

SAFE ROUTES IN THE CLASSROOM

ACTIVITIES FOR GRADES 5-6



Putting kids on a healthier path

Check it out at www.SafeRoutesNE.com.

TEACHING WITH THIS DOCUMENT

Each activity presented in this document is tied to one or more of Nebraska's academic standards. How you want to work these activities into your lesson plan is up to you. To achieve maximum effectiveness, you may want to consider:

- Timing these activities to coincide with a Walk to School Day or similar event at your school.
- Spreading activities out over a full week.
- Adding a reward or incentive program for students who walk or bike to school.
- Sending information home to parents about the importance of walking or biking to school.
- Keeping things fun as well as informative.

WHAT IS SAFE ROUTES NEBRASKA?

At Safe Routes Nebraska, we're committed to helping build safe routes to school, so kids can walk and bike more . . . getting the exercise they need for happy, healthy lives. Here's how we do it:

- Funding projects to make communities more walker/biker-friendly
- Educating teachers, students, parents, and communities on safe walking and biking
- Encouraging kids to walk or bike to and from school—after all, it's fun!

ACTIVITY 1

MAP MAKING

OBJECTIVES:

- Students will appraise different travel routes and select the most appropriate choice.
- Students will demonstrate their understanding of maps by using legends, symbols, orientation arrows, grid systems, and scale to create an accurate map.
- Students will translate their familiar surroundings to a two-dimensional rendering.

NEBRASKA STATE STANDARDS:

Social Studies/History 8.4.6 – Students will improve their skills in historical research and geographical analysis.

Reading/Writing 8.3.2 – Students will use multiple presentation styles for specific audiences and purposes.

TIME/DURATION: 1–2 weeks

MATERIALS:

- Pedometers (students may supply their own, but you should have a few on hand so they can measure distance in steps)
- Map of your community to show students

INSTRUCTIONS:

1. After using your community map to explain maps and all the parts of a map to students, instruct them that they'll be creating a map of their own.
2. Students should consider all possible routes to school and select the one that best balances safety and convenience. Once they've selected a route, they'll need to walk the route with a pedometer to determine the distance in steps.
3. With this route as the centerpiece, students will create a map with their homes at one end and the school on the other (students who live too far from school will use the appropriate park-and-walk site as their starting point).

<<< Continue on the next page. >>>

4. The map should include a compass rose to convey orientation, symbols to represent roads and landmarks, a legend to translate the symbols, and a scale bar that conveys that real distance in steps to the map distance in inches. Translating distance may be tricky for students. This may be something that the class learns to do as a group.
5. Between the two locations, students should note major roads, important historical landmarks, parks, stores, churches, libraries, etc.
6. On the due date, each student should present his or her map to the class and tell a few things about the landmarks on the route.
7. Next, discuss the number of steps required to walk the route and how that compares to the 10,000 minimum steps they should each walk per day.

ACTIVITY 2

FOOD DIARIES

OBJECTIVES:

- Students will record their dietary intake.
- Students will recognize the importance of good nutrition.
- Students will analyze their own consumption and compare it to the ideal put forth by the food pyramid.

NEBRASKA STATE STANDARDS:

Reading/Writing 8.2.5 – Students will demonstrate the ability to use self-generated questions, note taking, summarizing, and outlining while learning.

Science 8.7.1 – Students will develop an understanding of personal health.

Mathematics 8.2.1 – Students will add, subtract, multiply, and divide decimals and proper, improper, and mixed fractions with uncommon and common denominators with and without the use of technology.

Mathematics 8.5.1 – Students will collect, construct, and interpret data displays and compute mean, median, and mode.

