WHAT'S ON MY PLATE?

Grades 6-8

BEEF LOVING TEXANS®

TEXAS BEEF COUNCIL

Total Anticipated Time: 45 min.

OBJECTIVES

- Describe meal recommendations following MyPlate guidelines, given the MyPlate diagram
- Describe the importance of protein for building strength
- Explain the benefits of choosing beef as a protein source
- Plan a meal that follows MyPlate guidelines, given a middle school student scenario

Texas Essential Knowledge and Skills

110.22.b.1.B. – Follow and give oral instructions that include multiple action steps

110.22.b.5.F. – Make inferences and use evidence to support understanding

115.22.b.A. – Analyze healthy and unhealthy dietary practices

115.22.b.B. – Explain the importance of a personal dietary and exercise plan

Materials

Pre-Made Activity Station Posters

Markers

Pencils

MyPlate Brainstorming Posters

Masking Tape
(unless located in a gym or on a court)

Beach Ball/Large Exercise Ball

Handouts:

- Character Profile
  (one copy per group of 4-5 students)
- A Day in My Life Activity Stations
  (one copy)
- Beef Clues
  (one copy per group of 4-5 students)
- Texas Beef Council Super Foods Poster
  (one copy per group of 4-5 students)
- Cafeteria Menu
  (one copy per group of 4-5 students)
- MyPlate Self-Assessment
  (one copy per student)
- MyPlate, My Strength Take-Home Activity
  (one copy per student)

Activity Sequence

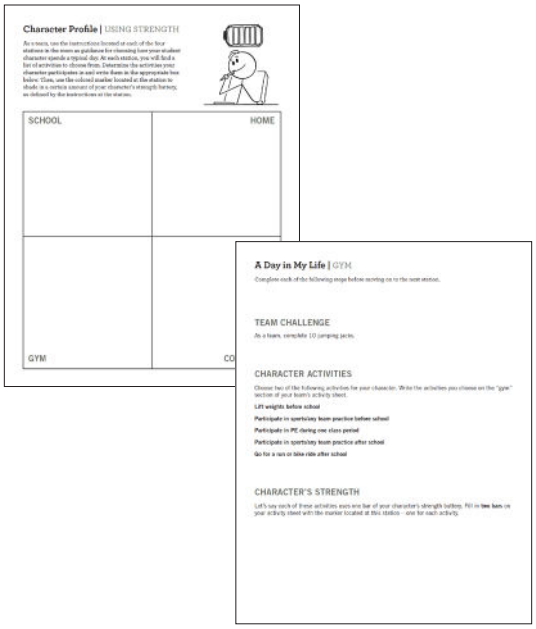
PREPARE:

- *Optional*: Review these resources for additional content background.
- Create stations around the room, with posters naming the stations as follows:
  1) School
  2) Gym
  3) Home
  4) Community

  Place each A Day in a My Life Activity Station handout at the appropriate station.
- Hang all of the MyPlate Brainstorming Posters across one wall. Place a few markers at each poster. Either use masking tape to create a line down the center of the room or use a center court line.
- Print enough copies of the Beef Clues handout for there to be one complete set of clues for each group of four-five students. Cut the documents into individual clues and hide each clue in a different location around the room.

Engage:

Divide the class into groups of four-five students. Provide each group with one copy of the Character Profile worksheet.



Today, in our groups, we are going to explore how we give ourselves the strength and energy we need to live our lives to their fullest. We will be exploring this through the perspective of a middle school character each of our groups get to create. As a group, you'll first be defining how your character – representing a middle school student – spends their time throughout the day. Take a look at the stations around the room. What do you see? Listen for: school, gym, home, and community.

The first page of your group's activity sheet asks you to define how your character spends their time. As a group, you'll visit each station except the cafeteria. The handout at the station will provide a list of examples of how your character might spend their time, and you'll choose however many activities from that station as directed on the handout. Then, before you can move to the next station, the handout will also give your team a quick challenge to complete. As a group, read the instructions for the front page of the activity sheet. After pausing to allow them to read, ask for questions, and then say: *Take five minutes to complete the front page of the activity sheet.*

After five minutes, instruct the students to take a seat in their groups.

What did we need to complete the team challenge at each station? Listen for: energy, strength, brain power, creativity, and strategic thinking.

What responsibilities and activities do we personally complete each day that require strength, brain power, and creativity? Listen for: homework, sports, paying attention in class, chores at home, part-time jobs, other extracurricular activities, etc.

Where did we see these kinds of responsibility examples in this activity? Listen for: in the example activities we picked for our character.

What happened as we picked activities for our characters and then filled in the energy battery? Listen for: We used up most/all of our character's battery.

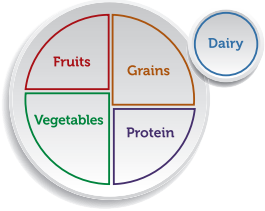
What do we think we need to provide our characters now to refill the energy battery? Listen for: Our characters need healthy, balanced meals to refuel.

Today, we're going to explore how we can create balanced and nutritious meals to help us maintain healthy bodies. A healthy body has strength, which can be explained as anything that gives us the ability to live our lives to the fullest. Let's explore how we build meals that give us the strength we need.

Explore:

Discovering MyPlate

Split the class in half, sending each half to opposite sides of the masking tape or center court line, identified prior to class.



