

## Vitamin and Mineral Power

**Grade Band:** 3-5

**Overview:** Student teams research a vitamin or mineral and create a trading card that explains their vitamin's or mineral's unique "superpowers."

**Corresponding Together Counts Lesson(s):** Decisions, Decisions; What's the Pattern; Nutrient Detectives; Food for Thought

**Suggested Time Frame:** 1-2 class periods

### Student Objectives

- Identify and summarize key facts about a select vitamin or mineral
- Design a trading card that illustrates and communicates key facts about a select vitamin or mineral

### Materials:

- 13 sheets of paper
- Markers
- "Vitamins and Minerals Trading Cards" student activity sheet (one per student)
- Access to the Internet

### Procedure:

1. Write the following terms on 13 separate small signs, and hang the signs around the room: Vitamin A, Vitamin B, Vitamin C, Vitamin D, Vitamin E, Vitamin K, calcium, sodium, iron, potassium, folate, riboflavin, and zinc.
2. Invite student pairs to travel from sign to sign and write or illustrate anything they know about the terms on each sign.
3. After all students have visited each sign, review what's written or illustrated. With which terms were students most familiar? Least familiar? Challenge students to identify what all of the terms have in common. Explain that all of the terms are names of vitamins or minerals.
4. Ask students if they know what vitamins and minerals are. Explain that **vitamins** are organic substances made by plants and animals, which are then eaten by humans. There

are 13 vitamins: Vitamins A, C, D, E, K, and the B vitamins. You can get all your vitamins from the foods you eat, but your body also makes Vitamins D and K. **Minerals** are inorganic substances that are not made by living things. Minerals are found naturally in soil and water and are absorbed by plants, which are then eaten by people and other animals. Examples of minerals are iron, calcium, and potassium. Our bodies need the right mix of vitamins and minerals to help us stay healthy.

5. Explain to students that, in this activity, they will work in teams to research information about one vitamin or mineral. They then will create a trading card that illustrates their vitamin/mineral on one side and summarizes important information about it on the other side. Note: If students are unsure about what trading cards look like, you can share sample images of [weather trading cards](#), [environmental trading cards](#), and [solar system trading cards](#).
6. Distribute the “Vitamins and Minerals Trading Cards” activity sheet. Explain that vitamins and minerals are like superheroes that give us their special powers to help us stay healthy. Review the assignment. Direct each student team to select one vitamin or mineral to research. Give students ample time to complete their research online or using books from the media center. Here is a list of web sites that students can use for their research:
  - a. Food and Drug Administration (FDA) Vitamins and Minerals chart: [https://www.accessdata.fda.gov/scripts/InteractiveNutritionFactsLabel/factsheets/Vitamin\\_and\\_Mineral\\_Chart.pdf](https://www.accessdata.fda.gov/scripts/InteractiveNutritionFactsLabel/factsheets/Vitamin_and_Mineral_Chart.pdf)
  - b. National Institute of Health (NIH) Office of Dietary Supplements: <https://ods.od.nih.gov/factsheets/list-VitaminsMinerals/>
  - c. United States Department of Agriculture (USDA) Vitamins and Minerals fact sheets: <https://www.nutrition.gov/whats-food/vitamins-minerals>
7. Once students have completed their research, distribute art materials to create the trading cards. Give students ample time to create the trading cards. When they are finished, encourage them to share and even trade their cards with class members!

**Family Extension:** Challenge families to find and prepare a recipe that includes at least three vitamins and minerals and to share information about how they are contributing to their good health by eating foods with these vitamins/minerals.

## National Standards:

### *National Health Education Standards*

**Standard 3:** Students will demonstrate the ability to access valid information and products and services to enhance health.

**Standard 5:** Students will demonstrate the ability to use decision-making skills to enhance health.

**Standard 7:** Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.

**Standard 8:** Students will demonstrate the ability to advocate for personal, family, and community health.

## Student Activity Sheet: Vitamins and Minerals Trading Cards

Vitamins and minerals are nutrients found in foods and beverages that help our bodies work properly. Although you get vitamins and minerals from the foods you eat every day, some foods have more vitamins and minerals than others. Vitamins and minerals perform many roles in the body. Some help strengthen bones, others heal wounds, and still others help your immune system. They also convert food into energy, and repair cellular damage.

All vitamins and minerals have their own “superpowers.” In this assignment, you will research one vitamin or mineral and design a trading card with a picture on one side and a summary of its superpowers on the other!

To complete your assignment, complete these steps:

1. Pick a partner.
2. With your partner, choose a vitamin or mineral from the list below to research.
3. Conduct research to answer these questions:
  - a. Is it a vitamin or a mineral?
  - b. What does your vitamin/mineral do in the body?
  - c. What foods or beverages contain your vitamin/mineral?
  - d. What is one interesting fact about your vitamin/mineral?
4. Plan and design your trading card:
  - a. Side A must include a picture that shows your vitamin/mineral and something that represents it. Get creative with your vitamin/mineral’s name and the way that you illustrate it!
  - b. Side B must include important information about your vitamin/mineral and its superpowers. It must include at least two things that your vitamin/mineral does in the body and at least two foods/beverages that contain your vitamin/mineral.

## Vitamins

Biotin  
Folate/Folic acid  
Niacin  
Pantothenic acid  
Riboflavin  
Thiamin  
Vitamin A  
Vitamin B6  
Vitamin B12  
Vitamin C  
Vitamin D  
Vitamin E  
Vitamin K

## Minerals

Calcium  
Chromium  
Chloride  
Copper  
Iodine  
Iron  
Magnesium  
Manganese  
Molybdenum  
Phosphorous  
Potassium  
Selenium  
Sodium  
Zinc