

COMMERCIAL BAKING



PURPOSE

To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the commercial baking field.

First, download and review the General Regulations at: updates.skillsusa.org.

ELIGIBILITY

Open to active SkillsUSA members enrolled in programs with commercial baking/pastry arts as the occupational objective.

CLOTHING REQUIREMENT

White pants or black-and-white checkered chef's pants* (no black pants); pants must fit properly and not drag on the floor. White chef's shirt or coat, white or black leather work shoes, white apron, white chef's hat (paper or cloth) and hairnet. A white chef's scarf is optional.

These regulations refer to clothing items that are pictured and described at: www.skillsusastore.org. If you have questions about clothing or other logo items, call 800-401-1560 or 703-956-3723.

* Black-and-white checkered chef's pants not available through the SkillsUSA Store.

Note: Contestants must wear their official contest clothing to the contest orientation meeting. (No identification of the school or state should be on the clothing.)

EQUIPMENT AND MATERIALS

1. Supplied by the technical committee:
 - a. All necessary equipment and food items
2. Supplied by the contestant (at least one of each, but more per item than specified is acceptable):
 - a. One palette knife
 - b. One hand whip

- c. One large kitchen spoon
- d. Three pastry bags, tips and scissors
- e. One bowl scraper
- f. One dough knife
- g. One serrated knife
- h. One pastry wheel
- i. One bench brush
- j. One grease brush
- k. One pastry brush
- l. One rolling pin
- m. Three side towels
- n. One cleaning towel
- o. One set of nested mixing bowls (1-, 2- and 3-qt.)
- p. Thermometer
- q. Timer
- r. Oven mitt or pan handlers
- s. Disposable gloves to handle ready to eat foods
- t. Pencil or marker to mark baked items
- u. No other food items allowed (e.g., sprinkles, decoettes, etc.)
- v. A small (battery-powered or spring) scale (2 lb. to 4 lb. capacity)
- w. Basic calculator is allowed for baking and written test
- x. A 1-2 qt. sauce pan
Note: This is the minimum of tools needed. Contestants may bring additional materials but they must be stored in your workspace. Judging will also include neat and clean workspace.
- y. All state winners must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty.

Note: Your contest also may require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the SkillsUSA website: updates.skillsusa.org.

SCOPE OF THE CONTEST

The contest will be geared toward the commercial (retail) baking business rather than commercial restaurant business.

Knowledge Performance

The contest will include a written knowledge test assessing baking fundamentals. The exam consists of 100 multiple-choice questions.

Topics of the exam include: weights, measures and general baking math; proper temperatures of dough, dough handling and baking; classifications and properties of ingredients; handling and storage of ingredients; safety and handling; yeast raised dough products; doughnut — cake and yeast raised; cake decorating; cakes; production, scheduling, planning; laminated doughs; cookies, pies and pastries; and customer service and merchandising of products.

The written test will be scheduled during a contestant meeting and held before the performance portion of the contest.

Skill Performance

The skill performance of the contest will be the actual preparation of goods and presentation of finished products ready for sale to customers.

Contest Guidelines

1. During the contest, all food items needed for baking will be provided; no outside food will be allowed.
2. The product formulas and other instructions needed for product preparation will be posted on the SkillsUSA website at: updates.skillsusa.org.
3. A total of six products will be prepared during the performance portion of the contest. The products will be selected by the national technical committee.
4. The finished products identified in Competency 2.9 will be judged using the following criteria. All products will be visually evaluated on a scale of one to five. Each product will be scored on these elements:
 - a. External appearance — Volume, form or shape, size, uniformity, structure, color, crust, thickness, character or feel and even bake. For certain products, the weight, size, flakiness, over spring, structure, toppings, fillings and glazes will be evaluated
 - b. Internal appearance — Slice, structure, color, grain or density, tunneling or holes, texture or feel and even bake
 - c. Taste — Aroma, flavor, mouth feel, aftertaste, character, palatability, texture, freshness, moisture and dryness

- d. Salability — Product quality, consistency and presentation as a desirable consumer good
5. The finished products identified in Competency 2.9 will be judged using the following criteria. All products will be visually evaluated on a scale of one to 10. Each product will be scored on these elements:
 - a. Icing
 1. Symmetry — cake centered on board, final shape of cake, sides perpendicular to top, square and level cake
 2. Opacity (no window or crumbs)
 3. Proper amount of icing
 - b. Design
 1. Borders — even and symmetrical
 2. Use of color
 3. Does the design fit the cake (room for lettering, flower too big or small)
 4. Balance
 5. Use of flowers
 - c. Technique
 1. Borders — even and symmetrical
 2. Natural flow of stems and leaves
 3. Roses — made to resemble nature
 4. Execution of design
 - d. Following directions — cake order followed exactly

Standards and Competencies

CB 1.0 — Demonstrate knowledge of basic baking fundamentals

- 1.1 Pass the Retail Baking Association standard certification exam. The exam consists of 100 multiple-choice questions. Topics of the exam include: weights, measures and general baking math; classifications and properties of ingredients; handling and storage of ingredients; safety and handling; yeast-raised dough products; doughnut — cake and yeast-raised; cake decorating; cakes; production/scheduling/planning; laminated doughs; cookies, pies, and pastries; and customer service and merchandising of products

