## Book and Bake Chocolate Whole Wheat Waffles

## Discussion guide... something for ages Pre-K to 18!

Copy the recipe for all, tools and ingredients (see side bar).
EXTRAS: U.S. map, food scale, internet access, a package w/price of 8-12 waffles.

- History. As U.S Minister to France, Thomas Jefferson returned with a waffle iron in 1789, serving waffles to many... Meriwether Lewis enjoyed waffles before Lewis \& Clark Expedition! Why would Mr. Jefferson NOT have served these waffles? A: Chocolate wasn't used in baking til 1832!
- Math. How many waffles does the recipe make and how much does each weigh? What is the net weight of the waffles the recipe makes? (A: 36 oz ) How does the price of making your own compare with buying a package of frozen waffles? A : compare net weight and price of purchased waffles How many grain servings in one waffle? (A: 1 oz=1 serving=3 servings)
- Science. State the Question. What makes the waffle light, not flat? Read the recipe together. What is their hypothesis?
A: Gas bubbles produced by the leavening (LEH-vuhn-ing) ingredients What is the leavening in the waffle and what gas does each type contribute? (A: Beaten egg whites ( $\mathrm{O} 2 \& \mathrm{CO} 2$ ); baking powder ( CO 2 )
- Reading. Read the recipe together, top to bottom. Take time to study the directions, terms. Before beginning, gather all ingredients and tools. Divide into teams and assign or ask teams self-assign prep steps.
- Consumer science. Compare ready-to-eat frozen waffles with Chocolate Waffles (A: Chocolate Waffles are wholegrain; cocoa is rich in hearthealthy flavanols ; use Nutrition Facts \& compare fat, sugars, fiber, protein, sodium, potassium, Vit. A, C, calcium, iron)
- Creativity. Use these terms in a mad-lib story or sentence! waffles... leavening... price...ingredients... flour...milk... cocoa... sugar...net weight... French... Thomas Jefferson... protein... whole grain... baking powder... beat... preheat... waffle iron... butter
- Team work. Describe how you can work together best to make great Chocolate Waffles. How can you divide clean up and baking?
- Tech Time. Learn more about flour, waffles, wheat, sugar and chocolate. How Flour is Milled. http://www.namamillers.org/education/kid-zone/ Waffle history. http://bit.ly/1CPH6Qr
Get food facts, not myths. Wheat and Sugar Facts. Wheatfoods.org and sugar.org Fun Facts about Chocolate, https://www.candyusa.com/story-of-chocolate/fun-facts-about-chocolatel


## Book AND Bake Options:

- Beans to Chocolate. How Things are Made. Inez Snyder.
- Grandma's Chocolate. Mara Price. (Spanish/English)
- Smart About Chocolate. Sandra Markle. (K and up)
- DK Readers: The Story of Chocolate. C. J. Polin (Gr. 2 and up)
- Charlie and the Chocolate Factory. Roald Dahl. (Many ages)
- Everything on a Waffle. Polly Horvath. (Many ages)



## What you'll need.

Cost per recipe:
Pre-K to 1st: Teams of 3-4 per aide - Tables/space, 6-12 teams
$\square$ Aprons for each baker
$\square 2$ to 4 waffle irons/drop cords
(Plug in at separate outlets)
6-12 medium mixing bowls
$\square$ 6-12 small glass or metal mixing bowls (to beat egg whites)
$\square$ 6-12 wire whisks
6-12 large mixing spoons
6-12 dry measuring cup sets
\& measuring spoon sets
$\square$ 6-12 liquid 2-cup measuring cups

- 2-4 vegetable oil pastry brushes
$\square$ Place tray or cookie sheet pan $\mathrm{w} /$ ingredients for two teams: whole wheat flour (4 cups) all-purpose flour (2 cups) baking powder (1 can) granulated sugar (1 cup) Baker's cocoa, ½ cup chopped nuts (1 cup, opt.) small salt container 1\% milk (4 cups) 4 large eggs (at room temp) 1 stick butter, cut in half $1 / 2$ cup vegetable oil vanilla extract (2 tsp.)
$\square$ Confectioner's (powdered)sugar
$\square$ Sifter, serving spoons
$\square$ Other topping options:
Vanilla low-fat yogurt,
Fresh Berry Sauce,
https://www.dominosugar.com/re cipe/fresh-berry-sauce
$\square$ Plates, napkins (no utensils)
$\square$ Dishpans, cloths, drying space
$\square$ Need gluten-free flour blend?
Go to: Gluten-free links at HomeBaking.org Glossary
Make your own Gluten Free Flour blend, Baking for Special Needs. https://www.homebaking.org/wpcontent/uploads/2019/07/final_kitc henscience-1.pdf

Lesson tested and prepared by Sharon Davis, Family \& Consumer Sciences. HomeBaking.org


1. Store backpacks, coats, phones
2. Wash tables or counter and hands; put on aprons
3. Divide into teams as needed; one recipe serves 12.
4. Read recipe together--top to bottom.
5. Discuss how to share the tasks and begin.
6. Gather ingredients and equipment for each team.

## Ingredients and Directions: Makes 12, 3-oz. waffles

1. In a medium-sized bowl, whisk together the dry ingredients:

2 cups whole wheat flour* (fluff flour, spoon into dry cup, level off)
$1 / 2$ cup granulated sugar
3 tablespoons baking cocoa
2 teaspoons baking powder
$1 / 4$ teaspoon salt
$1 / 2$ cup chopped nuts (optional)
2. In a 2-cup liquid measuring cup use whisk to mix until blended:
$11 / 2$ cups $1 \%$ milk
$1 / 4$ cup melted unsalted butter (or $1 / 4$ cup vegetable oil)
$1 / 4$ cup vegetable oil
1 teaspoon vanilla or almond extract

3. Separate 2 large eggs $* *$--add yolks to 2 -cup measuring cup milk mixture; mix well. In a separate glass or metal mixing bowl, beat egg whites with clean whisk or electric mixers to form stiff peaks.
4. Brush the waffle irons with vegetable oil and preheat.
5. Stir the liquid mixture into the dry ingredient mixture just until blended well. With a large spoon gently fold the egg whites into the batter until they disappear.
View how to "fold," HomeBaking.org Glossary, F. https://www.homebaking.org/glossary|\#f
6. If possible, warm a cookie sheet or plate to hold waffles in a $175^{\circ} \mathrm{F}$. oven.
7. Scoop $1 / 4$-cup batter onto each waffle grid, close and bake as waffle iron directs.
$\rightarrow$ Serve waffles hot, sprinkled with confectioner's sugar, OR a drizzle of syrup OR Greek vanilla yogurt and warm cherries. * an all-purpose gluten-free flour blend may be substituted
**OR, beat 2 whole eggs until lemon-colored; combine with milk mixture
One of 12 waffles, also provides 130 mg potassium, flavanols, 3 servings grain group and one full serving ( 16 g ) whole grains. Learn more: wholegrainscouncil.org

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