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Many kinds of text have subdivisions within major sections (like chapters), which are typically indicated by subheads within the text. These subheads are labeled according to the level of their importance: A heads, B heads, C heads, etc. (only the most technically written texts have three or more levels of subheads). The typographer's task is to make sure that these heads clearly signify to the reader, in regard both to their relative importance within the text and to their relationship to each other.

A heads

A heads indicate a clean break between topics within a section. They need to offer readers a palpable pause, a chance to catch their breath. Space—typically, more than one line space—between topics clearly suggests this sense of resting. In the first three examples here, A heads are set larger than the text, in small caps, and in bold. The fourth example shows an A head exended to the left of the text.

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B heads

Subordinate to A heads, B heads indicate a new supporting argument or example for the topic at hand. As such, they should not interrupt the text as strongly as A heads do. Here, B heads are shown in small caps, italic, bold serif, and bold sans serif.

C HEAD IN SMALL CAPS Suscipit lo
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C heads

Although not common, C heads highlight specific facets of material within B head text. They should not materially interrupt the flow of reading. As with B heads, these C heads are shown in small caps, italics, serif bold, and sans serif bold. C heads in this configuration are followed by at least an em space, to distinguish them from the text that follows.

Putting together a sequence of subheads: hierarchy

Here are three examples of subhead treatment within text. In the first, hierarchy of subheads is indicated by size and style of type. In the second, a hierarchy of consistently bold subheads is indicated simply by the relationship of head to text. In the third, hierarchy is established by color of type (bold/italic) and position relative to text.

Obviously, there is no single way to express hierarchy within text; in fact, the possibilities are virtually limitless. Once clarity has been established, the typographer can—and should—establish a palette of weights and styles that best suits the material at hand and the voice of the author.

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A head

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7/9 Univers 75 x 10p4

10/13.5 Janson x 22p3

Cross-aligning headlines and captions with text type reinforces the architectural sense of the page—the structure—while articulating the complementary vertical rhythms. In this example, four lines of caption type (leaded to 9 pts.) cross-align with three lines of text type (leaded to 13.5 pts.).

Lorem ipsum
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**Ut wisi enim ad
minim veniam,
quis nostrud
exercitation**

24/27 Janson x 16p (top)
14/18 Univers 75 x 10p4 (bottom)

10/135 Janson x 16p

Above (top left), one line of headline type cross-aligns with two lines of text type, and (bottom left) four lines of headline type cross-align with five lines of text type.

132 In most circumstances, a designer's first goal is to make material comprehensible to a reader. In other words, you should understand the material well enough to know how someone else needs to read it to make the best sense out of it. This understanding happens on two levels: content and form.

The recipe opposite is a fairly straightforward presentation of the making of an apple tart. With the exception of one or two terms specific to cooking, its content does not require any special knowledge. However, in its form—the manner in which information is set and placed on a page—the process it describes can be made clearer than it appears as plain typescript.

To understand the form, you must first understand the kinds of information the recipe contains and then rank it according to levels of importance, thereby creating a hierarchy. In this recipe there are the following levels of information:

title (1)
subtitles (2)
text (3).

Within the text there are **ingredient lists (3A)**, **oven temperature instructions (3B)**, and **directions (3C)**.

Successfully setting this recipe in type requires that you make each of these distinctions clear to the reader. Using some of the kinds of contrast discussed on pages 60–61 will help you express these distinctions.

1 Apple tart

2 The shell

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

3B Preheat the oven to 400°.

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13 inches in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

2 The apples

6 Granny Smith apples
Juice of one lemon
Cinnamon to taste
Nutmeg to taste

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than 1/4") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

2 The pastry cream

1/4 cup sugar
1 tablespoon flour
2 teaspoons cornstarch
1 large egg
1 cup milk
3 tablespoons unsalted butter
1/4 teaspoon vanilla extract

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

2 The assembly and baking

2 tablespoons sugar
8 ounces currant jelly

3B Preheat the oven to 375°.

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5–10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set and the tart to cool before serving (10 minutes).

Apple tart

The shell

Preheat the oven to 400°.

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt
* It is important to have these ingredients as cold as possible.

6 Granny Smith apples
Juice of one lemon
Cinnamon to taste
Nutmeg to taste

1/4 cup sugar
1 tablespoon flour
2 teaspoons cornstarch
1 large egg
1 cup milk
3 tablespoons unsalted butter
1/4 teaspoon vanilla extract

2 tablespoons sugar
8 ounces currant jelly

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than 1/4") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

The pastry cream

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

Preheat the oven to 375°.

