

## The Shopping Trip

**Task:** Your group needs to get some groceries for the week. You have one car to share and a limited amount of time available to shop. You're on a budget, and want the best quality foods at the lowest prices. There is a supermarket, farmer's market, butcher, and bakery, each with specific hours of operation and at varying distances from the house. Gas is expensive, and thus excess driving should be avoided when possible. Additionally, it is a hot day in July with temperatures over 100 degrees, and certain items cannot be left to spoil or melt in the car. Decide the best way to go about buying all of your groceries, minimizing time and cost, while maximizing quality. Your solution will be scored as follows:

Each item purchased +1 point

Quality bonus +1 point

Lowest priced +2 points

Food spoilage - all points earned for spoiled item

Each ten minutes of shopping/driving - 1 point

For example, an item that can be purchased at a grocery store will earn 1 point. If it is purchased for less money, it will earn 3 points. If it is higher quality *and* cheaper, it will earn 4 points.

In terms of food spoilage, items that need to be refrigerated will spoil in 45 minutes, items that need to be frozen will melt in 30 minutes. Assume that a stop at the grocery store requires 10 minutes plus one minute per item purchased, while a stop at a specialty store requires 5 minutes plus one minute per item purchased.

A guide to where each item may be obtained, and whether or not it spoils or melts is attached.

## Stores:

**Supermarket:** The supermarket has a wide variety of foods that generally are of average quality and price. It is open from 8AM-8PM, but tends to be very crowded. Allow for 10-15 minutes to search for parking. Aisles and check out lanes also tend to be very congested as well, which can add to the amount of time spent shopping. The supermarket is a 6 mile drive for the housemates, which takes roughly 20 minutes with traffic and stoplights.

**Farmer's Market:** The Farmer's Market offers a large selection of high quality produce at reduced prices. It is only open from 6AM-12PM. The Farmer's Market has a limited amount of stock each day, thus the variety lessens as the day continues. Additionally, it becomes more congested after 10:30 AM. It is a 2 mile drive from the house, and takes about 10 minutes with traffic and stoplights.

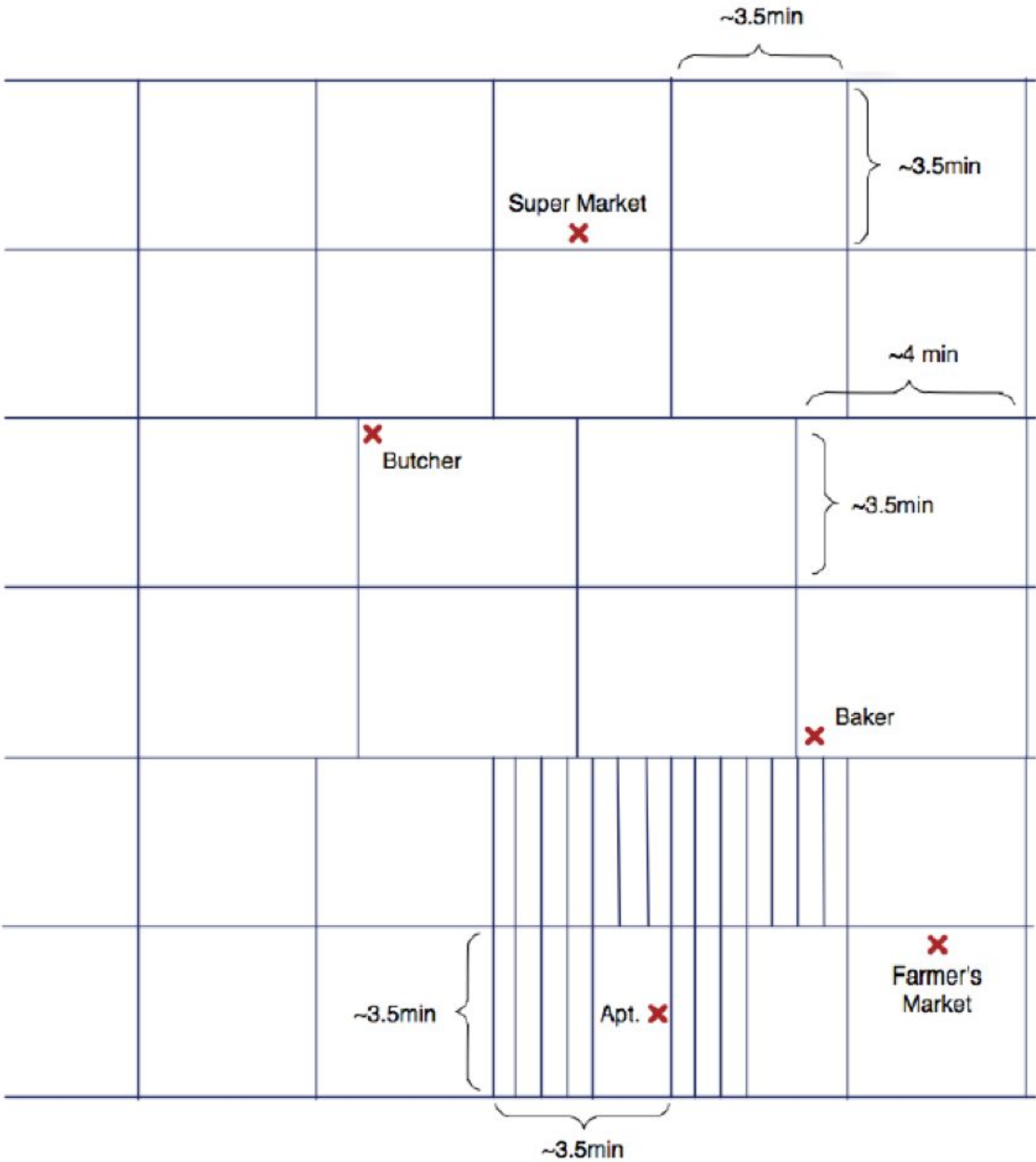
**Bakery:** The Bakery has excellent quality breads and other baked goods, and offers reduced pricing. The Bakery has a large selection, and replenishes its stock throughout the day. It is open from 8AM-4PM and is 2 mile from the house. The drive takes about 7 minutes with traffic and stoplights.

