

Coordinators: Gayla Randel, Family & Consumer Sciences Specialist, MT OPI
Christine Kirby, Executive Director, Home Baking Association
Instructor: Sharon Davis, FCS Education, *Baking STEAM*, HomeBaking.org
Lab manual: *A Baker's Dozen Labs*- 3rd Edition (All participants will receive).
Event Host: East Helena High School, 2760 Valley Dr, East Helena, MT 59635
Ms. Trinity Nelson, FCS Teacher- <https://ehhs.ehpsmt.gov/> School:406/227-7730

Prep Day - Wednesday, June 18- 1:00 PM- Set up labs (Davis/Gayla/Trinity)

Day 1 – Thursday, June 19, 2025

8:30 AM.- Classroom- Welcome, East Helena H.S. FCS Classroom- Gayla Randel
Orientation, Host, Trinity Nelson, FCS
Sensory Sample: Trail Mix Breakfast Bar (Lab 2) (Sharon)



8:45 AM- CLASSROOM – *Baking with Montana Grains and Flour* Greg Thayer, CEO, Montana Milling

<https://montanamilling.com>

9:45 AM- *Baking Best Practices- Home to Career* - Sharon

- *Mis en Place* (Teaching Methods)
- Measurement Matters, *Scoop, Spoon, Scale* (Activity)
- Baking Temperatures- Processes, Baking Food Safety

10:15 AM—*Baking Ingredient Functions, Trends, Resources*- Sharon

- Baking Ingredient Functions (PPT)
- What's Gluten? *Flour is Not Just Flour* (Activity)
- Sugar STEAM, Myths, Facts and Functions in Baked Goods
- Resources- Ingredient, nutrition, WheatFoods.org, IFIC.org

11:00 – Break – Wash, aprons on, team up, lab orientation- Trinity, Sharon

11:15 AM- LAB – Lab product preps, demos, Sharon

Everyday Muffins- Flour Baking Science (Lab 3)

3-2-1 Pastry Dough (Savory Galette, Bake for Lunch)

11:30 AM- Lab teams prep pastry dough (chill); prepare Everyday Muffins
Baking Science Experiment. Create galette; bake galette and Everyday Muffins.

12:30- Break/Lunch- *Baking for MT FCS* – Gayla Randel, CFCS, FCS Program Specialist, MT Office of Public Instruction-

- Enjoy your Savory Galette with salad
- Everyday Muffin Evaluation (Rubric, Lab 3) (Sharon)

1:30 - PM- Sharon Demo

Teams/ lab prep Pita and Artisan Focaccia dough; Refrigerate.

- Potato Refrigerator Sweet Dough (Lab 12) Refrigerate
- Designer Scone Bites (Lab 5) (Freeze- Teams Create product name, customer profile)

3:00 PM- Travel to Park Avenue Bakery

3:30-5:30 PM - *Coffee and Careers in Baking with Park Ave. Bakery*- 44 South Park Avenue, Helena- 406/449-8424

Career, Community and Family Connections

1.2 Demonstrate Transferable knowledge, attitudes, and technical and employability skills in school, community and workplace settings.

1.3.2 Demonstrate skills individuals and families can utilize to support civic engagement in community activities

Consumer and Family Resources

2.1.3 Analyze decisions about providing safe and nutrition food for individuals and families.

2.2.3 Demonstrate behaviors that conserve, reuse, and recycle resources to maintain the environment.

Food Production and Services

8.2.5 Practice standard personal hygiene and wellness procedures

8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods and food groups

8.4.7 Apply principles of measurement, portion control, conversions, food cost analysis

8.5.2 Demonstrate professional skill for a variety of cooking methods including...baking using professional equipment and current technologies.