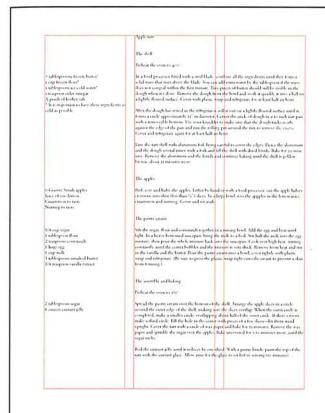
Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5-10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).



Option 1
One typeface, one size
throughout

9/11 Adobe Garamond



Establishing a format
After analyzing and organizing the content, devise a format that expresses differences within the text. In Option 1 (opposite), all the ingredients are separated from the directions. Because the line length required for easy reading of directions is more or less twice the line length required for a list of ingredients, the area within the margins of the sheet is divided vertically into three intervals, or columns. Ingredients occupy the first column, directions the second and third. Groups of ingredients cross-align with the directions that refer to them.

with a removable bottom.
against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

The apples
Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The assembly and baking
Preheat the oven to 375°. Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5-10 minutes more, until the sugar melts.

Establishing a hierarchy
Single line spaces indicate breaks between paragraphs. Double line spaces indicate breaks between sections of text.

Typeface choice
When numbers and fractions occur frequently in the text, choose a typeface with an expert set that includes lowercase numerals and fraction characters. (See page 6 for a brief discussion of lowercase numerals.)

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Ligatures
Virtually all text typefaces have ligatures for fi and fl combinations. Some also have ligatures for ff, ffi, and ffl.

Apple tart

The shell

Preheat the oven to 400°.

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

6 Granny Smith apples
Juice of one lemon
Cinnamon to taste
Nutmeg to taste

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than $\frac{1}{4}$ ") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

The pastry cream

$\frac{1}{4}$ cup sugar
1 tablespoon flour
2 teaspoons cornstarch
1 large egg
1 cup milk
3 tablespoons unsalted butter
 $\frac{1}{4}$ teaspoon vanilla extract

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

2 tablespoons sugar
8 ounces currant jelly

Preheat the oven to 375°.

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5-10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).

Apple tart

The shell

Preheat the oven to 400°.

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

If a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

6 Granny Smith apples
Juice of one lemon
Cinnamon to taste
Nutmeg to taste

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than $\frac{1}{4}$ ") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

The pastry cream

$\frac{1}{4}$ cup sugar
1 tablespoon flour
2 teaspoons cornstarch
1 large egg
1 cup milk
3 tablespoons unsalted butter
 $\frac{1}{4}$ teaspoon vanilla extract

3

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

2 tablespoons sugar
8 ounces currant jelly

4

Preheat the oven to 375°.

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5-10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).

Reinforcing structure

Setting the ingredients flush right against the gutter between the first and second columns strengthens the formal organization of the page. Keep in mind, setting type flush right causes one to read the shape created by the type before one reads the actual text. Similarly, the counterform created by the gutter between the two kinds of text (ingredients and directions) becomes a dominant, possibly intrusive element on the page.

Apple tart

The shell

Preheat the oven to 400°.

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than $\frac{1}{4}$ "') slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

The pastry cream

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

Preheat the oven to 375°.

2 tablespoons sugar
8 ounces currant jelly

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5-10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).

Apple tart

The shell

Preheat the oven to 400°.

In a food processor fitted with a solid mass that rises above the blade, does not congeal within the first few minutes of processing, dough when it's done. Remove

Title treatment

Enlarging the size of the title not only reinforces hierarchy, but also provides an unambiguous starting point for reading.

Line the tart shell with aluminum foil and the dough several times with foil. Remove the aluminum and bake until brown, about 15 minutes more.

The apples

Peel, core and halve the apples.
crosswise into thin (less than $\frac{1}{4}$)
cinnamon and nutmeg. Cover

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

Italic within the text

Italic within the list of ingredients indicates information that affects the items in use. Note also how the exended asterisk (see page 102) strengthens the left margin of the type. Compare with Option 1.

Apple tart

The shell

Preheat the oven to 400°.

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

6 Granny Smith apples
Juice of one lemon
Cinnamon to taste
Nutmeg to taste

1/4 cup sugar
1 tablespoon flour
2 teaspoons cornstarch
1 large egg
1 cup milk
3 tablespoons unsalted butter
1/4 teaspoon vanilla extract

2 tablespoons sugar
8 ounces currant jelly

The pastry cream

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

Preheat the oven to 375°.

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5-10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).

with a removable bottom.
against the edge of the pan
Cover and refrigerate again

Line the tart shell with aluminum foil and the dough several times. Remove the aluminum and the dough, about 15 minutes more.

