to show how much of the U.S. Food and Drug Administration's recommended daily allowances (RDA) are in one serving of the food. Recommended daily allowances are what nutrition experts say we need to eat every day to be healthy.

## Language Arts

1. Bring in an assortment of print advertisements or taped commercials for all kinds of food, and lead a discussion about food advertising:
  - What makes you want to buy food products you see advertised?

## P.A.S.S.

### GRADE 3

**Math Process**—1.1,2,3,5;  
5.1,2

**Math Concept**—3.2a; 5.1ab

**Reading**—3.2; 6.1c

**Writing**—2.1

**Visual Literacy**—1.1

### GRADE 4

**Math Process**—1.1,2,3,5;  
5.1,2

**Math Concept**—3.2a; 5.1a

**Reading**—2.2; 5.2c

**Writing**—2.1

**Visual Literacy**—1.1

### GRADE 5

**Math Process**—1.1,2,3,5;  
5.1,2

**Math Concept**—5.1a

**Reading**—2.2; 5.1ce,2a

**Writing**—2.2

**Visual Literacy**—2.1,4

## Materials

Nutrition facts labels from a variety of foods—cereals, canned vegetables, canned fruits, frozen meals, juices, drinks, etc., enough for at least five labels for three stations. (Make sure some are from cans of beans and high fiber cereals.)

dried beans, peas and lentils, mixed together in two containers

six empty containers (three per team)

two tablespoons

## Don't Spill the Beans!

1. Divide the class into two teams: "Beans" and "Lentils."
2. Designate a starting point and finishing point at least 10 yards apart.
3. Each group forms a line behind the starting point.
4. Students at the beginning of the line take a tablespoon of beans.
5. The leader shouts "LEGUMES" to start the relay.
6. Each student carries the tablespoon of beans to the finishing point.
7. For variation, students may take giant steps, walk sideways, etc.)
8. When everyone finishes, have students examine the contents of their containers.
9. Lead a discussion about the different kinds of beans, peas and lentils. (Has anyone eaten them? What are Your favorites? How do they taste?)

Colors? Special offers? The models or actors used?

—Are you more swayed to buy a food product by packaging or by what your families or peers like?

—Have students write short essays about the impact of packaging on buying choices.

2. Read and discuss background.

—Show students the food labels you have brought to class and review the nutrition facts found on them.

—Hand out Student Worksheet A.

—Provide each student or pair of students with one of the food labels.

—Students will work individually or in pairs to complete the worksheet.

## Math

1. Divide nutrition facts labels (See list of materials on next page) among three stations for your Food Label Relay.

—Separate the class into three groups, and have each group gather at one of the stations.

### Relay Stop # 1:

—Hand out Student Worksheet B.

—Read and discuss the information on the worksheet about fat.

—Students will use the food labels to complete the worksheets.

—Students will share their results and explain what adjustments they had to make to their menus to keep the fat within limits.

—Students will pretend they are using jump ropes (like a prize fighter), and jump their way to the next stop. (Rotate stations.)

### Relay Stop # 2:

—Hand out Student Worksheet C.

—Read and discuss the information on the worksheet about fiber.

—Have students complete the worksheets.

—Great job. You are a Fiber Olympian. March in double time to your next station to learn about exercise.

### Relay Stop # 3:

—Hand out Student Worksheet D.

—Read and discuss the information and the instructions.

—Students will work in groups to complete the math problems.

—When everyone in the group has completed the work, students will form a circle and do the exercises as instructed on the worksheet.

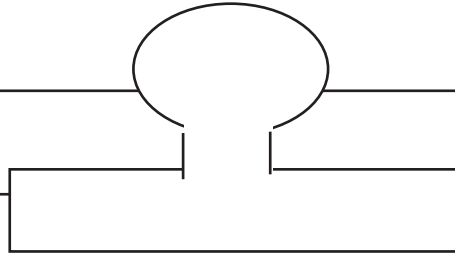
(Activity adapted from the American Heart Association Children's Pages.)

