4-H CONSUMER DECISION MAKING

2019 Study Guides & Sample Classes
Beginner Division (Ages 8 - 9)

Bicycles
Healthy Snacks
Measuring Equipment

Reviewed by Members of the North Dakota 4-H Consumer Decision Making Committee:
Kayla Carlson, Ellen Bjelland, Julie Garden-Robinson, Holly Halvorson, Alicia Harstad, Kari Helgoe, Vanessa Hoines, Debra Lee, Christina Rittenbach, Dena Kemmet, Holly Johnson, Kelsey Henderson, and Meagan Scott

North Dakota 4-H Consumer Decision Making
Sponsored by:
North Dakota 4-H Foundation

North Dakota State University does not discriminate on the basis of age, color, disability, gender expression/identity, genetic information, marital status, national origin, public assistance status, race, religion, sex, sexual orientation, or status as a U.S. veteran. Direct inquiries to the Vice President for Equity, Diversity and Global Outreach, 205 Old Main, (701) 231-7708.
Bicycles come in many shapes and sizes, and everyone should be able to find a bicycle for their needs. You can purchase a bicycle from a bicycle shop, from a garage sale, or it could be someone’s hand-me-down. Make sure that the bicycle fits you and that you and your parents do not buy one that you will grow into. It should fit you now. If you buy a new bicycle, buy one from a dealer that will help you.

**Saddles or Seats:** Seats come in a variety of shapes and sizes. Some are springy and wide, while others are hard and narrow.

**Wheels:** The bigger the wheels, the faster you go. However, bigger wheels are harder to turn when pedaling. The smaller the wheels, the slower you go, but it is easier to push the pedals with one revolution of your leg. In one revolution of a small wheel, you go a shorter distance than in one revolution of a bigger wheel. The smaller the wheel, the closer to the ground and more stable you are. The larger the wheel, the faster you go, and the higher up you sit.

**Handlebars:** The handlebars are what you use to steer the bike. If adjusted correctly, you should not have to stretch too far to put your hands on the handlebars. Your elbows should be slightly bent, and you should be comfortable.

**Gears and Shifting:** A gear is part of a bicycle that helps with speed and ease of pedaling. The more gears you have, the easier ride you will have while pedaling up and down hills and in rough areas like trails. Using bicycle gears allows you to pedal with the same amount of effort whether you are riding uphill, downhill, or on a flat surface.

**Brakes:** The brakes on a bicycle are the part that stops or slows the wheels. There are many types of brakes to choose from when purchasing a bicycle. Coaster brakes are a type of brake that work by pedaling backwards. Handbrakes are attached to the handlebar and are engaged by squeezing.

**Safety Gear:** Always wear a properly fitted bicycle helmet. It will protect your head from unwanted bumps and accidents on your bicycle. Remember, professional bicyclists always wear safety gear. If you are just learning or are stunt riding, you need knee and elbow pads and wrist guards. Make sure you also wear good shoes. Flip-flops are not a good choice of shoes for bicycling because they do not protect your feet.

**How to Fit a Helmet:** Make sure your helmet fits properly and that the pads hold it in place. Make sure the side straps are up under your ears. You should be able to put two fingers between the chinstrap and your chin. (see 3rd photo) In the last picture, you can see how a bicycle helmet should fit to protect all parts of your head.
Types of Bikes

**Mountain Bike:** Mountain bikes are designed for “off-road” riding, but they can also be ridden on paved and rocky trails. Mountain bikes have big tires with lots of tread that give your bike traction, which helps you not to slip. The handlebars on this type of bike should be straight to help you sit upright. Some features you may want to consider for your mountain bike are suspensions to help absorb shock when riding bumpy trails, and multiple gears, usually 21-27, to make going up and down hills easier.

**Trail Bike:** Trail bikes are good for trails or the road. They are ideal for casual, fun riding because they have upright handlebars, 21-24 gears, and slightly knobby tires, which help to grip trails.