The apples

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than 1/4") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

Title treatment

Introducing a sans serif boldface for secondary heads increases contrast and adds color to the page.

Apple tart

The shell

7 tablespoons frozen butter*
1 cup frozen flour*
3 tablespoons ice-cold water*
1 teaspoon cider vinegar
A pinch of kosher salt

* It is important to have these ingredients as cold as possible.

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

6 Granny Smith apples
Juice of one lemon
Cinnamon to taste
Nutmeg to taste

1/4 cup sugar
1 tablespoon flour
2 teaspoons cornstarch
1 large egg
1 cup milk
3 tablespoons unsalted butter
1/4 teaspoon vanilla extract

2 tablespoons sugar
8 ounces currant jelly

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than 1/8") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5–10 minutes more, until the sugar melts.

Boil the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).

Preheat the oven to 400°.

Preheat the oven to 375°.

Apple tart

The shell

In a food processor fitted with a steel blade, combine all the ingredients until they form a solid mass that rises above the blade. You can add extra water by the tablespoon if the mass does not congeal within the first minute. Tiny pieces of butter should still be visible in the dough when it's done. Remove the dough from the bowl and work it quickly into a ball on a lightly floured surface. Cover with plastic wrap and refrigerate for at least half an hour.

After the dough has rested in the refrigerator, roll it out on a lightly floured surface until it forms a circle approximately 13" in diameter. Center the circle of dough in a 10-inch tart pan with a removable bottom. Use your knuckles to make sure that the dough tucks neatly against the edge of the pan and run the rolling pin around the rim to remove the excess. Cover and refrigerate again for at least half an hour.

Line the tart shell with aluminum foil, being careful to cover the edges. Pierce the aluminum and the dough several times with a fork and fill the shell with dried lentils. Bake for 20 minutes. Remove the aluminum and the lentils and continue baking until the shell is golden brown, about 15 minutes more.

The apples

Peel, core and halve the apples. Either by hand or with a food processor, cut the apple halves crosswise into thin (less than 1/8") slices. In a large bowl, toss the apples in the lemon juice, cinnamon and nutmeg. Cover and set aside.

The pastry cream

Sift the sugar, flour and cornstarch together in a mixing bowl. Add the egg and beat until light. In a heavy-bottomed saucepan, bring the milk to a boil. Stir half the milk into the egg mixture, then pour the whole mixture back into the saucepan. Cook over high heat, stirring constantly, until the center bubbles and the mixture is very thick. Remove from heat and stir in the vanilla and the butter. Pour the pastry cream into a bowl, cover tightly with plastic wrap and refrigerate. (Be sure to press the plastic wrap right onto the cream to prevent a skin from forming.)

The assembly and baking

Spread the pastry cream over the bottom of the shell. Arrange the apple slices in a circle around the outer edge of the shell, making sure the slices overlap. When the outer circle is completed, make a smaller circle, overlapping about half of the outer circle. If there's room, make a third circle. Fill the hole in the center with pieces of a few slices—let them stand upright. Cover the tart with a circle of wax paper and bake for 25 minutes. Remove the wax paper and sprinkle the sugar over the apples. Bake uncovered for 5–10 minutes more, until the sugar melts.

Bake the currant jelly until it reduces by one-third. With a pastry brush, paint the top of the tart with the currant glaze. Allow time for the glaze to set before serving (10 minutes).

Preheat the oven to 400°.

Preheat the oven to 375°.

Revised format

Dividing the type area into seven columns provides a new, separate column for oven settings, creates a narrower (and easier to read) line length for instructions, and increases white space on the page.

■ Set instructional text of your choosing in a way that makes the different levels of copy clearly distinguishable from each other. The goal is to find out how much differentiation you feel is necessary. All the text must fit on an 8½ x 11" (216 x 279 mm) or A4 sheet.

Be sure to document several options within one approach.

The five small steps shown on these preceding pages provide a point of departure. As you work on your sketches, explore the use of several typefaces (possibly one for each level of text), the addition of rules to indicate sections, size changes, etc. The aim of the process is to sensitize yourself to the options available within this simple problem. You will also start to sense what is and is not appropriate to—even necessary for—the material at hand. Finally, keep alert to what makes the page feel like yours and no one else's—an expression of your typographic sensibility.

