

### Artisan Baking at Home

Below you'll find a list of ingredients and equipment needed for your class. To ensure efficiency during class, please have all ingredients on hand before class begins. Any prep work to be done before class is highlighted in yellow.

All recipes used in class will be attached in your confirmation email. Please scroll past the equipment list for the recipes.

If you have any questions or concerns email us, <u>bakingeducation@kingarthurbaking.com</u>. All Zoom links are sent out on the day of class. If you have not received the link 1 hour before your class begins, please contact us at the email above.

Day 1: Focaccia Siciliano, Lavash with Whole Wheat, Croissant Dough Day 2: Croissant Lamination, Baguette Day 3: Sourdough Bread, Croissant Roll and Bake

This class requires an active sourdough starter. A minimum of 2 weeks is required to properly achieve an active sourdough starter. If you need guidance with creating a sourdough starter or reviving a dormant starter, follow this link to our website: https://www.kingarthurbaking.com/learn/guides/sourdough Feel free to call us with any questions. (800) 652-3334

#### **INGREDIENTS** (total amount needed for the class)

- □ Active Sourdough Culture: 50g
- □ King Arthur Unbleached All-Purpose Flour: 2,270g (5 pounds), plus more for dusting work surface and maintaining starter
- □ Whole wheat flour: 199g (1 ¾ cups)
- □ Durum flour: 400g (3 ¼ cups)
- □ Pastry flour: 106g (1 cup)
- □ Sugar: 43g (1/4 cup)
- □ Olive oil: 28g (2 tablespoons) plus more for oiling a pan
- □ Instant or active dry yeast: 18g (5 ½ teaspoons)
- □ Salt: 4 tablespoons
- □ Milk: 59g (¼ cup)
- □ Eggs: 2

- □ Unsalted butter: 84g (6 tablespoons), at room temperature, Day 1
- □ Unsalted European-style unsalted high-fat butter: 113g (½ cup), COLD\*
- □ Cayenne: ½ teaspoon
- Chocolate batons or chocolate chips (optional for Pain au Chocolate): 8 batons
- Seeds of your choice: poppy, sunflower, caraway, sesame (optional)
- □ Rosemary (optional garnish)
- □ Finishing salt (optional garnish)
- □ Non-stick spray (or butter/oil for greasing pans)

\*Some examples of European-Style butter: Plugra, Kerry Gold, Danish Creamery. European-Style butter will facilitate the lock-in and folding process. Regular unsalted butter can be substituted, if you can't find unsalted European-Style butter. However, the results may not be as good, and the process of laminating may be slightly more difficult.

#### EQUIPMENT

□ Scale (required)	Pastry brush
Measuring spoons	□ 8" cake pan
□ Liquid measuring cup	Sharp knife or bakers' lame
□ Mixing bowls: Assorted sizes	Couche or tea towels for shaping bread
🗆 Bench knife	Round bannetons or large bowls for proofing
Plastic bowl scraper	$\square$ Baking sheets with parchment paper or silicone baking mats
Rolling pin	□ Plastic wrap

Steam is critical for achieving expansive, open-crumb loaves with a golden, crisp crust. There are a several good options for how to do this in your home oven. We will be covering two options in class.

For boules (round loaves) we recommend a heavy cast iron Dutch oven, covered baker, or combo cooker.

For baguettes we recommend using a baking stone or steel. In addition, a cast iron skillet is useful for steaming the bread while baking.

#### PLEASE NOTE

Adding water to a cast iron skillet or metal pan in a blazing hot oven can cause warping and rusting. It's wise to designate a cast iron skillet specifically for baking bread, accepting the possibility of warping or rust. Look for affordable cast iron skillets at garage sales or thrift shops, where you might discover ones in less-than-perfect condition. Avoid using glass, ceramic, or glazed Dutch ovens for this purpose.