Who has heard of MyPlate? Based on what we already know about MyPlate or just by looking at the diagram on the first poster, what do we think MyPlate is? Listen for: MyPlate is a diagram that helps us visualize how to create balanced and nutritious meals.

Let's see what we can deduce about what MyPlate recommends for us based on what we see on the poster. In a moment, we'll need to pay attention to the images on the poster, the sizes of the plate segments, and anything else we observe that might help us understand what MyPlate recommends for us to eat. Today, we are going to play "Keep It Up." Similar to a game of volleyball, the goal is to keep the ball from hitting the floor on your team's side of the court. If it hits the floor on your team's side, the other team gets a point. There are a few different rules, however:

1. *First, we can tap the ball in any way to keep it in the air; we just can't catch, hold, or throw the ball.*

2. *Second, there are no restrictions to how many times the team can tap the ball on their side of the court before sending it to the other team.*

3. *Third, if the ball goes out of bounds, the last team to touch the ball gives a point to the other team. I will have the final say on who touched the ball last.*

4. *Finally, once a team member has tapped the ball, they must exit the court. The only way to return to the court is to write a quick note on any poster of your choice explaining something you observe about MyPlate. Then, you can return to the court to help your team. For example, if the ball comes to me and I tap it to another teammate to keep it in the air or send it to the other side of the court, I might run to this poster, note that I see fruits with seeds, and then run back on the court to continue play. How can I clarify?*

Answer questions and remind the students that they want to work quickly to help their team, because if all teammates are out of the game, they cannot keep the ball in the air. Then, toss the ball into the game to begin. Allow play until the posters appear to have an appropriate number of notes.

Ask for volunteers to read the students' notes on each of the five posters focused on specific food groups (not the full diagram). After notes are read from one of the posters, ask, *"What do we think this section of the MyPlate diagram represents?"* and *"Looking at the full MyPlate diagram poster as well, what do we think MyPlate is telling us with regard to consuming this food group?"* If the students don't automatically list examples, ask them what food examples they see. After the assigned group shares, ask the rest of the class if they have anything to add. Make sure the following points are addressed, backfilling any content that is missed by the students:

The top left section of the plate represents fruit

- Aim for 1-2 cups of fruit each day
- Eat a variety of colors of fruits
- This group also includes 100% fruit juice
- Fresh, frozen, or dried fruit all count
- Fruit can be whole, cut-up, or pureed
- Examples include apples, bananas, grapefruit, grapes, mango, oranges, peaches, plums, raisins, and strawberries

The top right section of the plate represents grains and starches

- Look for "100% whole grain" or "100% whole wheat" on the food label
- At least half of the grains you eat should be whole grains, which contain the entire grain kernel, including the bran, germ, and endosperm
- Examples of grains and starches include bread, brown rice, oatmeal, breakfast cereals, tortillas, grits, and starchy vegetables like peas, corn, and potatoes

The top right circle represents dairy

- Aim for 2-3 cups of dairy each day
- Choose low-fat or fat-free milk, yogurt, and other milk products
- Dairy and calcium-fortified soymilk are rich sources of calcium and other vital nutrients
- Options for lactose intolerance include lactose-free milk, kefir, or fortified soymilk
- Choose products with at least 8g protein per serving

The bottom left section of the plate represents protein

- Aim for at least 25-30g of protein-rich foods at each meal
- Choose lean proteins – look for beef cuts with "round" or "loin" in the name
- Examples of protein-rich foods include lean beef, skinless poultry, eggs, fish, beans, nuts, and soy

The bottom right section of the plate represents vegetables

- Aim for 1-3 cups of vegetables each day
- Eat more red, orange, and dark green vegetables
- Eat edible seeds and skins for more nutrients
- Eat non-starchy vegetables (like lettuce, spinach, green beans, broccoli, tomatoes) at least twice per day
- This group also includes 100% vegetable juice
- Raw or cooked vegetables – fresh, frozen, canned, or dried/ dehydrated vegetables – are all good options
- This includes whole, cut-up, or mashed vegetables
- Examples include broccoli, asparagus, bell pepper, tomato, onions, and carrots

Which food group do we think helps us build strength? Listen for: protein.

Protein is key for supporting strength. What does protein do for our bodies? Listen for: builds muscle, helps us feel full long after eating a meal, supports proper brain function, supports a healthy immune system

For all of the reasons we've discussed, when building a meal, build it around ensuring adequate protein first. Then, add vegetables, whole grains, and other foods. For example, we could decide to eat meatballs, and then add canned green beans and brown rice, a glass of milk, and fruit like apple slices or strawberries.

ALTERNATE ACTIVITY

NOTE: If space does not allow for the ball activity, consider this alternate activity.

Combine small groups to create five total groups. Instruct students to each grab a marker and relocate with their group to a food group poster (ignoring the full MyPlate diagram poster).

Who has heard of MyPlate? Based on what we already know about MyPlate or just by looking at the diagram on the poster, what do we think MyPlate is? Listen for: MyPlate is a diagram that helps us visualize how to create balanced and nutritious meals.

In our groups, let's see what we can deduce about what MyPlate recommends for us based on what we see on the poster. Pay attention to the images on the poster, the sizes of the plate segments (refer to the full diagram poster for reference), and anything else we observe that might help us understand what MyPlate recommends for us to eat. Take three minutes and note your group's observations on the note sections of the poster for the MyPlate section your group was assigned to.