**Road Bike:** Road bikes are designed to be used on the road and smooth trails. A variation of this bike is also used for road races. Unlike the mountain bike, this bike has skinny, smooth wheels because it does not need as much grip as the mountain bike. Road bikes also have curved handlebars, allowing the rider to lean lower while riding to keep air from slowing down the bike. These bikes can come in a variety of gear settings.

**Trick Bikes:** Trick bikes are similar to trail bikes, but they have handlebars that can completely spin around. They also have pegs for a rider to stand on while performing tricks. These bikes only have one speed, and sometimes they have brakes for each wheel.

**BMX Bike:** The BMX bike is a stunt bicycle used for dirt riding and jumps. The BMX bike has a strong, but lightweight frame to make it good for racing around a course. The wheels are smaller and have tread to keep them steady.

**Comfort Bikes:** Comfort bikes are similar to trail bikes, but the distance from the seat to the handlebars is shorter, so you do not have to lean as much. These bikes are generally used for fun, but can also be used for commuting. These bikes often have wider seats and pedals, and they may have anywhere from 7 to 24 gears.

**Children’s Bikes:** Children’s bikes are designed for children just learning to ride a bicycle and are generally for children under age 12. Children’s bikes can come with brakes on the pedals, called coaster brakes, or handbrakes. They sometimes come with training wheels, which are wheels that attach to either side of the rear wheel to keep a bike balanced. These bikes have small wheels and have only one speed.
Sources


Adapted from the 2018-2020 National 4-H Consumer Decision Making Contest Study Guides Manual; Reviewed and revised April 2019 by Holly Johnson, NDSU Family & Community Wellness Extension Agent; and Meagan Scott, NDSU 4-H Youth Development Specialist

NDSU Extension does not endorse commercial products or companies even though reference may be made to trade names, trademarks or service names.
Situation Statement:
Ali is looking for a girl's bicycle. She would like it to be a 20-inch bicycle. Ali prefers coaster brakes.

Standards:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl's bicycle</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>20-inch bicycle</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Coaster brakes</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Class Items:
1. Boy's Schwinn Burnout Bicycle
2. Girl's Mongoose Slyde Bicycle
3. Girl's GMC Denali Bicycle
4. Girl's Huffy Sea Star Bicycle

Placing: 4-2-3-1  Cuts: 3-3-4

Reasons:
I place this class of bicycles 4-2-3-1.
I place 4 over 2 because 4 has coaster brakes, while 2 has handbrakes.
I place 2 over 3 because 2 is a 20-inch bicycle, while 3 is a 24-inch bicycle.
I place 3 over 1 because 3 is a girl's bicycle, while 1 is a boy's bicycle.
Grant: 1 is a 20-inch bicycle.
I place 1 last because it is not a girl's bicycle. It does not have coaster brakes.

For these reasons, I place this class of bicycles 4-2-3-1.
Sample Class – Beginner  
Bicycles  
Ali

#1

Boy’s Schwinn Burnout Bicycle

20-inch bicycle with handbrakes
Sample Class – Beginner
Bicycles
Ali

#2

Girl’s Mongoose Slyde Bicycle

20-inch bicycle with handbrakes
Sample Class – Beginner
Bicycles
Ali

#3

Girl’s GMC Denali Bicycle

24-inch bicycle with handbrakes
21 speeds
Sample Class – Beginner
Bicycles
Ali

#4

Girl’s Huffy Sea Star Bicycle

20-inch bicycle with coaster brakes
2019 Consumer Decision Making Study Guide
Beginner
Healthy Snacks

Nutrients are the workers for our bodies. They help us to grow and stay healthy. Snacks are a great way to help our bodies get the nutrients we need throughout our day. They also help us stay full between meals and keep us from overeating.

Key Terms

**Fiber:** The part of plant foods that cannot be digested.

**Food Group:** The basic food groups are grains, fruits, vegetables, dairy, and protein.

- **Grains:** bread, rice, oatmeal, etc.
- **Fruits:** apples, oranges, berries, mangos, etc.
- **Vegetables:** broccoli, spinach, peppers, carrots, etc.
- **Dairy:** milk, yogurt, cottage cheese, etc.
- **Protein:** meat, eggs, seeds, nuts, etc.