CB 2.0 — Prepare six baked goods made from scratch and/or from a fresh or frozen dough, and one iced and decorated cake in a bakery setting to RBA industry standards using a five-point scale (see criteria below). The contestant will:

- 2.1 Read and understand standard bakery formulas
- 2.2 Select correct ingredients given the provided formula
- 2.3 Weigh and measure ingredients accurately given the provided formula
- 2.4 Assemble ingredients in the correct sequence given the provided formula
- 2.5 Apply appropriate preparation procedure given the provided formula
- 2.6 Apply (i.e., blend, fold, mix) the appropriate mixing procedure given the provided formula according to RBA industry standard
- 2.7 Correctly leaven and bake product to RBA industry standard
- 2.8 Correctly finish baked product (i.e., glaze, ice or fill) to RBA industry standard
- 2.9 Prepare one product from each of the following categories to RBA industry standards
 - 2.9.1 Category 1: Yeast bread and rolls — straight dough formula
 - a. French or Italian dough hard rolls, French bread, Vienna bread, Kaiser rolls, club rolls, baguettes and breadsticks
 - b. Pan breads
 - 2.9.2 Category 2: Quick breads (no yeast) — baked
 - a. Loaf types — such as cranberry, date nut, lemon, poppy seed and cinnamon apple
 - b. Muffins
 - 2.9.3 Category 3: Cookies
 - a. Cut and roll out — such as sugar cookies
 - b. Bagged out — such as spritz, butter and tea cookie
 - 2.9.4 Category 4: Puff pastry (laminated dough)
 - a. Turnovers
 - b. Cream horns
 - 2.9.5 Category 5: Paste a Choux product
 - a. Éclairs and cream puffs

- 2.9.6 Category 6: Pie and pastry crust pastry
 - a. Regular two-crust, fruit-filled pies
 - b. Rim crust for one crust of soft pies — such as squash and custard, pecan
- 2.9.7 Category 7: Prepare one iced and decorated cake to the customer's specifications as per written order

CB 3.0 — Demonstrate knowledge of commonly accepted OSHA safety standards in a bakery, including lifting techniques and safety management

- 3.1 Use appropriate lifting techniques
- 3.2 Keep work area well organized and free of hazards
- 3.3 Follow safety requirements for operating equipment
- 3.4 Work with a regard for safety of self and others

CB 4.0 — Demonstrate appropriate, commonly accepted OSHA sanitation practices in a bakery

- 4.1 Wash hands sufficiently and at appropriate times during baking process
- 4.2 Inspect tools and equipment before using and correctly clean items
- 4.3 Use a clean side towel and replace as needed during the day
- 4.4 Avoid actions that can potentially contaminate food
- 4.5 Wear gloves when working with ready-to-eat foods

CB 5.0 — Demonstrate production efficiency practices in a bakery

- 5.1 Use procedures to accurately measure ingredients
- 5.2 Bake and finish product to produce the maximum salable product
- 5.3 Model time-management

CB 6.0 — Use commonly used equipment in a bakery according to manufacturer's specifications

- 6.1 Use equipment according to manufacturer's specifications
- 6.2 Select appropriate tools and equipment for baking function or product

- 6.3 Use mixer according to manufacturer's specifications
- 6.4 Use small wares and tools (thermometer, spoons, measures, etc.) appropriately

CB 7.0 — Demonstrate appropriate, commonly accepted OSHA personal hygiene and grooming practices in a bakery

- 7.1 Dress in a commonly accepted professional manner
- 7.2 Maintain a clean uniform (shirt, pants, skirts, shoes, hat, towel, etc.)
- 7.3 Wear head gear or other covering at all times
- 7.4 Maintain clean hands at all times

Committee Identified Academic Skills

The technical committee has identified that the following academic skills are embedded in this contest.

Math Skills

- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Simplify numerical expressions
- Solve practical problems involving percents
- Use of weights and measures

Science Skills

- Describe and recognize solids, liquids and gases
- Use knowledge of physical properties (shape, density, solubility, odor, melting point, boiling point, color)
- Describe and identify physical changes to matter
- Use knowledge of mechanical, chemical and electrical energy
- Use knowledge of heat, light and sound energy
- Use knowledge of temperature scales, heat and heat transfer

Language Arts Skills

- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice

- Understand source, viewpoint and purpose of texts
- Organize and synthesize information for use in written and oral presentations
- Demonstrate knowledge of appropriate reference materials
- Use print, electronic databases and online resources to access information in books and articles
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing

Connections to National Standards

State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards

- Numbers and operation
- Measurement
- Geometry
- Data
- Problem solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: <http://www.nctm.org>.

Science Standards

- Understands the structure and properties of matter
- Understands the sources and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry

Source: McREL compendium of national science standards. To view and search the compendium, visit: www2.mcrel.org/compendium/browse.asp.

Language Arts Standards

- Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.ncte.org/standards.