As students work, observe the groups and provide clarity or prompts as needed. After three minutes, instruct the groups to rotate clockwise to the next group's poster, and take one minute to add any thoughts to the original group's notes. Repeat the process one more time. Then, instruct the groups to return to their original poster. Follow the steps in the ball activity to discuss each poster, asking the original group from each poster to share the student thoughts written on the poster to begin each discussion.

Beef on My Plate

As students race around the room, tally the number of clues found on the board to be sure all have been collected. Once collected, celebrate the team that gathered the most. Then, ask the students to read their clues in the order indicated numerically on the clue. Provide the following additional thoughts for each clue as they are shared, one at a time:

Clue #1: What this tells us is that beef provides more nutrients in fewer calories than many other food choices.

Clue #2: Most of what cattle eat is forage and plant leftovers people can't eat. Then, they convert it to high-quality protein, making beef a sustainable choice for the environment.

Clue #3: So, cattle use land that cannot be easily used for other purposes.

Clue #4: This provides nutrients for the next year.

Clue #5: When we waste less food, it doesn't go to a landfill where greenhouse gases would be emitted. This applies to all food – not just beef or other protein sources.

Beef is an example of a protein source that is nutritious for us, while also a sustainable choice for the environment. There are clues as to what makes beef a nutritious, sustainable protein source hidden around the room. When I say "go," compete for your team to be the first team to collect all five clues provided on numbered slips of paper – this is a race! What questions are there? Ready? Go!

Note: If students have remaining questions about beef, direct them to write down their questions. If time allows, explore the following resources.

- First three videos on the Raw Truth About Beef experience page (https://rawtruthaboutbeef.com/the-experience/)
- The sustainability information on the Raw Truth About Beef resource page (https://rawtruthaboutbeef.com/beef-resources/).
- https://www.beefresearch.org/sustainability/index.html
- https://beef.widen.net/s/wwrw5hblhp

Preventing Food Waste

While we build nutritious meals to support our bodies, we all have a responsibility to help prevent food waste. Who can guess the percentage of food brought home in America that goes uneaten? Listen for: 40%.

That's enough food to fill the 90,000-seat Rose Bowl stadium every day. As an example, what would be some examples of ways leftover beef or steak could be made into a new meal? Listen to students' examples and provide additional examples such as: add leftover taco meat to eggs, slice leftover steak onto a salad, etc.

Apply:

Let's return to our character profiles and apply what we have learned about using MyPlate to fuel our bodies. This time, we'll be "visiting the cafeteria" for our characters to give them the strength and energy they need for the day.

Provide each group with the Texas Beef Council Super Foods Poster and Cafeteria Menu handouts.

The second page of our character profile activity sheets will ask us to do the opposite of what we did before with our characters' physical activity. This time, we will use the cafeteria menu information to build a day's-worth of meals and snacks to refill our character's energy battery. Take 30 seconds to read the instructions on the second page of the character profile worksheet.

Please take five minutes as a group to build your character's meal plan for the day. Refer to the super foods handout for reminders on building a nutritious plate!

What did we notice about the point values of the different foods available on the cafeteria station handout? Listen for: Foods in the different food groups affected the battery life differently.

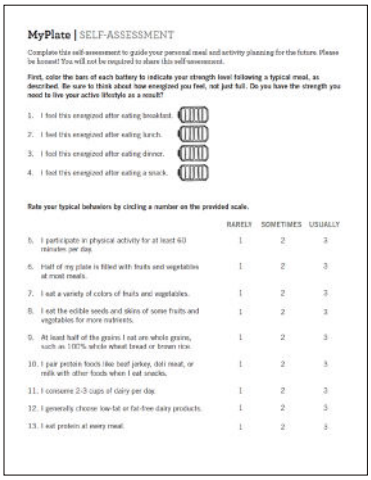
How many of our groups followed the recommendation to build the character's plate around protein? Who can provide an example of a meal they built with protein as the anchor? Listen for a couple of students' examples.

How do we plan to use these tips in the future, when we have opportunities to build our own meals or snacks? Listen and acknowledge students' thinking. Provide additional examples of protein incorporated into snacks, such as beef jerky and a banana, deli meat and pickle spears, and cheese and crackers.

Process:

Let's think about how well we currently incorporate the MyPlate recommendations into our daily routines.

Instruct students to return to their seats and provide each student with the MyPlate Self-Assessment. Instruct them to take three minutes to complete the self-assessment. After three minutes, thank the students for their reflective thinking.



MyPlate | SELF-ASSESSMENT

Complete this self-assessment to guide your personal meal and activity planning for the future. Please be honest! You will not be required to share this self-assessment.

First, color the bars of each battery to indicate your strength level following a typical meal, as described. Be sure to think about how energized you feel, not just full. Do you have the strength you need to live your active lifestyle as a result?

1. I feel this energized after eating breakfast.
2. I feel this energized after eating lunch.
3. I feel this energized after eating dinner.
4. I feel this energized after eating a snack.

Rate your typical behaviors by circling a number on the provided scale.