**Nutrient-dense Foods:** Foods that provide large amounts of vitamins and minerals and few calories.

**Portion Size:** The amount of food eaten at one time.

**Serving Size:** A standardized amount of a food, such as a cup or an ounce, shown on the Nutrition Facts label.

Reading Labels When Making Snack Choices

Try these tips to make smart food choices quickly and easily.

- **Sugars:** Look for foods and beverages low in added sugars.
- **Fats:** Foods that are high in fats are usually high in calories.
- **Sodium:** Most of the sodium people eat comes from processed foods, not from the salt shaker.
- **Protein:** Protein is made up of amino acids which function as building blocks for bones, muscles, cartilage, skin, and blood. It is good to have high-protein foods in place of high-sugar foods.
- **Whole Grains:** Foods made from the entire grain seed. Whole grains are often labeled on the package as “100% Whole Grain.”
- **Calories:** Come from food and beverages, so make your calories count!
- Keep these low: calories, saturated fats, trans fat, and sodium
- Get enough of these: potassium, fiber, vitamins A and C, calcium, and iron
Nutritious Snacking Tips

- Choose foods high in nutrients and low in fat and sugar.
- Eat snacks that include at least two food groups. For example, pair apple slices with cheese or a mini bagel with peanut butter.
- Plan and pack snacks for when you are on the go to avoid less healthful snacks.
- Incorporate fruits and vegetables into your snacking plans.
- Aim for whole grain snacks. At least half of your grains should be whole.

Sources


Adapted from the 2018-2020 National 4-H Consumer Decision Making Contest Study Guides Manual by Courtney F. Dodd, Ph.D., Assistant State Leader/Assistant Professor & Extension Specialist Texas A&M AgriLife Extension Service – 4-H Youth Development; Reviewed and revised April 2019 by Holly Johnson, NDSU Family & Community Wellness Extension Agent; Julie Garden-Robinson, NDSU Professor/Food and Nutrition Specialist; and Kayla Carlson, NDSU Family & Community Wellness/4-H Youth Development Extension Agent

NDSU Extension does not endorse commercial products or companies even though reference may be made to trade names, trademarks or service names.
Situation Statement:
Amy is having friends over after school. She would like to serve fresh fruit as a snack. She wants a snack that is easy to prepare. Amy wants to serve a snack that has 100 calories or less per serving.

Standards:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh fruit</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy to prepare</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>100 calories or less per serving</td>
<td>X</td>
<td>70</td>
<td>104</td>
<td>110</td>
</tr>
</tbody>
</table>

Class Items:
1. Apples
2. Nutri-Grain Cereal Bars
3. Bananas
4. Fruit Flavored Snacks

Placing: 1-3-4-2 Cuts: 3-4-3

Reasons:
I place this class of healthy snacks 1-3-4-2.

I place 1 over 3 because 1 has 100 calories or less per serving having 70 calories, while 3 contains 110 calories per serving.

I place 3 over 4 because 3 is fresh fruit, while 4 is a fruit flavored snack.
Grant: 4 has 100 calories or less per serving.

I place 4 over 2 because 4 has 100 calories or less per serving having 90 calories, while 2 contains 104 calories per serving.

I place 2 last because it is not fresh fruit. It does not have 100 calories or less per serving.

For these reasons, I place this class of healthy snacks 1-3-4-2.
Sample Class – Beginner
Healthy Snacks
Amy

#1

**Apples**
One apple per person

---

**Nutrition Facts**
Serving Size 1 medium
Servings Per Container 1

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories From Fat 0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% Daily Value*</td>
</tr>
<tr>
<td>Total Fat 0g</td>
<td>0%</td>
</tr>
<tr>
<td>Saturated Fat 0g</td>
<td>0%</td>
</tr>
<tr>
<td>Trans Fat 0g</td>
<td>0%</td>
</tr>
<tr>
<td>Cholesterol 0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium 0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>19g 6%</td>
</tr>
<tr>
<td></td>
<td>Dietary Fiber 3g 13%</td>
</tr>
<tr>
<td></td>
<td>Sugars 17g</td>
</tr>
<tr>
<td>Protein 0g</td>
<td></td>
</tr>
</tbody>
</table>

