



Handout 1.9: Nutrient Sort Cards

Lesson: 1.9 The Six Nutrients **Print:** Page 1 (the cards) on card stock, one set per team, cut on the lines and clipped. Pages 2 and 3, one per student.

Page 1: The 30 food cards (cut apart)

Each card has the food name and a one-line picture in words. Cards marked with a small 8 in the corner are the ten extra cards for grade 7 and 8; a grade 6 set uses the 20 cards without the 8.

1. Whole wheat bread (a brown slice with seeds on the crust)	2. Grilled chicken breast (a plain cooked chicken piece on a plate)	3. Olive oil (a green glass bottle with a pour spout)
4. Orange (a whole orange and a peeled half)	5. Milk (a glass of white milk next to a carton)	6. Water (a clear glass of water with ice)
7. White rice (a bowl of cooked rice)	8. Black beans (a bowl of cooked dark beans)	9. Avocado (a green fruit cut in half with the pit)
10. Broccoli (green florets on a plate)	11. Cheddar cheese (an orange block with two slices cut)	12. Watermelon (a red wedge with seeds) 8
13. Pasta (a bowl of cooked spaghetti, no sauce)	14. Eggs (two eggs, one cracked open showing the yolk)	15. Butter (a yellow stick on a dish)
16. Carrots (three orange carrots with green tops)	17. Spinach (a pile of dark green leaves)	18. Cucumber (a green cucumber with three slices) 8
19. Banana (a yellow banana, half peeled)	20. Peanut butter (a jar with a spoon of peanut butter)	21. Salmon (a pink cooked fish fillet) 8
22. Strawberries (five red berries with green tops)	23. Yogurt (a cup of plain white yogurt with a spoon)	24. Almonds (a small pile of brown nuts) 8
25. Oatmeal (a bowl of cooked oats)	26. Tofu (a white block cut into cubes) 8	27. Soup broth (a mug of clear steaming broth) 8
28. Sweet potato (an orange potato cut open) 8	29. Lentils (a bowl of cooked brown lentils) 8	30. Tortilla chips (a bowl of yellow triangle chips) 8

Pile cards (print six per team, larger):

CARBOHYDRATES	PROTEINS	FATS
VITAMINS	MINERALS	WATER

Page 2: The six nutrients chart

Name: _____ Date: _____ Period: _____

Directions: Fill in the chart as we go through the six nutrients. One job, two foods each.

Nutrient	What it does in your body (the job)	Two foods that give it
Carbohydrates		
Proteins		
Fats		
Vitamins		
Minerals		
Water		

Word bank (for the nutrient names): *[Sal: paste the Turkish, Portuguese, and Spanish words from Vocabulary 01.md here before printing.]*

The sort: Put every card in a pile. If a card belongs in two piles, put it between them and write it here.

Card that fits two piles: _____ Piles: _____ and _____

Why: _____

Card that fits two piles: _____ Piles: _____ and _____

Why: _____

Page 3: Lifespan needs table

Directions: Three people, three different bodies. For each person, pick the TWO nutrients they need most right now and write one sentence why, using a job from the chart on page 2.

Nutrient bank to circle or write: carbohydrates, proteins, fats, vitamins, minerals, water

Person	Nutrient 1	Nutrient 2	Why (use a job from the chart)
A two year old who is learning to walk and talk			
A 14 year old on a travel soccer team who practices five days a week			
A 78 year old grandparent who walks a mile most days and eats less than they used to			

Sentence starter: "A ___ needs ___ because it helps ___."

Grade 8 stretch, fourth person: a pregnant adult. Nutrient 1: _____ Nutrient 2: _____ Why: _____

Teacher key

The 30 cards, main nutrient and second nutrient. “Main” is the pile the card belongs in. “Also” is the pile it could sit between; those are the cards that make the “two piles” rule work.