	RARELY	SOMETIMES	USUALLY
5. I participate in physical activity for at least 60 minutes per day.	1	2	3
6. Half of my plate is filled with fruits and vegetables at most meals.	1	2	3
7. I eat a variety of colors of fruits and vegetables.	1	2	3
8. I eat the edible seeds and skins of some fruits and vegetables for more nutrients.	1	2	3
9. At least half of the grains I eat are whole grains, such as 100% whole wheat bread or brown rice.	1	2	3
10. I pair protein foods like beef jerky, deli meat, or milk with other foods when I eat snacks.	1	2	3
11. I consume 2-3 cups of dairy per day.	1	2	3
12. I generally choose low-fat or fat-free dairy products.	1	2	3
13. I eat protein at every meal.	1	2	3

Evaluate:

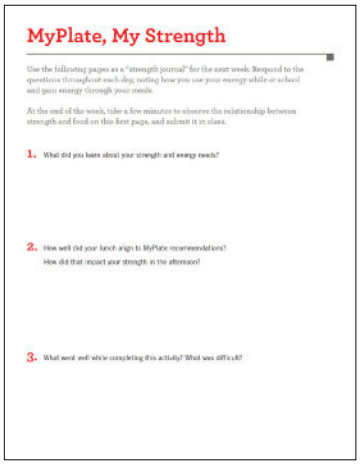
We'll keep our self-assessments for our own knowledge. Now, find a blank piece of paper, and based on what we learned today, draw and complete a MyPlate diagram with a lunch or dinner meal that aligns to the recommendations. Take just two minutes to note a simple meal with foods that you enjoy. Again, use the super foods handout to help you brainstorm!

After two minutes, collect the students' MyPlate examples and thank them for their work.

MYPLATE, MY STRENGTH TAKE-HOME ACTIVITY

Use this optional take-home activity as an additional method of evaluating students' learning. The activity can be modified as needed. For example, the timeframe of the activity can be modified to fit the course schedule.

Provide each student with the MyPlate, My Strength Take-Home Activity handout. Challenge them to use the handout as a "journal" to take note of how they use their strength throughout the day and how their meals impact their strength. They should submit the first page of the activity sheet at the end of the week as the assignment.



MyPlate, My Strength

Use the following pages as a "strength journal" for the next week. Respond to the questions throughout each day, noting how you use your energy while at school and gain energy through your meals.

At the end of the week, take a few minutes to observe the relationship between strength and food on this first page, and submit it in class.

1. What did you learn about your strength and energy needs?

2. How well did your lunch align to MyPlate recommendations?
How did that impact your strength in the afternoon?

3. What went well while completing this activity? What was difficult?

A Day in My Life | CAFETERIA MENU

Assume each menu item is the equivalent of one serving for its food group.

Dairy

Cheese stick

Cottage cheese

Milk

Smoothie

Yogurt

Fruit

Apple

Apple juice

Banana

Blueberries

Grapes

Orange

Orange juice

Peach

Pear

Pineapple

Raspberries

Strawberries

Watermelon

Grains

Bagel

Bread

Brown rice

Crackers

Oatmeal

Pasta

Pretzels

Tortillas

Protein

Baked chicken

Black beans

Deli turkey

Mixed nuts

Pork chop

Salmon fillet

Sausage patty

Scrambled eggs

Sliced ham

Sliced roast beef

Steak

Tuna

Vegetables

Avocado

Broccoli

Carrots

Celery

Cucumbers

Green beans

Lettuce

Sweet potatoes

Tomatoes

Beef on My Plate | CLUE #1

Three ounces of beef is a burger patty the size of a hockey puck or a steak the size of a deck of cards. Those three ounces of beef provides 25 grams of protein. You would have to eat six tablespoons of peanut butter (564 calories) or 1 ¾ cups of black beans (382 calories) to receive the same amount of protein.

Beef on My Plate | CLUE #2

All cattle eat forage for most of their lives, with some cattle also eating grains during the later part of their lives. The forage they eat may include grass, cornstalks, and hay.

Beef on My Plate | CLUE #3

Almost half of the land in the contiguous U.S. is pasture and rangeland, much of which is too rocky, steep, or arid to support farming, but it can support cattle and protein upcycling.

Beef on My Plate | CLUE #4

Cattle leave behind a nitrogen-rich, organic fertilizer.

Beef on My Plate | CLUE #5

When ground beef or steak is left over from a meal, it can easily be re-created into another meal, which helps to prevent food waste.

A Day in My Life | GYM

Complete each of the following steps before moving on to the next station.

Team Challenge

As a team, complete 10 jumping jacks.

Character Activities

Choose two of the following activities for your character. Write the activities you choose on the "gym" section of your team's activity sheet.

Lift weights before school

Participate in sports/any team practice before school

Participate in PE during one class period

Participate in sports/any team practice after school

Go for a run or bike ride after school

Character's Strength

Let's say each of these activities uses one bar of your character's strength battery. Fill in **two bars** on your activity sheet with the marker located at this station – one for each activity.

A Day in My Life | SCHOOL

Complete each of the following steps before moving on to the next station.

Team Challenge

As a team, identify three items in the room that begin with the same letter.

Character Activities

These are required activities! Write each of these activities on the "school" section of your team's activity sheet.

Listen and participate in class

Think and learn

Additionally, choose two extracurricular activities or clubs for your character. Add the activities you choose on the "school" section of your team's activity sheet.

Character's Strength

Your character's day at school uses a lot of brain power! Fill in **two bars** on the strength battery on your activity sheet with the marker located at this station.

A Day in My Life | HOME

Complete each of the following steps before moving on to the next station.