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

<table>
<thead>
<tr>
<th>Calories</th>
<th>Total Fat</th>
<th>Sat Fat</th>
<th>Cholesterol</th>
<th>Sodium</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000</td>
<td>Less than</td>
<td>Less than</td>
<td>Less than</td>
<td>Less than</td>
</tr>
<tr>
<td>2,500</td>
<td>65g</td>
<td>23g</td>
<td>300mg</td>
<td>2,400mg</td>
</tr>
<tr>
<td></td>
<td>30g</td>
<td>25g</td>
<td>300mg</td>
<td>2,400mg</td>
</tr>
<tr>
<td></td>
<td>Total Carbohydrate</td>
<td>67g</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dietary Fiber</td>
<td>25g</td>
<td>30g</td>
<td></td>
</tr>
</tbody>
</table>

INGREDIENTS: APPLES, RAW, WITH SKIN.

---

NDSU Extension does not endorse commercial products or companies even though reference may be made to trade names, trademarks or service names.
Sample Class – Beginner
Healthy Snacks
Amy

#2

**Nutri-Grain Cereal Bars**
One cereal bar per person

### Nutrition Facts

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories</th>
<th>% Daily Value*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>104</td>
<td>Calories from Fat 19</td>
</tr>
<tr>
<td>Total Fat</td>
<td>2g</td>
<td>3%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Trans Fat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>84mg</td>
<td>3%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>21g</td>
<td>7%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>1g</td>
<td>2%</td>
</tr>
<tr>
<td>Sugars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>1g</td>
<td></td>
</tr>
</tbody>
</table>

Vitamin A 11%  •  Vitamin C 0%
Calcium 1%  •  Iron 8%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

NutritionData.com
Sample Class – Beginner
Healthy Snacks
Amy

#3

Bananas
One banana per person

Nutrition Facts
Serving Size 1 medium
Servings Per Container 1

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>% Daily Value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>29g</td>
<td>10%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>4g</td>
<td>1%</td>
</tr>
<tr>
<td>Sugars</td>
<td>21g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>1g</td>
<td></td>
</tr>
</tbody>
</table>

Vitamin A 0%  
Vitamin C 15%
Calcium 0%  
Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

INGREDIENTS:  BANANA, RAW, EDIBLE PORTION, FDA
Sample Class – Beginner
Healthy Snacks
Amy

#4

Fruit Flavored Snacks
One fruit snack packet per person

Nutrition Facts
Serving Size 1 pouch (25g)
Servings Per Container 10

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
</tr>
<tr>
<td>Calories from Fat</td>
</tr>
<tr>
<td>Total Fat</td>
</tr>
<tr>
<td>Saturated Fat</td>
</tr>
<tr>
<td>Trans Fat</td>
</tr>
<tr>
<td>Cholesterol</td>
</tr>
<tr>
<td>Sodium</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
</tr>
<tr>
<td>Sugars</td>
</tr>
<tr>
<td>Protein</td>
</tr>
</tbody>
</table>

Not a significant source of dietary fiber, vitamin A, calcium and iron.

Ingredients: Fruit Juice Blend from Concentrate (apple, pear), Corn Syrup, Sugar, Modified Corn Starch. Contains 2% or less of: Fruit Pectin, Citric Acid, Dextrose, Sodium Citrate, Color (red 40, blue 1, yellow 5 and other color added), Malic Acid, Potassium Citrate, Vitamin C (ascorbic acid), Mineral Oil*, Natural Flavor, Carnauba Wax, Beeswax.

*Adds A Trivial Amount Of Fat

Distributed by General Mills Sales, Inc.
Minneapolis, MN 55440 USA
© 2000 General Mills

May be mfg. under U.S. Pat. No. 6,403,605
Gluten Free

Carbohydrate Choices: 1 1/2
Cooking can be lots of fun for boys and girls. Beginning cooks need to follow recipes, measure correctly, and use the right utensils and equipment.

