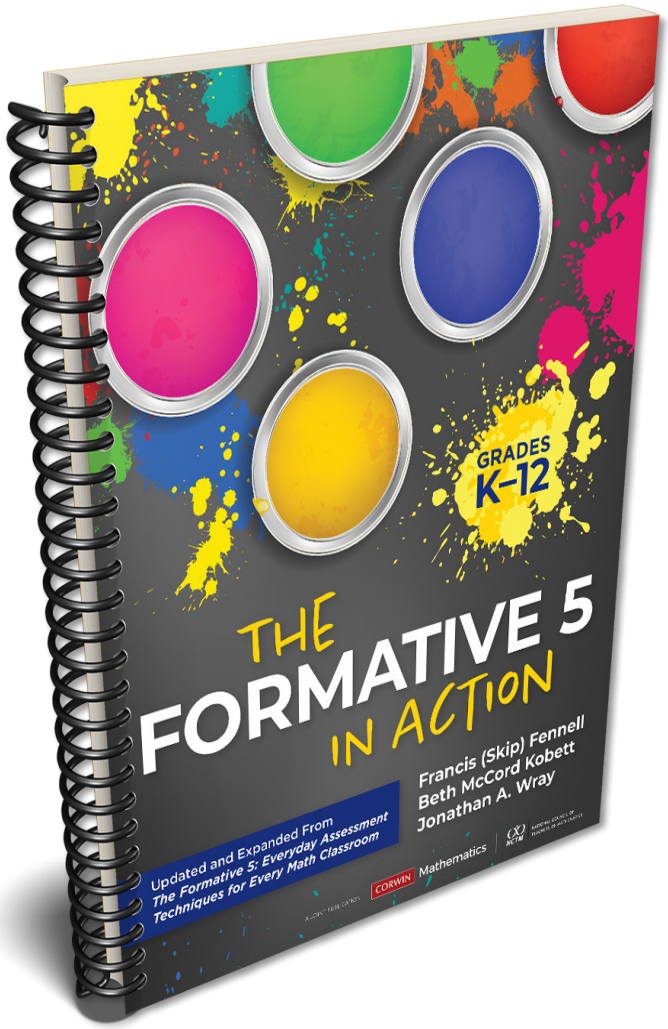

Thank you

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Please enjoy this complimentary excerpt from The Formative 5 in Action, Grades K-12.

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CORWIN

Planning for Observations Template

Lesson Objective:	
What will you expect to observe?  *Source:* iStock.com/Elvinagraph	
How will you know "it" if you see it?  *Source:* iStock.com/VectorCookies	
What particular strengths or challenges might you observe?  *Source:* iStock.com/Brownfalcon	
How will you record and provide feedback of what you observe?  *Source:* iStock.com/Rifai Ozil	

INSIGHT

Consider how you might leverage what students understand to address challenges and/or levels of understanding.

FIGURE 1.2 • Planning for Observations Template Example for Grade 1

Lesson Objective: Students will compare a pair of two-digit numbers based on meanings of the tens and ones digits, recording their comparisons using the symbols >, =, and <, and create orally presented story problems involving the comparison of two-digit numbers. Consider the following as you plan such a lesson.	
What will you expect to observe?  *Source:* iStock.com/Elvinagraph	• Students will work together in small groups as they compare two-digit whole numbers. (Note: Google Slides will be randomly presented. Students will respond on work mats.) • Students, working in groups of three, will use handfuls of counters to compare the number of counters in each of two groups. • Students will work individually to compare amounts of counters and also compare numbers. ***Your* Thinking:** What else might you anticipate observing, particularly given *your* class and *your* students?
How will you know "it" if you see it?  *Source:* iStock.com/VectorCookies	You will see and hear students sharing comments about whether a number is greater than, equal to, or less than another number (e.g., 34 is greater than 21). You will see and hear students use the <, =, and > symbols as they compare the two-digit numbers (e.g., 42 > 34). You will hear students create their own story problems involving comparing numbers. ***Your* Thinking:** What other "its" might you see and/or hear?
What particular strengths or challenges might you observe?  *Source:* iStock.com/Brownfalcon	**Strength:** Students successfully use counters and the <, =, and > symbols to compare two-digit numbers. Students create and verbalize story problems involving the comparison of two-digit whole numbers. **Challenge:** Students have difficulty comparing two-digit numbers beyond a certain number (e.g., they're challenged comparing numbers greater than 50 or comparing numbers closer to 100). Students are unsure when stating a comparison and using the symbols (e.g., is it 34 < 40 or 40 > 34?). **Challenge:** Confusion or partial understanding—students seem unable to determine the meaning and use of the <, =, and > symbols. **Strength and Challenge:** Students are more comfortable using counters as they compare numbers. ***Your* Thinking:** What particular strengths or possible challenges have you seen/experienced that may occur?