Team Challenge

As a team, complete 10 push-ups or sit-ups.

Character Activities

Choose five of the following activities for your character to complete. Write the activities you choose on the "home" section of your team's activity sheet.

Mow the lawn

Walk the dog

Do the dishes

Cook dinner

Fold laundry

Mop or vacuum the floors

Dust the furniture

Clean room

Water plants

Character's Strength

We'll assume the character completes these activities over the course of the week, using one bar of the character's strength battery each day. Fill in **one bar** on your activity sheet with the marker located at this station.

A Day in My Life | COMMUNITY

Complete each of the following steps before moving on to the next station.

Team Challenge

As a team, create a five-part team handshake.

Character Activities

Choose two of the following activities for your character to complete. Write the activities you choose on the "community" section of your team's activity sheet.

Participate in a community club or organization

Hold a part-time job after school/on the weekend

Assist with a community service project

Volunteer for a local community event or organization

Character's Strength

We'll assume the character completes these activities over the course of the week, using one bar of the character's strength battery each day. Fill in **one bar** on your activity sheet with the marker located at this station.

MyPlate | SELF-ASSESSMENT

Complete this self-assessment to guide your personal meal and activity planning for the future. Please be honest! You will not be required to share this self-assessment.

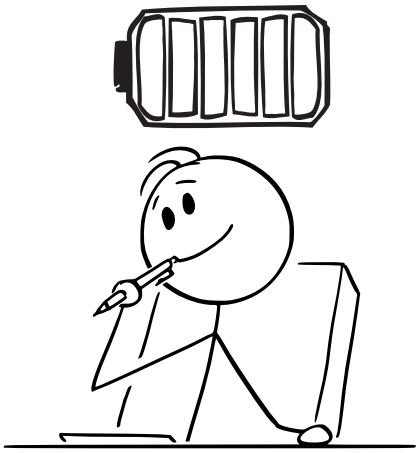
First, color the bars of each battery to indicate your strength level following a typical meal, as described. Be sure to think about how energized you feel, not just full. Do you have the strength you need to live your active lifestyle as a result?

1. I feel this energized after eating breakfast.
2. I feel this energized after eating lunch.
3. I feel this energized after eating dinner.
4. I feel this energized after eating a snack.

Rate your typical behaviors by circling a number on the provided scale.

	RARELY	SOMETIMES	USUALLY
5. I participate in physical activity for at least 60 minutes per day.	1	2	3
6. Half of my plate is filled with fruits and vegetables at most meals.	1	2	3
7. I eat a variety of colors of fruits and vegetables.	1	2	3
8. I eat the edible seeds and skins of some fruits and vegetables for more nutrients.	1	2	3
9. At least half of the grains I eat are whole grains, such as 100% whole wheat bread or brown rice.	1	2	3
10. I pair protein foods like beef jerky, deli meat, or milk with other foods when I eat snacks.	1	2	3
11. I consume 2-3 cups of dairy per day.	1	2	3
12. I generally choose low-fat or fat-free dairy products.	1	2	3
13. I eat protein at every meal.	1	2	3

Character Profile | USING STRENGTH

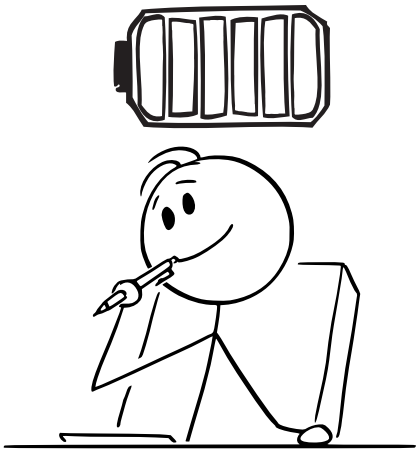


As a team, use the instructions located at each of the four stations in the room as guidance for choosing how your student character spends a typical day. At each station, you will find a list of activities to choose from. Determine the activities your character participates in and write them in the appropriate box below. Then, use the colored marker located at the station to shade in a certain amount of your character's strength battery, as defined by the instructions at the station.

SCHOOL	HOME
GYM	COMMUNITY

Character Profile | GAINING STRENGTH

Now, use the cafeteria menu handout to choose foods to fill your character's MyPlate diagrams for each meal of the day. As you go, refill the bars on your character's battery as instructed below.



Fill in your energy bar for each serving:

