4-H CONSUMER CHOICES

2016 Study Guides & Sample Classes
Beginner Division (Ages 8 - 10)

Bicycles
Kitchen Measuring Equipment
Snacks

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North Dakota 4-H Consumer Choices
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Can you remember getting to choose something of your very own? It is fun to choose your very own bicycle. No matter which bicycle you choose you still need to think about the bicycle itself and the things you need to be safe on your bicycle.

Bicycles come in many shapes and sizes and everyone should be able to find a bicycle for their needs. The main distinguishing feature of a boy’s bike is the metal bar connecting the handlebars to the saddle, which bicycles for girls usually do not have. The frame style of girls’ bicycles dates to the earliest years of bicycle design, when step-through frames accommodated the long skirts and dresses that women wore in the late 19th and early 20th century. For safety, make sure that the bicycle fits you now and it isn’t something that you will grow into.

**Saddles or Seats:** Seats come in a variety of shapes and sizes. Some are springy and wide while others are hard and narrow. Some have two little pads, one for each cheek and without the front part of the saddle.

**Wheels:** The bigger the wheel, the faster you go and the harder it is to turn the wheel. The smaller the wheel the slower you go, making it easier to push the pedal with one revolution of your leg. In one revolution of a small wheel, you go a short distance, but it is easier. In one revolution of a large wheel you go a further distance but it’s harder to push because you are covering more ground. The smaller the wheel the closer to the ground and more stable you are. The larger the wheel the faster you will go and the higher up you will 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.

**Shifting and Gears:** 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 the flat.

**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 works by pedaling backward. This is a good brake for the beginning rider or the trick rider.
- Handbrakes are engaged by a grip on the handlebars that pinches brake pads against the rim of the wheel.

**Accessories:** Your bicycle may have a light, a basket, a bell, a water bottle holder or any other item that will meet your needs as a bicyclist. Choose what you need, what you enjoy, and what you can afford.
## Different Types of Bikes....

| Mountain bikes | Mountain bikes are designed for "off road" riding. They also work great on paved and rocky trails because of their toughness. The big, knobby tires on mountain bikes give you good traction so you do not slip. On paved roads, the tires will make lots of noise. The handlebars are upright and straight so you can sit upright. Mountain bikes have many gears. |
| Trail bicycles or light duty mountain bikes | Trail bicycles or light duty mountain bikes are good for trails and roads. These bicycles are ideal for fun and family riding. The tires for kids trail bikes are 20-inches and 24-inches and for adults, 26-inches. Trail bikes have many gears. |
| BMX | BMX is often considered a stunt bicycle and needs a stronger lightweight bicycle frame. The tires are usually 20-inch and are knobby. They are one-speed bikes and are mostly used for general purpose and dirt riding. BMX bikes have a single handbrake for the rear wheel. |
| BMX jumping bicycles | BMX jumping bicycles are just like the regular BMX bike, but the frames are heavy duty to make jumping safer. |
| Free style or trick bicycles | Free style or trick bicycles have handlebars that can spin around. The frame has pegs for the rider to stand on while performing tricks. They feature handbrakes for each wheel. The tires are 20” and have many spokes to make the wheels strong. The tires on trick bikes are smooth. These bikes have only one speed. |
| Road/Distance bicycles | Road/Distance bicycles are designed for use on roads and smooth trails. The tires are 27-inches and are skinny. The handlebars are bent and the rider leans lower while riding to keep air from slowing the bike down. There can be many speeds. |
| Children’s bicycles | Children’s bicycles have smaller wheels (less than 20-inches) and either coaster brakes or handbrakes. The handlebars are straight or bent. Children’s bikes have only one speed. |

**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 too. 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:

To make sure your helmet fits properly and the pads hold it in place. Then get the side straps 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.