### Pane Siciliano

#### YIELD: 2 LOAVES

#### INGREDIENTS

- □ 400g (3 ¼ cups) durum flour
- I14g (scant 1 cup) King Arthur Unbleached All-Purpose Flour
- □ 4g (1 ¼ teaspoons) yeast
- □ 9g (1 ½ teaspoons) salt
- □ 340g (1 ½ cup) water
- □ 28g (2 tablespoons) olive oil, plus more for the pans

#### **GARNISHES** (OPTIONAL)

- □ Rosemary, finely shopped
- □ Finishing salt
- □ Sesame seeds
- 🗆 Egg white

#### DIRECTIONS

- 1. In a medium bowl, stir together the flours, yeast, and salt.
- Combine the water and olive oil, and stir into the dry ingredients, mixing until the dough comes together in a shaggy mass. Add more water, if needed, to make a soft dough.
- **3.** Lightly flour your work surface, then turn the dough out of the bowl.
- 4. Knead the dough by folding the far edge of the dough in half toward you. Press the dough with the palms of your hands and push lightly, down and away. Rotate the dough 90°.
- 5. Continue this process (fold, push, turn) until the dough is smooth and springy, about 5 minutes. Handle the dough very gently at first, then as the dough increases in strength, increase your pressure. If the dough sticks, scrape your work surface clean with your bench knife, then sprinkle the kneading surface lightly with flour.
- 6. Allow the dough to ferment in a covered bowl until it has doubled in bulk, about 30-60 minutes.
- 7. Transfer the dough to a lightly floured surface. Divide the dough in half, then form into desired shapes.
- For Focaccia, place a piece of dough into an 8" cake pan that is well coated in olive oil, drizzle the top of the dough with more olive oil, and dimple the dough with your fingertips.

- 9. Allow the focaccia to rise for 15 to 30 minutes. Garnish with rosemary and salt, if desired.
- Bake in a preheated 425°F oven, for about 15 to 20 minutes, until golden brown.
- For Lunetta, roll the dough into a long, narrow rope about 18" to 20" long. Then, curl the rope into a figure that resembles an inverted S.
- **12.** Cover the loaf and allow it to rise until puffy and almost doubled in volume, about 45 minutes.
- **13.** To garnish: Lightly brush the loaf with the beaten egg white, then sprinkle with the sesame seeds and finishing salt, if desired.
- 14. Bake the loaf on a parchment-lined sheet pan, in a preheated 400°F oven, for about 25 to 30 minutes, until light golden brown.
- 15. Allow the bread to cool completely before slicing.
- **16.** Store bread covered at room temperature up to 3 days, or freeze up to 1 month.

## Lavash with Whole Wheat

#### YIELD: APPROXIMATELY FOUR 11"X17" SHEETS

#### **INGREDIENTS**

- □ 114g (1 cup) King Arthur Premium Whole Wheat Flour
- □ 120g (1 cup) King Arthur Unbleached All-Purpose Flour
- □ 106g (1 cup) pastry flour
- □ 8g (2 teaspoons) sugar
- □ 9g (1 ½ teaspoons) salt
- □ 5g (1 ½ teaspoons) yeast

- □ ½ teaspoon cayenne pepper
- □ 56g (4 tablespoons) unsalted butter, at room temperature
- □ 170g (¾ cup) water
- □ Seeds and/or coarse salt, for topping

#### DIRECTIONS

- 1. Combine the dry ingredients, then rub in the butter.
- 2. Add the water and mix to form a cohesive mass.
- **3.** Lightly flour your work surface, then turn the dough out of the bowl.
- 4. Knead the dough by folding the far edge of the dough in half toward you. Press the dough with the palms of your hands and push lightly, down and away. Rotate the dough 90°.
- 5. Continue this process (fold, push, turn) until the dough is smooth and springy, about 5 minutes. Handle the dough very gently at first, then as the dough increases in strength, increase the pressure. If the dough sticks, scrape your work surface clean with your bench knife, then sprinkle the kneading surface lightly with flour.
- 6. Divide the dough into four pieces, wrap with plastic wrap, and chill for about 30 minutes.
- 7. Preheat oven to 450°F.
- 8. When you're ready to roll out your lavash, lightly dust your work surface with flour. You will not need a lot of bench flour; some traction from slight stickiness will help with the roll-out. Roll the dough into a piece approximately 11" x 17".