protein - half a bar

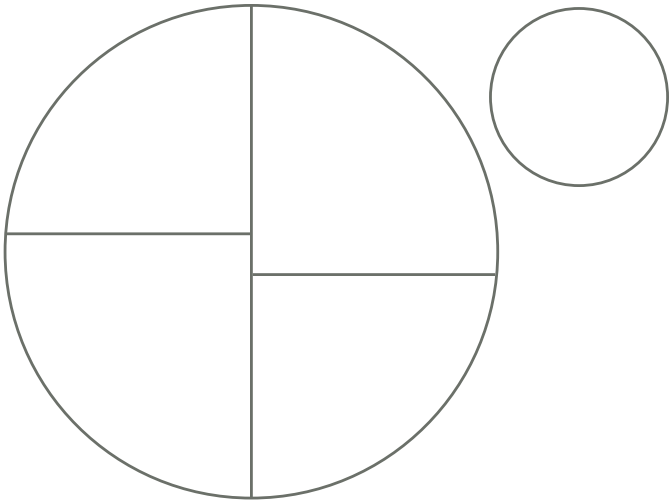
grains - one quarter bar

dairy - one quarter bar

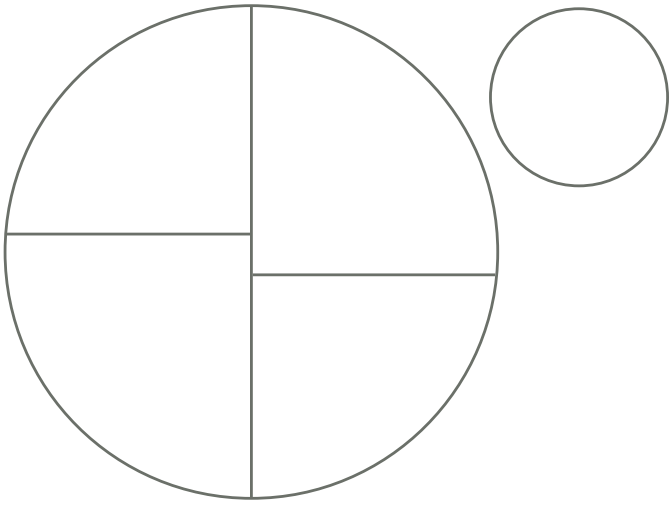
fruit - one eighth bar

vegetables - one eighth bar

Breakfast

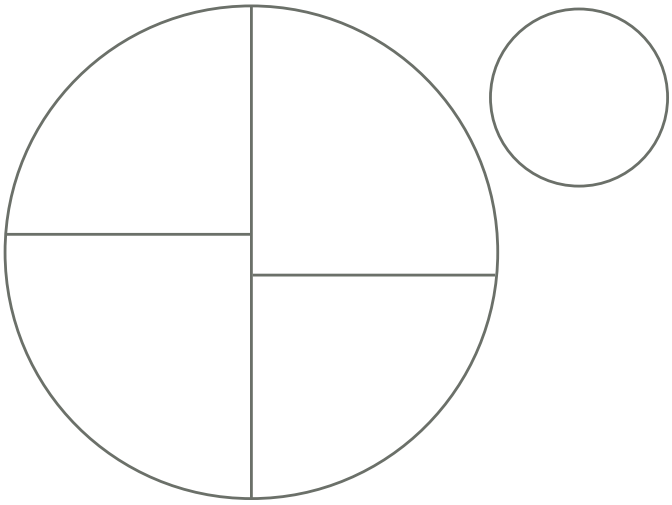


Lunch



Snack

Supper



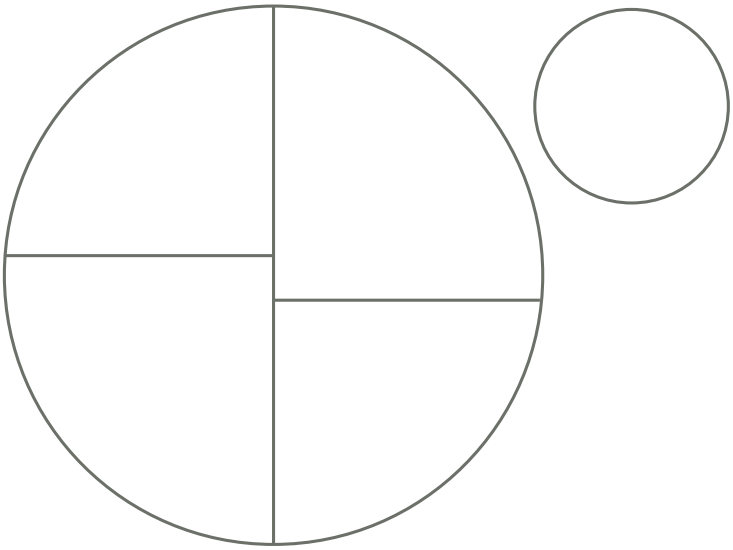
Snack

Day Two:

What did I need strength and energy for today?

At what points in the day did I feel I had the strength I needed?
When did I feel like I lacked strength?

What did I eat for lunch?



How did I feel immediately after eating lunch?
Three hours later?

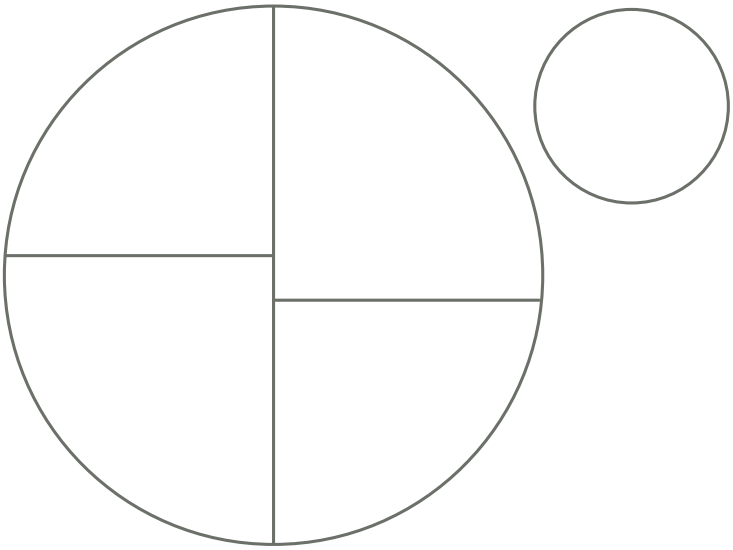
How did my lunch impact the strength and energy I had for the afternoon at school?