Name \_\_\_\_\_

# Food Label Relay

A

Fill out the survey form, using the information from the package of your choice.



1. What is the name of your product? \_\_\_\_\_

2. Where is it made? \_\_\_\_\_

3. What is the name of the company that makes this product? \_\_\_\_\_

\_\_\_\_\_

4. How many servings are in a container? \_\_\_\_\_

5. Would you buy this product? (circle one) Yes No

Why, or why not? \_\_\_\_\_

\_\_\_\_\_

6. Is the packaging of the product appealing to you? (circle one) Yes

No

Why, or why not? \_\_\_\_\_

\_\_\_\_\_

7. Are there any vitamins or minerals listed on the package as providing 100% of the USDA daily requirements? (circle one) Yes No

What are they? \_\_\_\_\_

\_\_\_\_\_

8. Are there any vitamins or minerals listed on the product as contributing 0%? What are they? \_\_\_\_\_

9. How many grams of fat are in this product? \_\_\_\_\_

10. How many grams of fiber are in this product? \_\_\_\_\_

Name \_\_\_\_\_

# Fitness Relay

B

Look at the food labels. Find the grams of fat. Write the name of the food and the grams of fat it contains.

Food	Grams of Fat

Kids need 2,200 calories every day to be healthy. These calories should come from a variety of foods, including grains, vegetables, fruits, meat, nuts, and dairy products. There are no “bad” foods, but there are some foods that we should only eat in small amounts. Fats are one of those foods. Everyone needs some fat, but not very much. The recommended amount is no more than 30 percent of your diet. For a kid, that comes to about 73 grams a day.

Create a menu, using the foods you have listed above. Pay attention to the amount of fat. You should have no more than 73 grams total.

	Fat Grams
Breakfast	
Snack	
Lunch	
Snack	
Dinner	
	Total Fat Grams

Congratulations. You are a Fat Fighter!

Name \_\_\_\_\_

# Food Label Relay

C

Fiber is an important part of any diet. Fiber is carbohydrates that cannot be digested. It is present in all plants eaten for food. That includes fruits, vegetables, grains, and legumes (beans and peas).

To calculate the number of grams of fiber you should eat, add five to your age.

Your age: _____
How many grams of fiber do you need each day? _____
$+ 5$

1. Choose three foods from the food labels.
2. Locate the number of grams of fiber from each food and add them together.
3. How many grams of fiber did you add to your diet?

Food	grams of fiber
How many grams of fiber did you add to your diet?	

Now choose five foods that have more than two grams of fiber in one serving.

Food	grams of fiber
How many grams of fiber?	

Congratulations. You are a Fiber Olympian!

Name \_\_\_\_\_

# Fitness Math

D

To keep your heart healthy, you need to exercise from 30 to 60 minutes every day. Use the back of this paper to figure out the answers to these fitness math problems. Number the problems.

1. If you exercised 30 minutes for five days a week, how many minutes would you exercise?

\_\_\_\_\_minutes

2. If you exercised 30 minutes for five days a week, how many hours would you exercise?

\_\_\_\_\_hours

3. If you exercised 30 minutes for seven days a week, how many minutes would you exercise?

\_\_\_\_\_minutes

4. If you exercised 30 minutes for seven days a week, how many minutes would you exercise in a 30-day month?

\_\_\_\_\_minutes

How many minutes did you exercise yesterday?

\_\_\_\_\_minutes

How many minutes do you plan to exercise today?

\_\_\_\_\_minutes

What is your favorite way to exercise (walking, running, sports, etc.)?

\_\_\_\_\_

When everyone in your group has finished the math problems, form a circle.

Give the person to your left a pat on the back.

Touch your toes, and reach as high as you can in the air.

Repeat this five times.

Now give the person to your right a pat on the back.

Great Job. You are a Healthy Heart Champion!