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San Bernardino County
Superintendent of Schools
Transforming lives through education



Wednesday, June 3
1:00pm

Food – Delicious Science, “We Are What We Eat
4th – 8th grades.

Food - Delicious Science is the thrilling science story of the food on your plate and the physics, chemistry and biology that lies hidden inside every bite. Across three episodes we use the latest imaging techniques to reveal this inner world of food and we reveal along the way why such a variety of food

have ended up in our diet and how they affect our lives. When viewed at the microscopic level, food resembles a vast range of alien landscapes that shift in remarkable ways as we cook them. Each time we eat, a cascade of biological reactions is set off inside our bodies: from flavor explosions in the mouth; to an energy rush; to occasionally triggering waves of disgust. And how these ingrained human reactions and cravings for food have deep evolutionary roots that offer a whole new way of thinking about our relationship to the modern diet. The science is set against sumptuous location photography shot across the world: from the oldest rice terraces in the Philippines to an ancient variety of potato in the Andes Mountains of Peru; from the corn fields of Mexico to the milk dairies of Bulgaria as we seek the origins of some of our favorite foods to deepen our understanding of why we eat them. This is food as you've never seen it before.

In part three travel the world with Michael Mosley and James Wong to learn how the hidden chemistry in every mouthful of food keeps our bodies fit and healthy.

After watching this episode, choose from the following questions and/or tasks to extend your learning

Question Box 1

- What is the central idea? How is the central idea developed?
- Cite evidence from the TV Show to support your determination of the central idea.
- Provide an objective summary of the program.
- Using evidence from “Food - Delicious Science “We Are What We Eat”, explain why this is a good title for this TV program.
- How do the chemicals in our food feed and build our bodies? Explain the process in detail.
- What are the handful of ingredients our bodies absolutely need to survive?
- Describe the essential molecules that come from these familiar sounding groups?
- List the surprises that James and Michael discover when they seek to understand exactly why each class of molecule is so important for the way our bodies work?
- Describe the use of the latest imaging techniques to reveal this inner world of food

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chemistry, biology and physics.

- Describe how and why such a variety of foods have ended up in our diet and how they affect our lives.
- What location in this episode appealed to you the most and why?
- How does the location in this episode influence the food we eat?
- Thinking about the science of food, which food in this episode was most interesting, revealing and/or surprising. Tell why.

Question Box 2

- What surprised you in the program, and why?
- What's the most important thing you learned from the TV show? Why do you think so?
- What do you want to learn more about this topic, and why?
- What did you learn from the program?
- What resources will you need to learn more about this topic?

Box 3 (Tasks)

- Draw a model of the three major food molecules.
- Make a model that shows what happens to food in your digestive tract once you've eaten it.

Box 4 (Enrichment)

- Discuss with evidence that you, literally, are what you eat.
- Discuss with evidence why fast food is contributing to malnutrition.

Box 5 (Extend/Real-Life)

- After looking at the following website, discuss with evidence whether or not you are eating healthy. <https://www.choosemyplate.gov/>
- Mindful eating is a way to practice mindfulness and helps you to focus on the moment. The next time you eat a snack, practice the following:
 1. Look - what colors and shapes do you see?
 2. Listen - does your food make a sound?
 3. Touch - is it smooth, bumpy or rough?
 4. Smell - what does your food smell like?
 5. Taste - put your snack in your mouth. Notice how it feels in your mouth. Do you taste anything yet? Start to chew, does the flavor change? How many different flavors are there?