Rooted in Wyoming:
Nutrition & Tasting Lesson Plan

Objective: Students will understand 1) all food is made up of macronutrients: carbohydrates, protein, fats, fiber; 2) plant foods provide important nutrients that keep body's healthy; 3) identify taste spectrums: sweet, bitter, vegetal, and how color relates to nutrient content.

Materials:

- Poster Boards
- Paper Plates
- Napkins
- Various Vegetables for Tasting

Introduction:

- Everything we eat provides our bodies with carbohydrates, protein, fat, and fiber in different amounts. These are called macronutrients or big nutrients because we need lots of them.
- Vitamins and minerals are micronutrients, or small nutrients, because they are important but we don't need as much of them.
- Carbohydrates come from grains, fruit, and vegetables. Carbohydrates are the main energy sources for our bodies. Whole grains contain B Vitamins, Vitamin A, Vitamin E, phosphorus, and potassium.
- Proteins come from meat, eggs, beans, nuts, seeds, and grains like quinoa and amaranth. Protein helps build strong bones and muscles and helps us stay healthy. Proteins contain Vitamin D, Vitamin E, the B vitamins, iron, zinc, and magnesium.
- Fats come from animal products and plant foods like nuts, oils, and avocados. Fats allow us to absorb vitamins like Vitamin A, D, & E. Fats support our brain health and support our cells and organs.
- Fiber is found in all plant foods. Fiber makes us feel full after eating. Fiber helps feed our gut microbiome, supports our immune system, and helps our digestion. High fiber foods include whole grains, vegetables, and fruits. High fiber foods contain many vitamins and minerals, including Vitamin A, D, K, and folic acid, calcium, phosphorus, and magnesium.
- It is important to eat a mix of all of these things every day to give our body all the different vitamins and minerals it needs to be healthy.
- When building your plate, try to fill half of it with vegetables and fruit. Vegetables and fruit are nutrient dense but low in calories, meaning you can eat lots of them. A nutrient dense food is a food that has lots of vitamins and minerals in it.
- You may have heard people refer to the 'gut microbiome'. Your gut microbiome is made up of trillions of tiny bacteria, viruses, and fungi that live in your intestines and help keep you healthy. Just like a garden needs healthy soil, your body needs these helpful bacteria to keep you growing healthy and strong. These bacteria help break down food, help you absorb nutrients, help regulate your moods, and help boost your immune system. You can help decide what type of bacteria make up your microbiome by eating lots of different fruits, vegetables, and other whole foods. Try fermented foods like yogurt, kimchi, and kombucha to give your microbiome an extra boost.

Color = Vitamins. This is why it is important to 'eat the rainbow'

- Orange & Yellow: Beta Carotene, Carotenoids: Vitamin A & C: eye health; heart health; skin health; cancer prevention.
- Green: Lutien, Zeaxanthin: bone health; blood flow; anti-aging.
- Red: Anthocyanidins, Lycopin: heart health; immune protection.
- Purple & Blue: Polyphenols, Anthocyanins: brain health; blood flow; anti-aging.
- White: Allicin, Quercetin: immune support, heart health.

Vegetable Tasting:

- Sweet Vegetables: Cherry tomatoes, red bell peppers, corn.
- Bitter Vegetables: Spinach, Chard.
- Vegetal (Green): Green Bell Peppers, cucumber.