Card	Main pile	Also	Note
1. Whole wheat bread	Carbohydrates	Vitamins (B vitamins), Minerals (iron)	whole grain, also fiber
2. Grilled chicken breast	Proteins	Minerals (iron)	lean protein
3. Olive oil	Fats		pure fat
4. Orange	Vitamins (C)	Carbohydrates, Water	
5. Milk	Proteins	Minerals (calcium), Fats, Water	the classic three-pile card
6. Water	Water		pure water
7. White rice	Carbohydrates		
8. Black beans	Proteins	Carbohydrates, Minerals (iron), fiber	a plant protein that is also a carb
9. Avocado	Fats	Vitamins	a fruit that is mostly fat
10. Broccoli	Vitamins (C, K)	Minerals, Water	
11. Cheddar cheese	Proteins	Fats, Minerals (calcium)	
12. Watermelon	Water	Carbohydrates, Vitamins (C)	about 92 percent water
13. Pasta	Carbohydrates		
14. Eggs	Proteins	Fats, Vitamins (D in the yolk)	
15. Butter	Fats		
16. Carrots	Vitamins (A)	Carbohydrates, Water	
17. Spinach	Minerals (iron)	Vitamins (A, K), Water	accept Vitamins as main
18. Cucumber	Water	Vitamins	about 95 percent

			water
19. Banana	Carbohydrates	Minerals (potassium), Vitamins	
20. Peanut butter	Fats	Proteins	accept Proteins as main
21. Salmon	Proteins	Fats (omega 3), Vitamins (D)	
22. Strawberries	Vitamins (C)	Carbohydrates, Water	
23. Yogurt	Proteins	Minerals (calcium), Carbohydrates	
24. Almonds	Fats	Proteins, Minerals	accept Proteins as main
25. Oatmeal	Carbohydrates	Minerals, fiber	whole grain
26. Tofu	Proteins	Minerals (calcium, when set with calcium)	plant protein
27. Soup broth	Water	Minerals (sodium)	
28. Sweet potato	Carbohydrates	Vitamins (A)	accept Vitamins as main
29. Lentils	Proteins	Carbohydrates, Minerals (iron), fiber	
30. Tortilla chips	Carbohydrates	Fats, Minerals (sodium)	processed; the salty card

Scoring the sort: a team sort is “got it” at 24 of 30 cards in the main pile or between the main pile and an “also” pile. Cards with “accept ... as main” count either way.

The six nutrients chart (page 2), accepted answers.

Nutrient	Job	Foods (any two)
Carbohydrates	The body's main quick energy source	bread, rice, pasta, oatmeal, potatoes, fruit, beans
Proteins	Build and repair muscle, skin, and other tissue; growth	chicken, fish, eggs, beans, milk, cheese, yogurt, tofu, nuts
Fats	Stored energy; protect organs; keep the body warm; carry vitamins A, D,	oil, butter, avocado, nuts, peanut butter, salmon, cheese

	E, and K; brain growth in young children	
Vitamins	Help the body run its processes (seeing, healing, fighting illness, using energy)	fruits, vegetables, milk (D), eggs, whole grains (B)
Minerals	Build bones and teeth (calcium); carry oxygen in the blood (iron); balance fluids (potassium, sodium)	milk, cheese, yogurt, spinach, beans, meat, bananas
Water	Carries nutrients and waste; controls body temperature; makes up more than half the body	water, milk, soup, fruit, vegetables

Lifespan needs table (page 3), accepted answers. Any two that match the science with a reason tied to a job. The most defensible pairs:

Person	Needs most	Why
Two year old	Fats and minerals (calcium, iron); also proteins	Fat for brain growth; calcium for bones and teeth that are still forming; iron for blood as the body grows fast; small stomach, so small meals often
14 year old athlete	Carbohydrates and water; also proteins and minerals (calcium, iron)	Carbs for energy at practice; water to replace sweat; protein to build muscle during a growth spurt; calcium for bones that are still hardening; iron for oxygen, especially for girls
78 year old	Proteins and minerals (calcium, vitamin D); also water and fiber (carbohydrates)	Protein to keep muscle; calcium and vitamin D to slow bone loss; fewer calories needed but the same or more of these; thirst signal weakens with age, so water on a schedule
Grade 8 stretch, pregnant adult	Minerals (iron, calcium) and vitamins (folate); also proteins	Iron for more blood; calcium for the baby's bones; folate for the baby's brain and spine; protein for growth



Do not mark down a student who picks water for the toddler or protein for the athlete if the reason uses a real job. The point is the reason, not the pair.