- **9.** If the dough shrinks back while you're rolling, let the dough rest before returning to it. You want to aim for a smooth sheet of dough that is very thin.
- 10. Once the dough is thin enough, and approximately the size and shape of your baking sheet, place it on a parchmentlined pan.
- You may seed or salt the crackers by pressing the seeds/salt into the dough using the rolling pin.
- **12.** Dock all over with a fork to prevent excessive puffing in the oven.
- 13. Bake the lavash for about 8 minutes, until it begins to brown and is very crisp. It's best to bake the lavash one sheet at a time. While the first sheet is baking, you'll have enough time to roll out the second piece of dough.
- 14. Remove the lavash from the oven and cool completely before serving. The large sheets make a dramatic presentation, but you may also break them into pieces to store in an airtight container for several days.

### Croissants

#### YIELD: 8 CROISSANTS

#### **INGREDIENTS - DETREMPE**

- 255g (2 cups + 2 tablespoons) King Arthur Unbleached All-Purpose Flour
- □ 25g (2 tablespoons) sugar
- $\Box$  1 ¼ teaspoons salt
- □ 1 ¼ teaspoons yeast
- 28g (2 tablespoons) unsalted butter, at room temperature
- □ 59g (¼ cup) milk
- □ 89g (¾ cup) water

#### **INGREDIENTS - BUTTER BLOCK**

□ 113g (½ cup) unsalted butter, cold (high fat, European-style butter recommended)

#### **INGREDIENTS - EGG WASH**

🗆 1 large egg

- 🗆 15g (1 tablespoon) water
- □ ¼ teaspoon salt

#### DIRECTIONS

#### DETREMPE

- 1. In a medium bowl, combine the flour, sugar, salt, and yeast.
- 2. Cut in the butter, using a bowl scraper or your fingers.
- 3. Add the milk and water, mixing to form a shaggy dough.
- 4. Knead the dough by folding the far edge of the dough in half toward you. Press the dough with the palms of your hands and push lightly, down and away. Rotate the dough 90°.
- 5. Continue this process (fold, push, turn) until the dough comes together. Handle the dough very gently at first, then as the dough increases in strength, increase the pressure. If the dough sticks, scrape your work surface clean with your bench knife, then sprinkle the kneading surface lightly with flour.
- 6. The dough should be cohesive and slightly springy, but not smooth. Do not over knead the dough; creating too much gluten at this point will make it difficult to roll out the dough tomorrow.
- Place the dough in a plastic bag and refrigerate for at least 5 hours, or overnight.

#### BUTTER BLOCK

- Form a pliable block of butter by placing the butter on an unfloured surface and pounding it with a rolling pin until it has the consistency of modeling clay.
- 2. Working quickly, mold the butter into a 5" square of even thickness.

#### LOCK-IN

- 1. On a lightly floured surface, gently degas the detrempe then roll it into a 6" square.
- 2. Place the butter block offset like a diamond in the center of the dough square.
- Fold the corners of the dough over the butter toward the center to resemble an envelope. Pinch the dough to seal and fully enclose the butter.

#### TURNS

- 1. With the seam up, roll the dough into a 6" x 16" rectangle.
- Fold the bottom third up and the top third down, just as you would fold a letter. You have completed the first of 3 turns. Refrigerate the dough for 20 minutes.
- 3. Remove the dough from the refrigerator and place it on a lightly floured surface. Position the dough so that the folded edge, running the length of the dough, is on your left. Roll the dough out lengthwise to form a 6" x 16" rectangle. Fold the dough in thirds as you did previously. Cover and refrigerate the dough for 45 minutes.
- 4. Repeat this process one more time, then allow the dough to rest for at least 5 hours or overnight in the refrigerator before rolling out and forming the croissants.

