



3RD GRADE
LESSON: Calories
SC STANDARD: 3.ATO.3

CALORIES

OBJECTIVES:

- Understand what a calories is and how they hurt or help your body
- Explain where to find calories on the food label
- Discuss and understand that every food has calories, and that some are “good” calories while others may be “bad” calories

LET'S GET STARTED! (10 MINUTES):

- Allow students to name some foods that they think have calories in them
- Explain the definition of a calorie and how it affects your body as a whole
- Help students understand the meaning of “good” calories and “bad” calories
- Point out where calories can be found on a food label
- Discuss the fact that all foods have calories in them, but the amount may change

ACTIVITY (15 MINUTES):

- The activity for this lesson will help familiarize students with the algebraic concept of writing an equation and using a letter or symbol to represent the unknown.

WRAPPING UP (5 MINUTES):

- Review what a calorie is and have students restate what a “good” calorie versus a “bad” calorie is with a couple of examples
- Pass out Boss' Backpack Bulletin with weekly reminders and goals

SC STANDARDS:

- 3.ATO.3 Represent the problem situation using an equation with a symbol for the unknown

MATERIALS:

- Calorie Place Value worksheet
- Boss' Backpack Bulletin
- Pencils

LET'S GET STARTED!

- This lesson is going to be about calories. Open by asking the class to name some foods that they think have calories in them, and then to name some that do not have any calories at all.
- You will teach the class what a calorie is, how they benefit your body, and that there are “good” calories and “bad” calories depending on the different foods you eat.

DIALOGUE BOX

- Can anyone name any foods that have calories in them? What about foods that have no calories?
- All foods have calories and that is how you all get your energy during the day is through the food you eat!
- Calories are the energy that you get from food and it helps fuel your body and give you energy. If you do not get enough calories in a day, your body does not have enough energy to function properly, and you may even begin feeling tired. Not only would your body start slowing down, but your heart would also start slowing down, which means it is not getting enough blood.
- Almost everything in your body gets damaged when you are not feeding yourself enough calories!
- Someone your age needs close to 1,500 calories each day to stay healthy and keep you feeling energized.
- On the flip side of this, if you eat too many calories, or significantly over 1,500 calories, your body will also suffer from this as well. When you eat too many calories you can possibly begin gaining weight, which is not very healthy for your body either. Gaining too much weight can slow you down and make it a lot harder for your heart to pump blood in and out of your system!
- So, remember that the magic number is to try and stay around 1,500 calories per day!
- Now start discussing the differences between “good” calories and “bad” calories with examples of each.
- While all foods do have calories in them, the amount of calories will change, but the type of calorie will also change depending on the type of food it is.
- A helpful way to think of this is by separating it into “good” calories and “bad” calories.
- We can describe a “good” calorie as being something that is in a Go food, and remember a Go food is a food you can eat anytime you want. “Good” calorie foods are things like fruits, vegetables, whole grains, lean meats, fish, low-fat milk, and even nuts if you eat the right portion size.

DIALOGUE BOX

- All of these foods are very healthy for you and offer a lot of vitamins and minerals to your body that help keep you nourished, feeling full, and help your heart and brain work the way they are supposed to.
- “Bad” calories would come from those foods that we have previously described as Whoa foods, which are foods that you should only eat every once in a while or on special occasions. “Bad” calorie foods consist of chips, cookies, fries, fried foods, cakes, and soda. The calories in these foods do not keep your full for a long period of time, and they do not give you any nutrients that your body needs to stay healthy.
- After demonstrating where calorie can be found on the food label, elaborate on the fact that all foods have calories in them no matter what kind of food they are.

DIALOGUE BOX

- Like I mentioned earlier, calories can be found in any type of food you may eat or buy at the grocery store. About 90% of the time, you can find the amount of calories in a food on the food label.
- This becomes a problem though when it comes to fruits and vegetables. Fruits and vegetables do have calories in them, but because they do not necessarily come in a package, they do not have a food label on them.
- On other packaged foods, the food label can be found on the side of bottom of the box or bag that your food comes in. Calories will always be one of the first things on the food label. So, next time you go to the store with your parents, pick something up off of the shelf and try and find the amount of calories in that food for one serving.
- Always remember that you are supposed to eat around 1, 500 calories in one day, and what happens to your body if you eat way too much or not enough calories.

ACTIVITY

- The activity for this lesson will help familiarize students with the algebraic concept of writing an equation and using a letter or symbol to represent the unknown.
- Each student will be given a Calorie Chart with pictures of multiple lunch items. Underneath each picture is the amount of calories each lunch item contains. Students will use the chart to create an equation to help determine how many calories John had for lunch
- The unknown will be represented as “X”

DIALOGUE BOX

- Today we are going to practice making equations that help us solve for an unknown number. In math sometimes we use letters and symbols like “X” and “Y” to represent numbers we haven’t figured out yet.
- For example, let’s look at the equation $2+2=4$
- If we didn’t know what $2+2$ was we could write the equation $X=2+2$. Then, we could solve the equation and determine that $X=4$
- Let’s practice using equations to help John figure out how many calories he had for lunch

ADDITIONAL ACTIVITY

- Have the students pick three lunch items they would eat and write an equation to help them determine how many calories this would be

WRAPPING UP

- Hand out Boss’ Backpack Bulletin for them to do this week, and with the weekly goal on it. Tell students that on their Bulletin there will be examples of “good” calories and “bad” calories so that they can remember and watch out for those foods at home.



BOSS' BACKPACK BULLETIN

Your goal for this week is to eat more “good” calorie foods, or healthy Go foods, and try to cut back on those foods that have “bad” calories in them.



Good Calorie Foods

- All fruits
- All vegetables
- Foods made with whole wheat
- Low-fat milk
- Lean meats
- Fish
- Eggs
- Low-fat or Greek yogurt
- Natural peanut butter
- Nuts and seeds
- Rice cakes
- Whole grains (wheat, rice, corn, oats)

Bad Calorie Foods













- Chips
- Cookies, brownies, and cakes
- Fruit gummies
- Soda, fruit juices, and sports drinks
- Chocolate and candy
- Whole milk
- Flavored milk
- White grains (white rice, white flour, white tortillas, etc.)
- Fried foods and fast food
- Sugary cereals
- Ice cream

The “good” calorie foods I ate this week:

The “bad” calorie foods I tried staying away from this week:

Pictures of “good” calorie foods

CALORIES

 41 Calories	 170 Calories	 33 Calories
 85 Calories	 230 Calories	 105 Calories
 150 Calories	 80 Calories	 200 Calories
 150 Calories	 52 Calories	 110 Calories

1. John wants to know how many calories he had for lunch. He decides he is going to make an equation to help him figure it out. He wants to represent the number of calories with the letter "X." Using the attached calorie chart, help John solve for "X" and calculate how many calories he had for lunch. He had a turkey and cheese sandwich, carrots, and a banana.

$$X = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

2. Pick three lunch items that you would eat from the chart above and write an equation to help determine how many calories this would be.

$$X = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$