TIME/DURATION: 2 weeks

MATERIALS:

- Journaling notebook for each student (student should provide own)
- Poster of the food pyramid (<http://www.mypyramid.gov/downloads/MiniPoster.pdf>)
- A copy of the provided My Food Analysis sheet for each student

INSTRUCTIONS:

1. Explain the food pyramid to your students, focusing on portion sizes and the amounts of each food group recommended:
 - Baseball – about 1 cup vegetables or fruits
 - A rounded handful – about $\frac{1}{2}$ cup
 - Tennis ball – about $\frac{1}{2}$ cup
 - Deck of cards – about 3 ounces of meat, fish, or poultry

<<< Continue on the next page. >>>

- Golf ball or large egg – about $\frac{1}{4}$ cup
 - Thumb tip – about 1 teaspoon
 - Whole thumb – about 1 tablespoon
 - Six dice – about 1 ounce of cheese
 - Check book – about 3 ounces of fish
2. Instruct your students to begin tracking everything they eat in their food diaries. Record should include the name and amount of food eaten as well as its food pyramid category.
 3. Aside from a record of every item eaten, students should write a daily entry on how the food they've eaten has affected their moods and how they feel physically. For example, did eating too much at one meal cause the student to feel tired? Did eating too much sugar cause their stomach to hurt? Did a grainy snack make them feel more calm?
 4. Also have the students write about what they were doing while eating. Were they watching TV? Sitting at a table with family?
 5. At the end of the two weeks, walk through the "My Food Analysis" sheet with the class. Allow students to complete the analysis in class so they can ask for help as needed.

NAME: _____

STUDENT WORKSHEET

MY FOOD ANALYSIS

Instructions:

Using your food journal, record the amounts you ate of each food group. Once you've recorded everything, calculate your average consumption for each food group and compare it to the ideal.

RECOMMENDED AMOUNTS:

Grains – 6 ounces (about 3 cups)

Vegetables – 2½ cups

Fruits – 1½ cups

Milk – 3 cups

Meat/beans – 5 ounces

DATE	GRAINS (ounces)	VEGGIES (cups)	FRUITS (cups)	MILK (cups)	MEAT/ BEANS (ounces)	OIL/FAT (ounces)
Day 1						
Day 2						
Day 3						
Day 4						
Day 5						
Day 6						
Day 7						
Day 8						
Day 9						
Day 10						
Day 11						
Day 12						
Day 13						
Day 14						
Average per day						
Recommended per day	6 ounces	2.5 cups	1.5 cups	3 cups	5 ounces	1 or less

1. How do your averages compare with the recommended amounts?
2. What can you do to bring your eating habits closer to the recommendations?
3. What are some consequences of eating an unbalanced diet?

ACTIVITY 3

TIME IN A BOTTLE

OBJECTIVES:

- Students will create an imaginative story based on the real-life route between their house and school.
- Students will collect items as “evidence” to substantiate their experiences to classmates.

NEBRASKA STATE STANDARDS:

Science 8.1.2 – Students will develop an understanding of evidence, models, and explanations.

Reading/Writing 8.2.1 – Students will write using standard English (conventions) for sentence structure, usage, punctuation, capitalization, and spelling.

Reading/Writing 8.2.2 – Students will write compositions with focus, related ideas, and supporting details.

Reading/Writing 8.2.4 – Students will demonstrate the use of multiple forms to write for different audiences and purposes.

Reading/Writing 8.3.2 – Students will use multiple presentation styles for specific audiences and purposes.

TIME/DURATION: 1 week

MATERIALS:

- A plastic milk jug for each student (students can provide)

INSTRUCTIONS:

1. Instruct students to create a fictional adventure story about biking or walking the route between their house and school.
2. Once they've completed their stories, students should spend the rest of the week collecting “evidence” from the route to substantiate the story. For example, if one student writes about having to climb a tree to escape a monster, he could collect leaves and bark from the tree. If a student writes about meeting a talking frog, she could collect pond water and lily pads.
3. Students should assemble all their “evidence” in a clear plastic milk jug. They may also add their own touches such as pictures of story characters, miniature toys that convey an action used in their story, etc. They should use their imagination to make the milk jug as clear a visual conveyance of their story as possible.
4. On the last day of the week, have students bring their milk jugs to the front of the class and present their story.