#### **RECIPE CONTINUED ON NEXT PAGE...**

### Croissants (cont.)

#### **CUTTING & SHAPING CROISSANTS**

- Roll the dough out into a rectangle that is approximately ¼" thick. Trim the dough so that it measures 8" x 16".
- Mark the dough at 4" intervals along the long edge. Cut the dough first into 8" x 4" strips, then cut each strip in half diagonally to form triangles.
- 3. Cut a 1" notch in the base of each triangle. Fold the inner corners towards the outer edges and press down to seal. Gently stretch the dough by pulling from the bottom of the triangle to the tip. Stretching the dough before rolling the croissant will result in more rolls and a more layered croissant.
- 4. Starting with the base of one triangle, fold ¼" of the dough over onto itself, then continue rolling the triangle up to the point. Repeat this process with the remaining triangles.
- 5. Arrange the croissants on a baking sheet, leaving plenty of room for them to expand. Gently cover the croissants with plastic wrap.

#### PROOFING

1. Allow the croissants to rise until they have almost doubled in bulk. Rising times vary depending on temperature and humidity, so observe them for puffiness. They should feel spongy and marshmallow-like.

#### EGG WASH & BAKING

- **1.** Preheat oven to 400°F.
- 2. Whisk together the egg, water, and salt. Just before baking, brush the croissants gently with the egg wash.
- 3. Bake the croissants for 15-20 minutes, or until deep golden brown.
- **4.** Store at room temperature in an airtight container or plastic bag for 1-2 days. Freeze for longer storage.

### Baguettes

#### YIELD: 3 DEMI-BAGUETTES

#### **INGREDIENTS - POOLISH**

□ 138g (1 cup+ 2 tablespoons) King Arthur Unbleached All-Purpose Flour

□ 138g (½ cup + 1 tablespoon) cool water

□ pinch yeast

#### **INGREDIENTS - FINAL DOUGH**

- 324g (2 <sup>3</sup>/<sub>2</sub> cups) King Arthur Unbleached All-Purpose Flour
  189g (<sup>3</sup>/<sub>4</sub> cup+ 2 teaspoons) water
- □ 1/2 teaspoon yeast
- □ 10g (1 ½ teaspoons) salt

#### DIRECTIONS

#### POOLISH

 The night before you're ready to bake, combine the flour, water, and pinch of yeast in a medium bowl and mix until blended. Cover the bowl tightly and let the poolish ferment for approximately 12-15 hours at room temperature. When it's ripe, the poolish should be very bubbly and fragrant.

#### **FINAL DOUGH**

- 1. When the poolish is ripe, combine it with the final dough ingredients. Stir until the mixture forms a cohesive mass. The dough should be somewhat sticky, so you may need to add a bit more water.
- 2. Let the dough rise for 60-90 minutes, folding every 10 minutes for the first half hour (3 folds total). The dough temperature should be about 78°.
- 3. Divide the dough into 3 pieces and gently pre-form rounds. Let rest, covered for 20 minutes.
- 4. Shape pre-shaped rounds into baguettes. Place the shaped bread, seam side down on a couche or a lightly floured tea towel and let it proof, covered, about 30 to 40 minutes, or until it has almost doubled in bulk.
- 5. While the loaves are proofing, preheat your oven and baking stone to 500°F.
- 6. Place the risen loaves on parchment paper, then place the loaves and parchment paper on a peel. Score the loaves. Slide the baguettes and parchment onto the preheated stone.
- 7. Fill the oven with steam. Bake for 25-30 minutes or until the crust is well-caramelized, and the sides are firm.
- 8. Baguettes are best enjoyed same day. If necessary, store at room temperature in a plastic bag. Freeze for longer storage.