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How will you record and provide feedback of what you observe?  *Source:* iStock.com/Rifai Ozil	Consider the examples of the individual student, small-group, and class observation tools in Figures 1.6–1.9. You can access these tools for your own use at **https://qrs.ly/wsetnnz**. Consider taking a picture of what you observe as a record of student performance. Consider an observed response that may require immediate (typically) oral feedback. Think about how *you* might provide feedback to your students using your responses to the Planning for Observations questions (Figure 1.1). Also, consider opportunities for student-to-teacher and student-to-student feedback.

FIGURE 1.3 • Planning for Observations Template Example for Grade 5

Lesson Objective: Students will divide a (nonzero) whole number by a unit fraction (e.g., $3 \div \frac{1}{4}$), demonstrating their understanding by creating a word problem and representing the solution using a visual model. Consider the following as you plan such a lesson.	
What will you expect to observe?  *Source:* iStock.com/Elvinagraph	• Students will work together in small groups as they create their word problems. • Students will use the number line or an area model to partition 3 by "number line hops" of $\frac{1}{4}$ (dividing by $\frac{1}{4}$). • Students will use a drawing to create three objects and then divide each object into fourths. • Do you anticipate that students will recognize that $3 \div \frac{1}{4} = 12$ since $\frac{1}{4} \times 12 = 3$ (or $12 \times \frac{1}{4} = 3$)? • ***Your* Thinking:** What else might you anticipate observing, particularly given *your* class and *your* students?
How will you know "it" if you see it?  *Source:* iStock.com/VectorCookies	You will see and hear students sharing word problems for $3 \div \frac{1}{4} = 12$, showing the number of $\frac{1}{4}$s in 3 on their number lines. In addition to an appropriate word problem, you will see students use manipulatives, an area model, or the number line to represent the problem and solution for $3 \div \frac{1}{4} = 12$ recognizing that $3 \div \frac{1}{4} = 12$ can be thought of as $\frac{1}{4} \times 12 = 3$. ***Your* Thinking:** What other "its" might you see and/or hear?
What particular strengths or challenges might you observe?  *Source:* iStock.com/Brownfalcon	**Strength:** Students successfully use their number lines, drawings, and manipulatives to interpret and solve their word problems. **Challenge:** Students have difficulty framing word problem contexts for $3 \div \frac{1}{4} = 12$. **Challenge:** Confusion or possible misconception—students seem unable to recognize the relationship between $3 \div \frac{1}{4} = 12$ and $\frac{1}{4} \times 12 = 3$. **Challenge:** Students have limited experience using representations for division of whole numbers by unit fraction problems. **Strength and Challenge:** Students are more comfortable using area models than the number line for representing division of whole numbers by unit fraction problems. ***Your* Thinking:** What particular strengths or possible areas of challenge have you seen/experienced that may occur?

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How will you record and provide feedback of what you observe?  *Source:* iStock.com/Rifai Ozil	Consider the examples of the individual student, small-group, and class observation tools in Figures 1.6–1.9. You can access these tools for your own use at **https://qrs.ly/wsetnnz**. Consider taking a picture of what you observe as a record of student performance. Consider an observed response that may require immediate (typically) oral feedback. Think about how *you* might provide feedback to your students using your responses to the Planning for Observations questions (Figure 1.1). Also, consider opportunities for student-to-teacher and student-to-student feedback.