Day Three:

What did I need strength and energy for today?

At what points in the day did I feel I had the strength I needed?
When did I feel like I lacked strength?

What did I eat for lunch?



How did I feel immediately after eating lunch?
Three hours later?

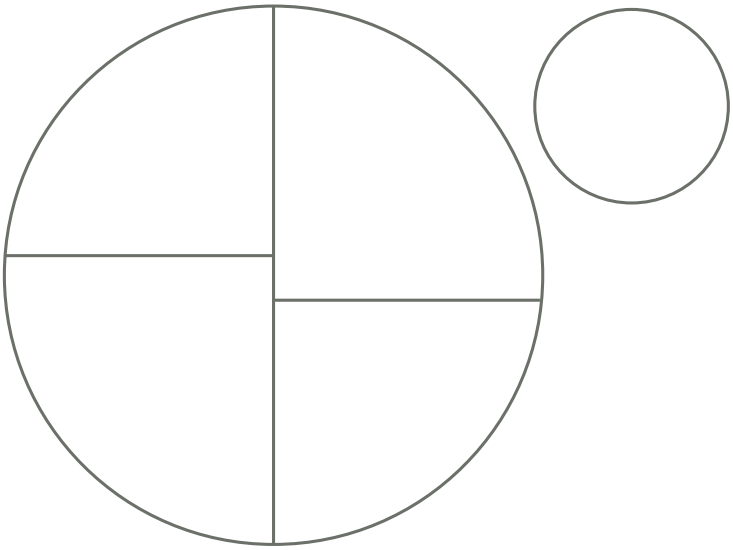
How did my lunch impact the strength and energy I had for the afternoon at school?

Day Four:

What did I need strength and energy for today?

At what points in the day did I feel I had the strength I needed?
When did I feel like I lacked strength?

What did I eat for lunch?



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Day Five:

What did I need strength and energy for today?

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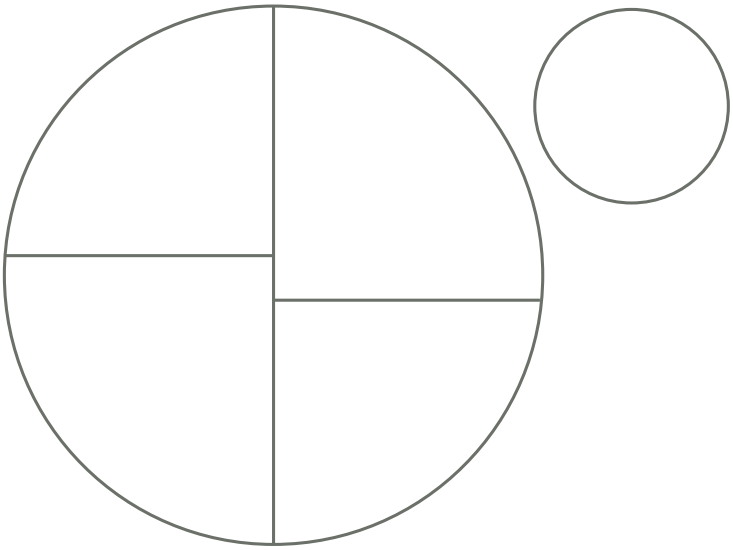

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MyPlate, My Strength

Use the following pages as a "strength journal" for the next week. Respond to the questions throughout each day, noting how you use your energy while at school and gain energy through your meals.

At the end of the week, take a few minutes to observe the relationship between strength and food on this first page, and submit it in class.

1. What did you learn about your strength and energy needs?

2. How well did your lunch align to MyPlate recommendations?

How did that impact your strength in the afternoon?

3. What went well while completing this activity? What was difficult?

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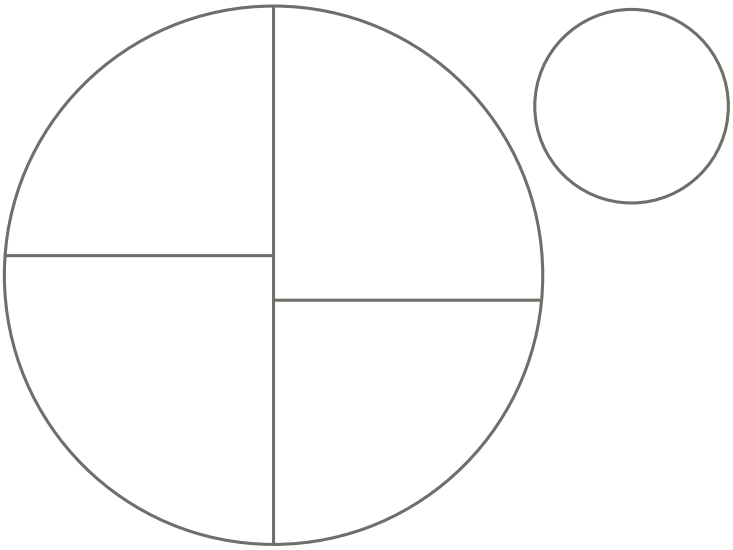