## Sourdough Bread

#### YIELD: 2 LOAVES

#### INGREDIENTS

- □ 398g (1 ¾ cups) ripe sourdough starter
- □ 517g (4 <sup>1</sup>/<sub>3</sub> cups) King Arthur Unbleached All-Purpose Flour
- □ 80g (scant ¾ cup) King Arthur Premium 100% Whole Wheat Flour
- □ 350g (about 1 ½ cups) water
- 🗆 16g (scant 1 tablespoon) salt

#### DIRECTIONS

- 1. Weigh the sourdough starter into a large bowl.
- 2. Add the all-purpose flour, whole wheat flour, and water to the bowl.
- 3. Mix until all the flour is moistened, and the dough has formed a cohesive mass. Adjust with extra water, if needed, to form a soft, tacky dough.
- 4. At this point you should allow the dough to rest, covered, for approximately 20 minutes. This rest is known as an autolyse.
- 5. When the rest period is over, add the salt, mixing well to combine.
- 6. On an unfloured surface, knead the dough using the slap and fold method until it is smooth and elastic. This will be a soft, somewhat sticky dough. A dry dough will significantly slow down the rise and yield a dry, under-risen loaf.
- 7. When finished kneading, place the dough back in the bowl and cover. Allow the dough to rise for 2 to 3 hours, incorporating a fold at the halfway point.
- 8. At the end of the fermentation period, turn the dough out onto a lightly floured work surface and divide in half.
- 9. Pre-shape the dough into rounds, cover, and let rest another 20 minutes.
- 10. Shape the loaves into boules or batards and allow them to proof, covered, until risen and airy but not too fragile, about 1 ½ hours. About 1 hour before the dough is ready to bake, preheat the oven along with the baking stone or dutch oven to 450°F.
- 11. When the bread is ready to bake, score the loaves and load them into the oven. Add steam as directed. Bake until the bread is crusty and golden, about 35 to 40 minutes.
- 12. Once cool, store bread in a plastic bag or airtight container up to 4 days, or freeze up to 1 month.

# All Steamed Up

When it comes to baking beautiful, artisan-style breads at home there are a few things we need to set up to produce the best results. We need a good, hot, well-preheated oven, a baking stone/steel or some other hearth, and a means of introducing steam into the oven.

Preheating your oven with the baking stone in for the better part of an hour ensures that once the bread is in the oven, it will rise quickly and fully. The baking stone will retain plenty of heat for quick transfer to the dough. When using a baking steel, the preheating time may be slightly reduced. The rapid increase in dough temperature is a critical part of pushing the bread up during the first few minutes of the bake. Ovens that haven't been substantially preheated or lack a baking stone, or some other hearth, will result in flatter bread.

The second thing we need to make the best possible bread is steam. Flushing the oven with steam right after the bread is loaded keeps the bread moist and results in better volume, color, and crumb structure.

There are several ways to do this effectively. An old, dedicated, cast-iron pan placed in the bottom of the oven while preheating is an effective tool for steam. Immediately after loading the bread, slide the cast iron pan out of the oven far enough to carefully pour about one cup of boiling water into the preheated pan. Make sure to stay out of the way of the quickly rising steam. Close the oven, and let the bread bake in the freshly steamed oven until it's time to check for doneness. When pouring the water into the pan, it's a good idea to place a cookie sheet or other covering over the window of your open oven door. This ensures that no boiling water bouncing out of the pan damages your oven window.

Alternately, a cast-iron or ceramic Dutch oven may be preheated for the better part of an hour. Round loaves can be placed in the preheated pan, covered with the lid, and placed back in the hot oven. This method uses naturally generated steam from the baking bread by trapping it in the closed Dutch oven. No additional water or steam is required. When using this method, carefully remove the Dutch oven lid about 15 minutes into the bake. This will release excess steam and expose the loaf to the oven so it can take on color for the remainder of the bake.

If neither of these methods is available, a metal bowl may be placed over round loaves for about 15 minutes. This will also retain steam naturally emitted from the baking bread but may be less effective than either of the methods outlined above.