A recipe is like a map. Follow it carefully! Look for recipes that are easy to understand. Always ask for help if you do not understand the directions for a recipe.

The recipe should use common measuring equipment, such as cups and teaspoons.

**Measuring Equipment:** A good cook needs good tools. Cooking tools are called **utensils**. Use standard measuring cups and spoons because these are the most accurate. They are made specifically for measuring. Do not use **coffee cups or regular spoons for measuring since they are not accurate**.

**Dry Ingredients/Solid Shortening:** Dry ingredients include flour, sugar, and brown sugar. Dry ingredients and solid shortening are measured a little differently, but they all require the same type of utensil: **nested measuring cups**. Nested means one fits inside the other. The cups may come in a set of 1 cup, 1/2 cup, 1/3 cup, and 1/4 cup. Or, they could be 1 cup, 3/4 cup, 2/3 cup, 1/2 cup, 1/3 cup, and 1/4 cup. They may be made of plastic or metal.

**To Measure These Ingredients:**

- **Flour:** Spoon into cup and level with straight edge
- **White Sugar:** Dip into sugar and level with straight edge
- **Brown Sugar:** Pack into cup and level with straight edge; the sugar holds the cup shape when cup is emptied
- **Shortening:** Pack into cup with rubber spatula and level

A straight-edged spatula or knife is used to level off a dry measuring cup or a measuring spoon. Push the blade across the top for a level measurement. This is an important step for accurate measuring. Measures should be level, not heaping.

**Liquid Ingredients:** Liquid ingredients include milk, water, or juice. Liquid measuring cups have a spout for easy pouring. These cups have extra space above the “cup” line so you will not spill. The cups have markings to measure 1/4 cup, 1/3 cup, 1/2 cup, 2/3 cup, 3/4 cup, and 1 cup. Liquid measuring cups also come in 2 cup and 4 cup sizes. Liquid measures may be made of plastic or glass. To measure liquid ingredients, you may need to bend down so your eyes are level with the measuring lines when pouring the liquid into the container.
**Measuring Spoons:** Measuring spoons are made specifically for measuring; they are not for eating. A set often has four spoons: 1 tablespoon, 1 teaspoon, 1/2 teaspoon, and 1/4 teaspoon. The spoons may be made out of plastic or metal.
Situation Statement:
Jim is making muffins to take to school for his birthday treats. To measure the ingredients, he knows he needs to use standard measuring equipment. For the flour and sugar, he will need a dry measuring cup. He would like to use a 1 cup measure for the flour and sugar.

Standards:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard measuring equipment</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dry measuring cup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 cup measure</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Class Items:
1. 6 Ounce Coffee Mug
2. Standard 1 Cup Liquid Measure
3. Standard 1/2 Cup Dry Measure
4. Standard 1 Cup Dry Measure

Placing: 4-3-2-1  Cuts: 3-2-8

Reasons:
I place this class of measuring equipment 4-3-2-1.

I place 4 over 3 because 4 is a 1 cup measure, while 3 is a 1/2 cup measure.

I place 3 over 2 because 3 is a dry measuring cup, while 2 is a liquid measuring cup.
Grant: 2 is a 1 cup measure.

I place 2 over 1 because 2 is standard measuring equipment, while 1 is a coffee mug. 2 is a 1 cup measure, while 1 is a 6 oz. coffee mug.

I place 1 last because it is not standard measuring equipment.
It is not a dry measuring cup.
It is not a 1 cup measure.

For these reasons, I place this class of measuring equipment 4-3-2-1.
Sample Class – Beginner
Measuring Equipment
Jim

#1

6 Ounce Coffee Mug
Sample Class – Beginner
Measuring Equipment
Jim

#2

Standard 1 Cup Liquid Measure
Sample Class – Beginner
Measuring Equipment
Jim

#3

Standard 1/2 Cup Dry Measure

NDSU Extension does not endorse commercial products or companies
even though reference may be made to trade names, trademarks or service names.
Sample Class – Beginner
Measuring Equipment
Jim

#4

Standard 1 Cup Dry Measure