Bike Parts:
The frame is the main part of a bike. It is a triangular shape, is very sturdy, and can be found on all bikes. The top of the seat post is very important–the seat, or saddle, that you sit on. The crank is what you make go round and round when your feet are on the pedals. The chain and the chain rings are part of the system that helps transfer the energy from you to make the bike go forward. The fork is what the front wheel is connected to. The rim is the outermost part of the wheel where the tire is. The spokes keep the wheel round. The valve stem is the part of the tube where you attach a pump to put air in the tire. Brakes are used when you want to stop. Lastly, the reflectors on the front (white), rear (red) and in your wheels are the part of the bike that help make you more visible to others.

References:
Bicycle glossary www.sheldonbrown.com
League of American Bicyclists www.bikeleague.org
http://bicycleworldandfitness.com
www.nhtsa.dot.gov
4-H CCS Bicycle Project for age 5
Consumer Reports www.consumerreports.org
Wikipedia www.wikipedia.com

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Reviewed and updated 2015 by Linda Hauge

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Situation Statement:
Ali is looking for a girl’s bicycle. She would like it to be a 20-inch bicycle with coaster brakes.

Standards

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<td>X</td>
</tr>
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</tr>
<tr>
<td>Coaster brakes</td>
<td></td>
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Class Items:
1. Boy’s Schwinn Burnout Bicycle
2. Girl’s Mongoose Slyde Bicycle
3. Girl’s GMC Denali Bicycle
4. Girl’s Schwinn DeeLite 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 caliper brakes.

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

Boy’s 20-inch bicycle with caliper brakes
Sample Class
Beginner - Bicycles
Ali

#2

Girl’s Mongoose Slyde Bicycle

Girl’s 20-inch bicycle with caliper brakes
Sample Class
Beginner - Bicycles
Ali

#3

Girl’s GMC Denali Bicycle

Girl’s 24-inch bicycle with caliper brakes
21-speed bicycle
Sample Class
Beginner - Bicycles
Ali

#4

Girl’s Schwinn DeeLite Bicycle

Girl’s 20-inch bicycle with coaster brakes
Cooking can be lots of fun for boys and girls. Beginning cooks need to follow recipes, measure correctly and use the right utensil or equipment.

A recipe is like a map. Follow it carefully! Look for recipes that are easy to understand.

The recipe should use common measuring equipment such as cups and teaspoons, not teacups or soup spoons.

Always ask for help if you do not understand directions for a recipe.

- **Kitchen 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 especially for measuring. Do not use coffee cups or regular spoons for measuring since they are not accurate.

The kind of ingredient you are measuring will help you decide which utensil to use.

- **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 1 cup, 3/4 cup, 1/2 cup, 1/3 cup, 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 and pour the liquid in.

- **Measuring spoons**: Measuring spoons are made especially for measuring; they are not the kind you use for eating. A set often has four spoons. They are 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 to measure the flour and sugar.

Standards

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<td>Standard measuring equipment</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Dry measuring cup</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>1 cup measure</td>
<td>X</td>
<td></td>
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Class Items:
1. 6 Ounce Coffee Mug
2. Standard 1 Cup Liquid Measure
3. Standard ½ Cup Dry Measure
4. Standard 1 Cup Dry Measure

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

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

I place 4 over 3 because 4 is a 1 cup measure while 3 is a ½ 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 dry measuring equipment.
It is not a 1 cup measure.

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

#1

6 Ounce Coffee Mug
#2

Standard 1 Cup Liquid Measure
Sample Class
Beginner - Kitchen Measuring Equipment
Jim

#3

Standard ½ Cup Dry Measure
Sample Class
Beginner - Kitchen Measuring Equipment
Jim

#4

Standard 1 Cup Dry Measure
Snacks can play an important role in your everyday food choices. Think of snacks as mini-meals that help provide nutrients and food energy you need to grow, play and learn. Snacks can help fill in the MyPlate gaps by helping you get enough of the foods and nutrients you need. Snacking is OK!