ACTIVITY 4

COMIC STRIP

OBJECTIVES:

- Students will compose an original story that teaches a lesson about walking/biking safety.
- Students will illustrate the story in comic form.
- Students will present the story to younger students, thereby teaching them about walking/biking safety.

NEBRASKA STATE STANDARDS:

Reading/Writing 8.2.1 – Students will write using standard English (conventions) for sentence structure, usage, punctuation, spelling, and paragraph indentation.

Reading/Writing 8.2.4 – Students will demonstrate the use of multiple forms to write for different audiences and purposes.

Reading/Writing 8.3.2 – Students will use multiple presentation styles for specific audiences and purposes.

Science 8.7.1 – Students will develop an understanding of personal health.

TIME/DURATION: 1 hour

MATERIALS:

- A copy of the provided My Comic Strip sheet for each student

INSTRUCTIONS:

1. Print out one comic book sheet for each student.
2. Instruct students to write a 6-frame comic story on a separate sheet of paper. The story should teach a lesson about walking/biking safety.
3. Once their story is complete, they may begin illustrating the story on the comic book page.
4. When the illustrations are complete, assign each student in your class to a student in kindergarten or first grade. Your students should use the comic story they've created to teach a lesson about biking/walking safety to the younger students.

NAME: _____

STUDENT WORKSHEET

MY COMIC STRIP

Title: _____

ACTIVITY 5

PHYSICAL FITNESS REPORTS

OBJECTIVES:

- Students will research and analyze information about health through activity and healthy diet and about the current obesity epidemic.
- Students will draft a research paper on the topic.
- Students will make large-scale recommendations on halting the obesity epidemic in the United States.

NEBRASKA STATE STANDARDS:

Reading/Writing 8.1.3 – Students will identify and classify different types of text.

Reading/Writing 8.2.1 – Students will write using standard English (conventions) for sentence structure, usage, punctuation, spelling, and paragraph indentation.

Reading/Writing 8.2.4 – Students will demonstrate the use of multiple forms to write for different audiences and purposes.

Reading/Writing 8.3.2 – Students will use multiple presentation styles for specific audiences and purposes.

Science 8.7.1 – Students will develop an understanding of personal health.

TIME/DURATION: 3 weeks

MATERIALS:

- None

INSTRUCTION:

1. Give students some brief background information about the current obesity epidemic among children in the United States.
2. Task them with finding new solutions.
3. Assign students a 5- or 6-page report about obesity, its causes, ways to prevent and cure it, and why the United States is currently experiencing an epidemic.
4. The final portion of the report should consist of recommendations from the students on eliminating the obesity epidemic and promoting better eating, more activity, and overall better health among children.
5. Upon completion, instruct each student to develop a 5-minute presentation with visual aids about one of the recommendations.

BICYCLE SAFETY BASICS

Instructions:

Read the following passage about bicycle safety and then answer the questions below.

SMART BIKING

Safe behavior is very important for bicyclists. When you're riding in an area where there are cars, there is always the danger of an accident. Knowing the rules of bicycle safety can keep you from getting hurt.

One way to ensure your safety while biking is to always wear a certified bike helmet. Make sure the helmet is on properly. It should sit on your head parallel to the ground. Helmets should never tip too far back or too far forward. The helmet straps should form a "V" shape around each ear.

A second smart biking tactic is to be visible to cars. Your bike should have reflectors so cars can see you at night. Try not to bike alone. Two bikes are easier to see than one.

The last way to bike safely around cars is to ride predictably. Cars should always know what you're going to do next. One way to ride predictably is not to make any sudden changes in your course. Another way to ride predictably is to use hand signals. See the pictures below to learn how you can signal to cars so they'll always know your next move.



LEFT TURN



RIGHT TURN



STOPPING

Now that you know some smart biking tips, be sure to use them to stay safe next time you're on your bike.

