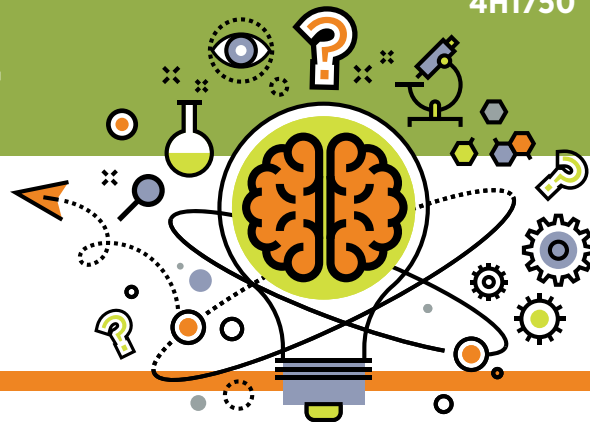


# TEACHING SCIENCE

...when you don't know diddly-squat



## Is precooked bacon a better value?

### Purpose:

The purpose is **not** to teach specific content, but to teach the process of science – asking questions and discovering answers. This activity encourages young people to try to figure things out for themselves rather than just read an answer on the internet or in a book. As a leader, try not to express your opinion, but let the youth engage in argument based on evidence.

### Time required:

30 minutes or multiple days depending on the interest and questions the youth have

### Materials:

- Precooked bacon
- Raw bacon
- A way to cook bacon
- Kitchen scale

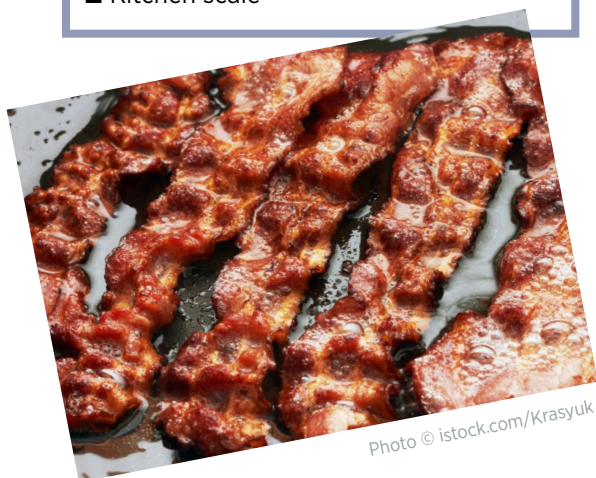


Photo © istock.com/Krasyuk

### SCIENCE PRACTICE:

#### Asking questions and defining problems

1. *Is precooked bacon a better value than raw bacon that you cook yourself? Why might that be important? Is the flavor and texture different? If one was cheaper, would you buy it that way? How much is the convenience of precooked bacon worth?*

### SCIENCE PRACTICE:

#### Planning and carrying out investigations

2. *With adult supervision, cook the entire package of raw bacon to your desired crispness. After cooking the bacon, weigh what you cooked on your kitchen scale. Weigh the precooked bacon. Taste both the precooked bacon and the bacon you cooked, and record the differences in taste and texture.*

### SCIENCE PRACTICE:

#### Using mathematics and computational thinking

3. *Create a chart like the one on the following page, and calculate the cost per ounce of each type of bacon.*

### SCIENCE PRACTICE:

#### Analyzing and interpreting data

4. *Which bacon is a better value – the precooked or the bacon you cooked? Why do you say that? Did you include the value of your time to cook the bacon? Did you include the value of your time to clean up the cooking dishes? (How much is your time worth? How do you determine that?) What are the advantages of precooked bacon? What are the advantages of cooking bacon yourself?*

