**Kids’ Activity: Sourdough Bread Starts with Starter**

Best served warm and crusty, sourdough bread can be made in your own kitchen in a few steps. You can grow your own living science project, then eat it up! Yum!

**Day 1: Make the Initial Starter**

4 ounces all-purpose flour (⅔ cup plus 2 tablespoons)

4 ounces water (⅔ cup)

- Wash the ingredients and combine in a 2-quad glass or plastic bowl. Stir vigorously until combined into a smooth batter. It will look like a sticky, thick dough. Scoop down the sides and loosely cover the container with plastic wrap or a clean kitchen towel secured with a rubber band.
- Place the container somewhere with a consistent room temperature of 70°F to 75°F (like the top of the refrigerator) and let sit for at least 24 hours.

**Day 2: Feed the Starter**

4 ounces all-purpose flour (⅔ cup plus 2 tablespoons)

4 ounces water (⅔ cup)

- Wild yeast have started making themselves at home in your starter. They will eat up the sugars in the flour and release carbon dioxide (the bubbles) and alcohol. They will also increase the acidity of the mixture, which helps fend off any bad bacteria. At this point, the starter should smell fresh, mildly sweet, and yeasty.
- Repeat this process for about 4 days. Then it is time to bake your bread! Wash your starter well, then use it for your daily bread. For origin story, try tinyurl.org/yingodog

**Try your own experiment:** Change the variables - variations in sourdough starters can change the flavor of your bread.

**Variations include:** time, temperature, location, flour (white, whole wheat, other), wet vs. dry

**Teen Activity:** Make Your Own Hummus

- Cooked a natural History of Transformation by Michael Pollan 641.3 P715
- The Dunes Effect: The Surrounding New Truth about Food and Flavor by Mark Schuback 641.3 SC3

**Ingredients**

(1) 15.5 oz. can of chickpeas

(1) large lemon

(2) garlic cloves

1 tsp salt

15 cloves of pepper

1 cup tahini

3 Tbsp. extra-virgin olive oil

**Directions**

1. Open can of chickpeas pinto-way. Drain the chickpeas, then puree them into food processor or blender.

2. Cut lemon in half and squeeze all the juice onto the chickpeas.

3. Smash garlic cloves with flat side of knife and remove peels. Puree with side of knife until a paste forms. Add to the food processor/blender.

4. Puree chickpeas, garlic, salt, pepper, and 2 Tbsp. water

5. Put on lid and process until smooth (~1 minute).

6. While food processor/blender is still running, stream in 3 Tbsp. olive oil. Continue to process until light and creamy (~1 minute longer). Taste and season with more salt if needed.

7. Transfer hummus to bowl and top with options above, such as tahini, sumac, sesame seeds, or cinnamon.

8. Source: tinyurl.com/665soo

**Questions? Contact Joy at JFejelshackerr@ppld.org**
Kid to Kid’s Books: Engaging Picture Book Biographies

Stubby’s Yellow Friendship by Michael Freeman

Set during World War I, this picture book biography touches upon a complex topic by introducing school-age kids to the heroic efforts of a small, skinny dog who wandered into an army training camp and then served with the soldiers.

Ages 8 - 12; History, World War I

Wild Horse Annie: Friend of the Mustangs by Tavia Yang

This origin tale of a favorite horse makes a read aloud for the entire family. After World War II, there was very little left to eat in Japan. Ando saw the tears of hungry people, and wanted to make something that would be ready instantly. This is the story of how he worked and worked to make a product that would meet their needs.

Ages 6 - 12; History, World War II; Food Science

Magic Homework: Story of Multinational Andis by Andrew Wang

Andis shows kids how to combine plastic and ribbon to create rubber bands with customized colors and shapes that stretch. The text describes the steps for making the rubber band that will be used on the kite. As part of his new effort, Andis encouraged children in Volkshochschule (a public community college) to protect the American mustangs.

Ages 6 - 12; American History, Animal Rights

Doctor Espearte and the Language of Hope by Alex Rodriguez

Espearte is spoken by two million people around the world. This simple, innovative, and last straightforward rules so words are easy to learn, remember, and use. Read about the man who helped create Esperanto and its influence.

Ages 6 - 12; History, Spanish

Just Like Rube Goldberg: The Incredible True Story of the Man behind the Machine by Sarah O’Connor

Zeny is a word to describe Rube Goldberg’s (1889-1970) inventions, which utilized complex sequences to accomplish simple tasks like turning on a light. Still today, when people try to think of complicated steps in order to do a simple task, they will build a “Rube Goldberg machine” to demonstrate their ideas.

Ages 6 - 12; Inventions, Cartoons, Creativity

Visit ppd.org for more events.

Homeschool Programs across the District (December 2019 - February 2020). Check ppd.org for dates and locations.

Monday, January 20th - 9 a.m. - 12 p.m.

“Discover the History of this Luxurious Ship, which Set Sail on its Maiden Voyage on April 10, 1912. Learn about the Engineering Mistakes and Principles such as buoyancy and overflow. For ages 5 - 12.”

Epic Engineering Disasters: The Unsinkable Titanic

Homeschooled students are invited to demonstrate this scientific phenomenon and its causes. Plus, create a Northern Lights art project using chalk pastels. For ages 6 - 12.

The Northern Lights Science and Art Experience

Annual Homeschool Science Fair

Homeschooled students are invited to demonstrate a science project for other families. There are no rules or guidelines for this noncompetitive event – planning is left up to individual families. Please register online at ppd.org. Registration opens Fri., Jan. 24, 2020.

Fri., Feb. 21 - 10 - 11:30 a.m. • Venue @ Library 21c

3D Koi Fish Masterpiece

Homeschooled students will be introduced to the many variations of Japanese koi fish and their habitat. Then create a 3D koi and paint it in realistic bright colors. For ages 7 - 12.

3D Koi Fish Masterpiece

Questions? Contact Joy at Jfleishhacker@ppld.org

Homeschool Science @ East

These awesome science-based programs offer kids an engaging variety of learning experiences.

Check ppd.org for more information.

3rd Friday of every month • 1 p.m. • East Library Community Room