- Snacks are usually small amounts of food.
- Eating three balanced meals and two or three small snacks a day can be good for you.
- If you choose wisely, snacks can help provide the calories and nutrients you need to grow and develop.
- Snacks will not spoil appetites if eaten one or two hours before meals.
- Concentrating is easier if you are not hungry.
- Snacks should be an important part of your daily eating plan.

Choosing two foods to eat together can make a good snack. Try to choose foods from different food groups that go well together.

The following can affect your snack choices:

- Likes and dislikes - Eating what we like always is more fun. Think of MyPlate, then think of some foods you like out of each group. Try to eat a variety of foods, not the same food all the time.
- How hungry are you? Great snacks for the very hungry snacker can be found in the protein group. Some meats and cheeses contain more fat, so they provide more calories and more energy.
- Are you on the run and do not have much time to prepare a snack? Grab a piece of fresh fruit, string cheese and some water for a quick snack.
- How much can you spend? Are you choosing a snack from home or are you buying one with your own money? This may affect your choice. To compare food items, you need to look at the cost per serving. To determine the cost per serving, you can divide the total cost of the snack by the number of servings. Some serving sizes are bigger than others.
- Is it good for you? Snack foods combine with the foods you eat at meals to make your body strong and healthy. A few important nutrients for growing bodies include calcium, iron, protein, vitamin A and vitamin C. These nutrients are listed on all food labels. One nutrient that some people watch is fat, especially “saturated fat” and “trans fat.” Try not to eat too much of these. These nutrients also are listed on the food label.

You deserve the best. Your body is an amazing machine. Food is the fuel for your body. Choosing snacks wisely helps you put the best fuel in your body and will keep your body running at its best.

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. Her family is trying to keep their grocery bills down, so she wants to serve a food that costs less than 40 cents per serving.

Standards

<table>
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<td>Fresh fruit</td>
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<td></td>
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<tr>
<td>Easy to prepare</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Less than 40¢ per serving</td>
<td>(55¢)</td>
<td>X (32¢)</td>
<td>X (35¢)</td>
<td>(45¢)</td>
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Class Items:
1. Apples
2. Nutri-Grain Cereal Bars
3. Bananas
4. Fruit Flavored Snacks

Placing: 3-1-2-4  Cuts: 3-5-3

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

I place 3 over 1 because 3 costs 35 cents per serving while 1 costs more than 40 cents per serving at 55 cents.

I place 1 over 2 because 1 is a fresh fruit while 2 is a cereal bar.
Grant: 2 costs less than 40 cents per serving at 32 cents.

I place 2 over 4 because 2 costs 32 cents per serving while 4 costs more than 40 cents per serving at 45 cents.

I place 4 last because it is not fresh fruit. It costs more than 40 cents per serving.

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

#1

Apples
One apple per person
55 cents each

**Nutrition Facts**

- **Serving Size:** 1 medium
- **Servings Per Container:** 1

<table>
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<th>Amount Per Serving</th>
<th>Calories From Fat</th>
<th>% Daily Value*</th>
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<td>Saturated Fat</td>
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<td>Trans Fat</td>
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<tr>
<td>Protein</td>
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| Vitamin A          | 0%               |
| Vitamin C          | 10%              |
| Calcium            | 0%               |
| Iron               | 0%               |

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

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<tr>
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</tr>
<tr>
<td>Trans Fat</td>
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<tr>
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<td>Total Carbohydrate</td>
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<tr>
<td>Dietary Fiber</td>
<td>25g</td>
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**INGREDIENTS:** APPLES, RAW, WITH SKIN.

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Sample Class
Beginner - Snacks
Amy

#2

Nutri-Grain Cereal Bars
One cereal bar per person
32 cents each
Sample Class
Beginner - Snacks
Amy

#3

Bananas
One banana per person
35 cents per banana

Nutrition Facts
Serving Size 1 medium
Servings Per Container 1

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<td>Iron</td>
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* 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,

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Sample Class
Beginner - Snacks
Amy

#4

Fruit Flavored Snacks
One fruit snack packet per person
45 cents for each packet