### SCIENCE PRACTICE:

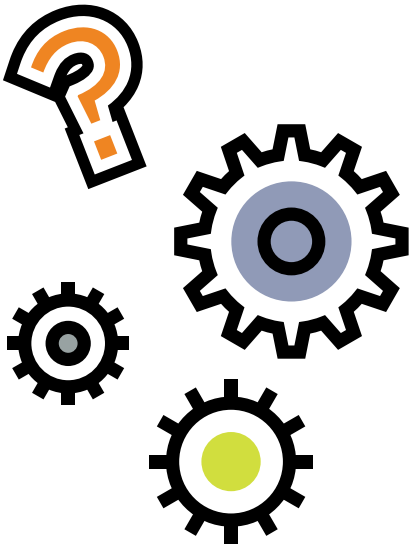
#### Constructing explanations and designing solutions

5. *Is precooked bacon the better value? Why or why not?*



**Bacon Comparisons**

You do not need all the answers to teach science. You simply need an inquisitive mind and to be willing to carry out an investigation.



Bacon Type	Weight of precooked package or weight of raw bacon after cooking (in ounces)	Cost of the package of bacon	Cost/weight	Notes (taste & texture)
Example: Precooked bacon	2.52 ounces	\$4.48	\$4.48/2.52 ounces = \$1.78 per ounce	Very chewy
Raw, cooked Bacon				
Precooked bacon				

**SCIENCE PRACTICE:**  
Engaging in argument from evidence

- Why do you think the price of the precooked bacon is different from the bacon you have to cook yourself? How do you think the precooked bacon is cooked? What do you think happens with all the bacon grease that is rendered out of precooked bacon? Do you think either the precooked bacon or the bacon you cook yourself is healthier? How do you define healthier?

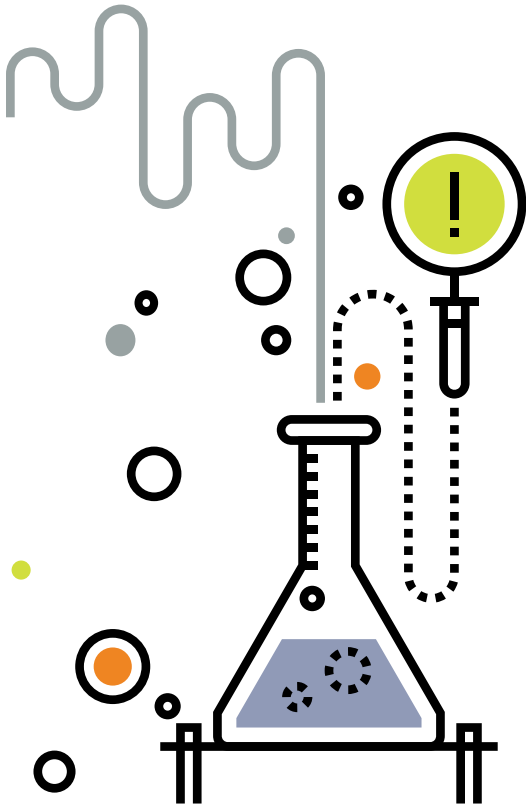
**SCIENCE PRACTICE:**  
Obtaining, evaluating, and communicating information

- If you were going to recommend either precooked or raw bacon, how would you describe it?

**Other thoughts:**

- Are there other foods you could try this with? Powdered milk? Concentrated orange juice? Home dehydrated food? How do bacon bits compare?
- Based on the difference between the raw bacon weight before and after cooking, could you determine how much the precooked bacon weighed originally?
- Could you compare pork bacon and turkey bacon?
- What about vegan bacon?





## Science & Engineering Practices:

These eight Science and Engineering Practices come from [A Framework for K-12 Science Education](#) (National Research Council, 2012, p. 42). These research-based best practices for engaging youth in science are connected to in-school science standards that all children must meet.

- ▶ Asking questions and defining problems
- ▶ Developing and using models
- ▶ Planning and carrying out investigations
- ▶ Analyzing and interpreting data
- ▶ Using mathematics and computational thinking
- ▶ Constructing explanations and designing solutions
- ▶ Engaging in argument from evidence
- ▶ Obtaining, evaluating, and communicating information

## Reference:

National Research Council. (2012). *A framework for K-12 science education: Practices, crosscutting concepts, and core ideas*. National Academies Press.

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