

Name: _____ Date: _____ Class/Period: _____

Lesson 7.2: How does the availability of green space in a city impact individual health?

Purpose

In this lesson, you will investigate the activities of three high school students all of whom live in the same city, but in different areas of the city.

Prediction

Think about different areas of your city. Do you think where someone lives in the city influences how physically active they are? Why or why not?

Procedure

1. Three high school students all live in the same city in different areas and they all have the day off. The schedules of the three students are described below.
 - **Student A:**
 - *Location:* Lives 0.2 miles from a small park with basketball courts and a playground. Lives 1 mile from a large park with a pond, large grassy areas, basketball courts, tennis courts, baseball field, soccer field and other activities.
 - *Activities:* In the morning, sits and watches TV (1 hour). Goes across the street to play basketball. Shoots baskets (30 min). Then plays basketball (1 ½ hours). In the afternoon, walks over to the large park (30 min). Sits and hangs out with friends (1 hour 30 min). Talks a walk around the pond (45 min) and throws a Frisbee with a friend (45 min). Walks back home (30 min).
 - **Student B:**
 - *Location:* Lives 0.75 mile from a small park with basketball courts and a playground.
 - *Activities:* In the morning, sits and watches TV (2 hour 30 min) and talks on the phone (30 min). In the afternoon, walks to the park (20 min). Plays basketball (1 ½ hours). Stands around and hangs out with friends (1 hour 50 min). Walks back home (20 min).
 - **Student C:**
 - *Location:* Lives 2 miles from a small park with basketball courts and a playground.
 - *Activities:* In the morning, sleeps late (1 hour) and then sits and watches TV (2 hours). In the afternoon, talks on the phone with friends (30 min). Walks to the pizza shop on the corner (10 min) and sits and hangs out with friends (2 hour 20 min). Walks back home (10 min) and runs into friends. Stands at street corner and talks (40 min).
2. Read the table below to find out how many calories the three students burned for the various activities. All three students weigh approximately 165 pounds so they burned

similar numbers of calories for completing the same activity. Add up the number of calories for each activity to determine the total number of calories for each student.

Results:

| Time of Day | Student A <i>(Close to 2 parks)</i> | Student B <i>(0.75 miles to 1 park)</i> | Student C <i>(2 miles to 1 park)</i> |
|-----------------------|---|--|--|
| Morning | Sitting. 60 min. • Calories = <u>79</u> Basketball shooting baskets. 30 min. • Calories = <u>168</u> Basketball game full court. 90 min • Calories = <u>1233</u> | Sitting. 150 min. • Calories = <u>198</u> Talking on phone. 30 min. • Calories = <u>40</u> | Sleeping 60 min. • Calories = <u>69</u> Sitting. 120 min. • Calories = <u>158</u> |
| Afternoon | Walking 2 mph 105 min • Calories = <u>364</u> Sitting 90 min • Calories = <u>119</u> Frisbee 45 min • Calories = <u>171</u> | Walking 2 mph 40 min • Calories = <u>139</u> Standing 110 min • Calories = <u>163</u> Basketball game full court. 90 min • Calories = <u>1233</u> | Talking on phone 30 min • Calories = <u>40</u> Walking 2mph 20 min • Calories = <u>69</u> Sitting 150 min • Calories = <u>198</u> Standing. 40 min Calories = <u>59</u> |
| Total Calories | | | |

Conclusion

1. How did where the students live impact their activities and number of calories burned?
2. What conclusions can you make about the impact of green space and parks on health?