**Butcher:** The Butcher has a wide variety of higher quality meats at lower prices than the supermarket. It is open from 10AM-6PM and is a 2 mile drive from the house, and takes about 15 minutes with traffic and stoplights.

ITEM	Spoils	Melts	Farmers Mkt	Bakery	Butcher	Grocery
Apples			X			X
Bagels				X		X
Bananas						X
Butter	X		X			X
Cheese			X			X
Chicken	X				X	X
Eggs	X		X			X
Fish	X					X

French bread				X		X
Fresh Corn			X			X
Ice Cream		X				X
Lettuce			X			X
Loaf of White Bread				X		X
Milk	X		X			X
Muffins				X		X
Pasta						X
Peanut Butter						X
Peppers			X			X
Popsicles		X				X
Potatoes			X			X
rice						X
Sliced Deli Meats	X				X	X
Steak	X				X	X
Tomatoes			X			X
Wheat Bread						X
Yogurt	X					X

Map of Shopping Locations



### **Member A Shopping List**

Milk  
Eggs  
Rice  
Chicken  
Popsicles  
Peanut Butter  
Loaf of White Bread  
Bananas  
Bagels

Availability: 8AM-2PM

### **Member B Shopping List**

Milk  
Eggs  
Cheese  
Butter  
Pasta  
Tomatoes  
Peppers  
Fish  
French bread  
Sliced Deli Meats  
Lettuce

Availability: 11AM-4PM

### **Member C Shopping List**

Milk  
Eggs  
Yogurt  
Apples  
Fresh Corn  
Steak  
Potatoes  
Loaf of Wheat bread  
Muffins  
Ice cream

Availability: 1PM-7PM

### **Member D Shopping List**

Milk  
Eggs  
Rice  
Chicken  
Popsicles  
Peanut Butter  
Loaf of White Bread  
Bananas  
Bagels

Availability: 8AM-2PM

### The Shopping Trip Team Answer Sheet

**When prompted in the chat room, have one person record your final answers. You can use the chart below for guidance.** For instance, “Stop 1: 8AM, A&D, Farmers Market, Milk/Eggs,” etc. **Make sure to include stops back at the house to pick people up**

Stop #	Time	People	Place	Items
1				
2				
3				
etc.				