# **Controlling Dough Temperature**

Understanding the importance of dough temperature and knowing how to control it is important to good bread baking. Yeast are living organisms and thrive in dough given the right conditions. They like a steady, warm environment with plenty of food. The flour provides food, but it's up to the baker to produce a dough that is hospitable to good fermentation. A dough at 60° will ferment much slower than an 80° dough. To accurately follow recipe timelines, we need to mix dough that will be warm enough to make the yeast comfortable and active. At home, this usually means making dough that is around 78° after mixing is complete. The easiest way to control the temperature is to use the right temperature water for our mix.

To calculate Desired Dough Temperature, we use an easy formula. Professional bakers, who work on tight timelines, use this formula to control their doughs and stay on schedule, and it can be a valuable tool for baking at home. To calculate water temperature for our mix, we need to know a few things: The temperature of the air, the temperature of the flour, the temperature of our preferment (if there is one), and the amount of heat (we will call this "friction") we're going to generate during the mix (this applies only if mixing in a stand mixer. When mixing dough by hand, our number for friction is 0). A digital probe thermometer is needed.

#### STEP 1

Multiply the dough temperature we want (78°) by the number of variables we have (air, flour, preferment, friction).

• 78 x 4 = 312

#### STEP 2

Use thermometer to take the temperatures of the variables.

- Air: 70
- Flour: 67
- Preferment: 69
- Friction: 0

#### STEP 3

Subtract the value of each variable from the value in step 1.

• 312 - 70 - 67 - 69 - 0 = 106

That is the whole Desired Dough Temperature calculation. If we pull 106° water from our tap, we will produce a dough near 78°, and can more reliably follow our recipe timeline.

#### NOTE

When mixing without a preferment, we will only have three variables. That means, multiply 78 x 3. Also, when using a mixer, the value for friction will generally be about 26. One test batch is all you need to determine the exact friction of your mixer.

### Croissant Dough Storage and Handling Instructions

#### DETREMPE

Within 48 hours of making the croissant detrempe, you may choose to:

- Wrap it well and freeze it up to 1 month for later use
- Begin the lamination process

#### FULLY LAMINATED DOUGH

Within 48 hours of finishing the lamination on the croissant detrempe, you may choose to:

- 1. Wrap it well and freeze it up to one month for later use
- 2. Roll, cut, and shape the croissants in the evening, spacing them on a parchment-lined baking sheet as you would for baking. Cover the croissants lightly with plastic wrap, then refrigerate overnight. In the morning, bring the croissants to room temperature to finish the proofing process. Egg wash the croissants, then bake as directed.
- 3. Roll, cut, and shape the croissants, then place them on a parchment-lined baking sheet and freeze. Once frozen solid, consolidate the croissants down into a zip-top bag or container and freeze up to one month. The night before you'd like to serve the croissants, remove the frozen croissants from the freezer and place them on a parchment-lined baking sheet, spacing as you would for baking. Cover the croissants lightly with plastic wrap, then place them in the refrigerator to thaw and slowly begin the proofing process overnight. In the morning, bring the croissants to room temperature to finish the proofing process (or speed it up by turning your oven into a proof box-see below). Egg wash the croissants, then bake as directed.

#### TIPS FOR SUCCESS

- It's best to freeze croissant dough only once during the entire process. For example, if you've chosen to freeze the croissant dough at the detrempe stage, you'll need to continue with lamination and baking without freezing again.
- Allow frozen croissant detrempe, fully laminated dough, or cut shapes to thaw overnight in the refrigerator before using.
- Turn your home oven into a proof box: With the oven off, boil a mug of water and place it on the bottom rack of your oven. Place your baking sheet of croissant, uncovered, on the rack above the water. This will create a warm, moist environment for the croissant to proof. Replace the boiling water as needed until the croissants are fully proofed. Be sure to remove your croissants from the oven before preheating it for baking.