8.5.14 Demonstrate cooking methods that increase nutritional value, lower calorie content, utilize herbs, spices

Food Science, Dietetics and Nutrition

9.5.6 Conduct sensory evaluations of food products

Hospitality, Tourism and Recreation

10.4.4 Apply basic food preparation and service skills in catering operations

Workshop STEAM References:

A Bakers Dozen Labs, 2025

USB-HomeBaking.org

Baking Food Safety 101, 2025

Baking Glossary Terms, Techniques,

<https://www.homebaking.org/glossary/>

Dough Sculpting 101, HomeBaking.org 50, 5-Minute Baking Activities.

Baking tutorials, BakerBettie.com and BiggerBolderBaking.com

Baking Glossary, HomeBaking.org

Montana Wheat & Barley Committee,

<https://montanawbc.com/>

RedStarYeast.com- Yeast Science

RodelleKitchens.com- Vanilla 101

<https://www.parkavenuebakery.net/about/>

Meet with Renee Kowalski and general manager to learn their career paths, who and how they hire and train employees- all while enjoying their pastries and a beverage of choice. *Beverage and pastries are not included in registration fee.*

Day 2, Fri., June 20, 2025 –

Career Clusters, Standards,
www.LeadFCSEd.org

7:00 AM- Davis arrive, bake Scone Bites; set up Vanilla Sensory and Chocolate Tasting experience.

8:30 AM—Teachers arrive Classroom- East Helena H.S.

Baking Teams' Introduce their Designer Scone Bites and taste test

- How & to whom would your team label & market your scone?
- What is "value-added baking?" and price-point costing?
- Reflect on Park Avenue visit
- Are you an FCS entrepreneurial test kitchen? Be an asset to school, community, home
- Cottage Baking in Montana- <https://cottagefoodlaws.com/montana-cottage-food-laws/>
- Service Learning and Career Connections- Bake for Funds; Bake to Give; HBA Members

9:15 AM- LAB Demos Pita, Artisan Focaccia (Sharon)

9:30 AM- LAB Teams shape Pita (for Lunch), create Artisan Focaccia

- Bake focaccia and pita; prep fillings for pita
- Share Artisan Focaccia creations; cross-classroom strategies

11:00 AM – What's in A Baker's Dozen Labs USB, HomeBaking.org, On-line(Sharon, Teachers)

Noon- Lunch- Enjoy Pita with savory fillings; dessert- *A Slice of History- Chocolate Yeast Cake (Lab 11)*

Speaker: MT Wheat & Barley Resources and Connections- Lori Wickett- Director, Research & Communications - <https://montanawbc.com/>

1:00 PM – Break/LAB- Demo, shape and bake Potato Refrigerator Dough Braids, Rolls –

- Feature resources: Potato Refrigerator Dough/Video – Lab 12-Dough Sculpting 101
- HomeBaking.org; KingArthurBaking.com; BakerBettie.com and BiggerBolderBaking.com
- Clean labs

2:30 PM- Classroom - *Baking with Vanilla 101*- Tasting Single-Sourced Vanilla from RodelleKitchens

- Vanilla 101 Sensory Taste Test (Sharon and Gayla)
- EXTRA Resource- How to Conduct a Chocolate Tasting and Chocolate Tasting Resources, PPT; Samples (Sharon)

4:00 PM- Applications, Evaluation and Outtakes with Gayla-

Share baking credential opportunity; career connections; HomeBaking.org, futureinbaking.com

4:15 PM- Graduation 😊 Receive Baking Kit

All students please bring a hair covering. Please wear close-toed lab shoes; no jewelry or nail polish please.

Resources:

Home Baking Association: www.HomeBaking.org

Montana Wheat & Barley, <https://ymiclassroom.com/lesson-plans/mt/>

Red Star Yeast: Recipes, Sourdough, Step-By-Step, Yeast Science- <https://redstaryeast.com/baking-learning-center/>

Wheat Foods Council: Graphics and Videos-Wheat, Flour and Milling 101- <https://www.wheatfoods.org/wheat-101/>

The Journey of Wheat <https://youtu.be/3ihTep7zMNI?si=ctBoaZO6u0ZQWoN7>

Flour provided by Wheat Montana, ND Mill and King Arthur Baking. Yeast by Red Star and Vanilla by ADM/Rodelle.