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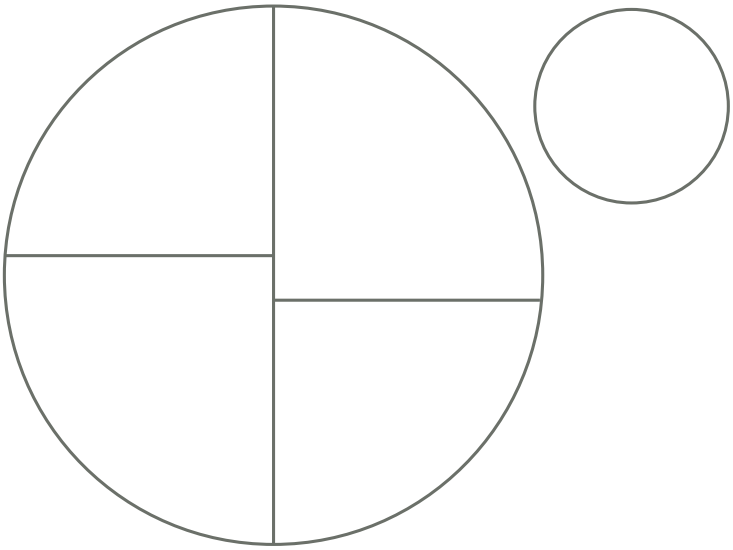

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Day Three:

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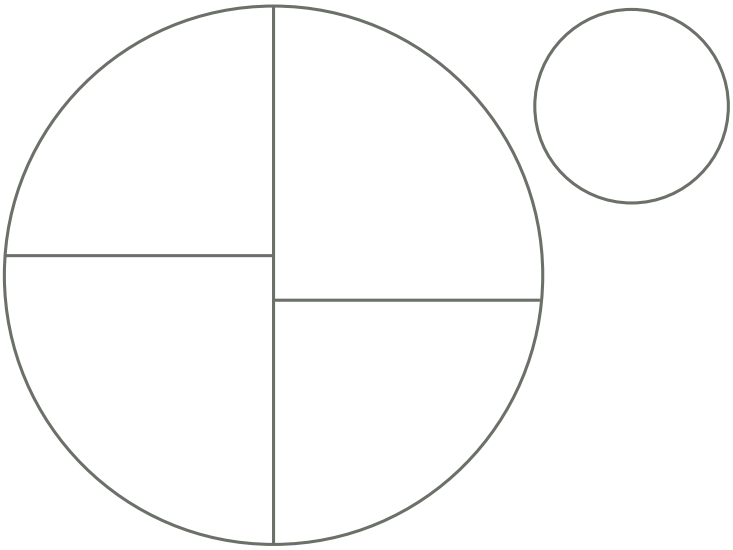

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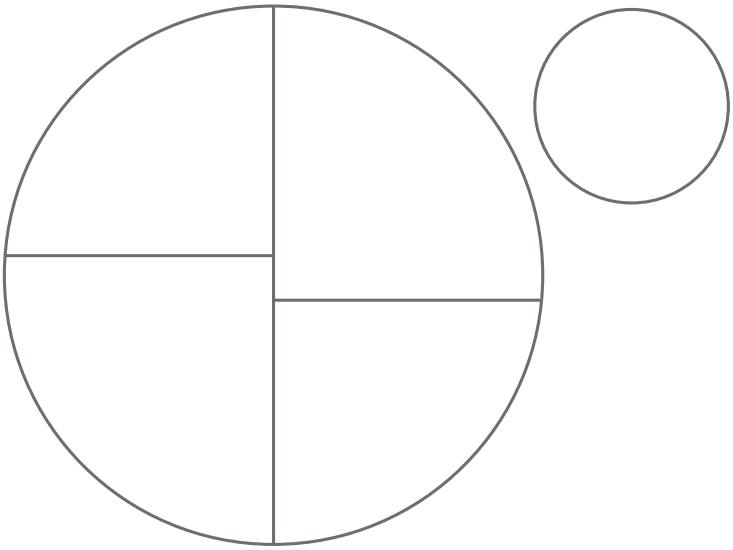

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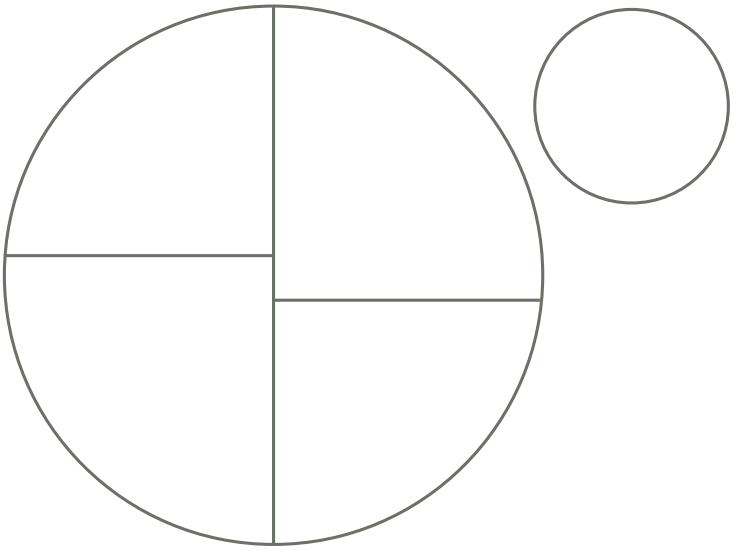

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