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Fibonacci sequence

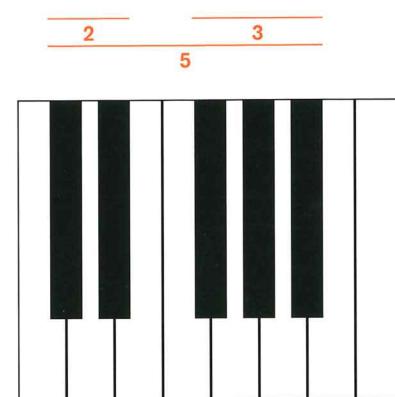
Another useful model when considering proportions is the Fibonacci sequence. Named for Italian mathematician Leonardo Fibonacci (c. 1170 –1240), a Fibonacci sequence describes a sequence in which each number is the sum of the two preceding numbers:

| |
|------------|
| 0 |
| 1 |
| 1 [1+0] |
| 2 [1+1] |
| 3 [1+2] |
| 5 [2+3] |
| 8 [3+5] |
| 13 [5+8] |
| 21 [8+13] |
| 34 [13+21] |
| ... |

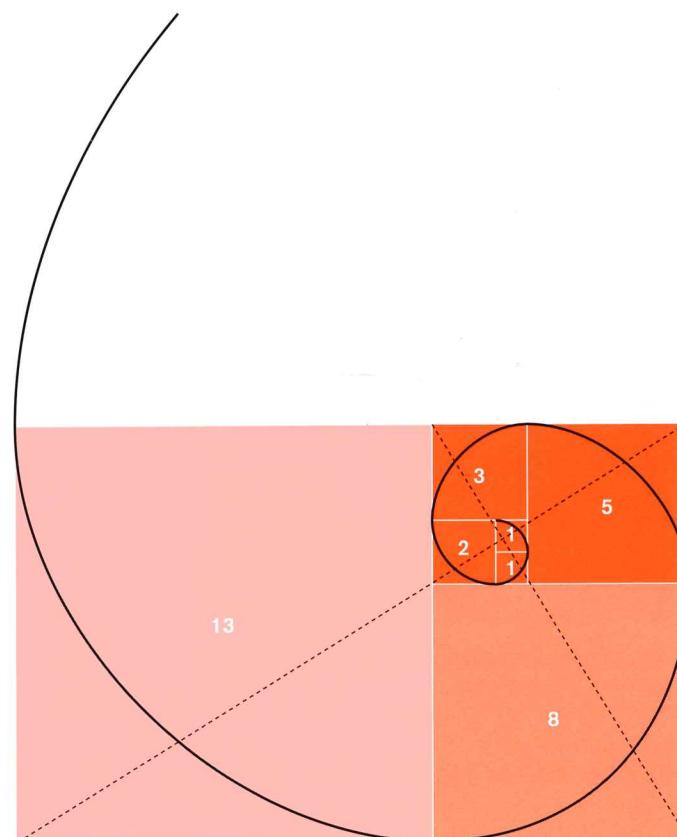
As the numbers in a Fibonacci sequence increase, the proportion between any two numbers very closely approximates the proportion in a golden section (1:1.618). For example, 21:34 approximately equals 1:1.618. Nature is full of examples of the Fibonacci sequence and the golden section, from the intervals of branches on a tree to the shell of a chambered nautilus.

Fibonacci's sequence always began with 1, but the proportion between any two numbers remains constant when the sequence is multiplied:

| | | |
|-----|-----|-----|
| 0 | 0 | 0 |
| 2 | 3 | 4 |
| 2 | 3 | 4 |
| 4 | 6 | 8 |
| 6 | 9 | 12 |
| 10 | 15 | 20 |
| 16 | 24 | 32 |
| 26 | 39 | 52 |
| 42 | 63 | 84 |
| 68 | 102 | 136 |
| ... | ... | ... |



8



Above, a spiral describes a Fibonacci series (and the growth of a chambered nautilus). The red rectangle on the upper right approximates a golden section. As each square in the sequence is added, the orientation of the golden section changes from vertical to horizontal.

Left, one of the many examples of a Fibonacci sequence is the musical octave as seen on a piano—eight white keys, five black keys (separated into a group of two and a group of three).

Series of type sizes based on a Fibonacci sequence:

The basic sequence
(beginning at 1):
5 pt., 8 pt., 13 pt., 21 pt., 34 pt.,
and 55 pt.

Aa Aa Aa Aa Aa Aa

Aa Aa Aa Aa Aa Aa Aa Aa

The sequence doubled:
6 pt., 10 pt., 16 pt., 26 pt., 42 pt.,
and 68 pt.

The sequence tripled:
6 pt., 9 pt., 15 pt., 24 pt., 39 pt.,
and 63 pt.

The sequence quadrupled:
8 pt., 12 pt., 20 pt., 32 pt., 52 pt.,
and 84 pt.

Aa

Aa Aa Aa Aa Aa Aa Aa Aa

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