<<< Continue on the next page. >>>



NAME: _____

STUDENT WORKSHEET

Questions:

1. Why is it important to know the rules of bike safety?
2. What is the proper way to wear a bike helmet?
3. Why are reflectors important?
4. What are two ways to ride predictably?

FEEL THE BURN!

Instructions:

Based on the facts presented, solve the problems below. Round your answer to two decimal places.

Fact: A calorie is a measurement of energy. Calories are burned through physical exercise. Calories are consumed from food.

Fact: In order to lose weight, you must burn more calories than you consume.

Fact: 3,500 calories = 1 pound. If you burn 3,500 calories, you lose a pound. If you consume 3,500 calories, you gain a pound.

PROBLEM 1: ANGIE

Angie walked to and from school all five school days this week. She also played soccer at recess three days this week and played basketball on the other two school days and on Saturday and Sunday. Angie burned a total of 2,200 calories on the days she played basketball, and 2,500 calories on the days she played soccer. Each day, Angie consumed 1,800 calories.

A) How many calories did Angie consume this week?

B) How many calories did Angie burn this week?

C) Did Angie gain or lose weight? How much?

PROBLEM 2: ROBERT

Robert rode his bike to and from school twice this week. His parents drove him three days. On the days he biked, Robert played softball with friends after school. When he got a ride, he played computer games. On the weekend, Robert went hiking with his father one day and played on his computer one day. On the days that Robert played computer games, he burned 1,800 calories. On the days he played softball, he burned 2,500 calories. On the day he went hiking, he burned 2,800 calories. Each weekday, Robert consumed 2,200 calories. On the weekend, he consumed 2,500 calories each day.

- A) How many calories did Robert consume this week?

- B) How many calories did Robert burn this week?

- C) Did Robert gain or lose weight? How much?

PROBLEM 3: COMPARISON

- A) In a 40-week school year, how much will Robert have gained?

- B) In a 40-week school year, how much will Angie have lost?

- C) What can Robert learn from Angie?

TEACHER'S KEY:

FEEL THE BURN

Fact: A calorie is a measurement of energy. Calories are burned through physical exercise. Calories are consumed from food.

Fact: In order to lose weight, you must burn more calories than you consume.

Fact: 3,500 calories = 1 pound. If you burn 3,500 calories, you lose a pound. If you consume 3,500 calories, you gain a pound.

Problem 1: Angie

Angie walked to and from school all five school days this week. She also played soccer at recess three days this week and played basketball on the other two school days and on Saturday and Sunday. Angie burned a total of 2,200 calories on the days she played basketball, and 2,500 calories on the days she played soccer. Each day, Angie consumed 1,800 calories.

A) How many calories did Angie consume this week?

12,600

B) How many calories did Angie burn this week?

16,300

C) Did Angie gain or lose weight? How much?

Angie lost. By burning 3,700 calories, Angie lost 1.06 pounds.

Problem 2: Robert

Robert rode his bike to and from school twice this week. His parents drove him three days. On the days he biked, Robert played softball with friends after school. When he got a ride, he played computer games. On the weekend, Robert went hiking with his father one day and played on his computer one day. On the days that Robert played computer games, he burned 1,800 calories. On the days he played softball, he burned 2,500 calories. On the day he went hiking, he burned 2,800 calories. Each weekday, Robert consumed 2,200 calories. On the weekend, he consumed 2,500 calories each day.

A) How many calories did Robert consume this week?

16,000

B) How many calories did Robert burn this week?

15,000

C) Did Robert gain or lose weight? How much?

Robert consumed more calories than he burned, so he gained 0.29 pounds.

Problem 3: Comparison

A) In a 40-week school year, how much will Robert have gained?

11.6 pounds

B) In a 40-week school year, how much will Angie have lost?

42.4 pounds

C) What can Robert learn from Angie?

Consuming fewer calories and being more active is the only way to lose weight!