FIGURE 1.4 • Planning for Observations Template Example for Grade 7

Lesson Objective: Students will test for equivalent ratios by using a ratio table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. Consider the following as you plan such a lesson.	
What will you expect to observe?  *Source:* iStock.com/Elvinagraph	• You will see that students recognize how earlier understandings related to fraction equivalence are related to determining proportional relationships. • You will see students comfortably using ratio tables to represent and help create equal ratios/proportions. • You will see students using coordinate graphs to represent and then define proportional relationships. ***Your* Thinking:** What else might you anticipate observing, particularly given *your* class and *your* students?
How will you know "it" if you see it?  *Source:* iStock.com/VectorCookies	You will see students using ratio tables to create proportions. Students will accurately describe how they created or validated proportional relationships using the ratio table and/or the coordinate plane. ***Your* Thinking:** What other "its" might you see and/or hear?
What particular strengths or challenges might you observe?  *Source:* iStock.com/Brownfalcon	**Strength:** Students are able to connect prior learning related to equivalent fractions to proportional relationships. **Challenge:** Students are not comfortable in their use of the ratio table or coordinate plane. **Challenge:** Students are unable to create varied representations of proportional relationships. ***Your* Thinking:** What particular strengths, possible areas of confusion, or challenges have you seen/experienced that may occur?

(*Continued*)

(*Continued*)

How will you record and provide feedback of what you observe?  *Source:* iStock.com/Rifai Ozil	Consider the examples of the individual student, small-group, and class observation tools in Figures 1.6–1.9. You can access these tools for your own use at **https://qrs.ly/wsetnnz**. Consider taking a picture of what you observe as a record of student performance. Consider an observed response that may require immediate (typically) oral feedback. Think about how *you* might provide feedback to your students using your responses to the Planning for Observations questions (Figure 1.1). Also, consider opportunities for student-to-teacher and student-to-student feedback.

FIGURE 1.5 • Planning for Observations Template Example for High School Algebra

Lesson Objective: Students will estimate or calculate the average rate of change over a specified interval.	
What will you expect to observe?  *Source:* iStock.com/Elvinagraph	• Students will recognize how earlier understandings relate to how functions change by describing them as increasing, decreasing, or staying constant. • Students will give attention to units in calculating or estimating average rate of change, contributing to how much the output changes relative to the input quantity. ***Your* Thinking:** What else might you anticipate observing, particularly given *your* class and *your* students?
How will you know "it" if you see it?  *Source:* iStock.com/VectorCookies	You will observe students engaged in discussions revealing that they understand that the average rate of change is a measure of how much the function changes per unit, on average, over an interval. Students will state that if the two points on the graph of the function are $(a, f(a))$ and $(b, f(b))$, the average rate of change is the slope of the line that connects the two points. You will see students calculating the average rate of change of a function by dividing the difference in the outputs by the difference in the inputs, or $\frac{f(b)-f(a)}{b-a}$ ***Your* Thinking:** What other "its" might you see and/or hear?

(*Continued*)

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What particular strengths or challenges might you observe?  *Source:* iStock.com/Brownfalcon	**Strength:** Students are able to calculate the average rate of change over the specified interval provided. **Challenge:** Students have difficulty visualizing and understanding that finding the average rate of change is equivalent to finding the slope of the line connecting two points. **Challenge:** Students are not comfortable approximating the distribution of points on a scatterplot without worrying about the smaller changes between them. ***Your* Thinking:** What particular strengths, possible areas of confusion or challenges have you seen/experienced that may occur?
How will you record and provide feedback of what you observe?  *Source:* iStock.com/Rifai Ozil	Consider the examples of the individual student, small-group, and class observation tools in Figures 1.6–1.9. You can access these tools for your own use at **https://qrs.ly/wsetnnz**. Consider taking a picture of what you observe as a record of student performance. Consider an observed response that may require immediate (typically) oral feedback. Think about how *you* might provide feedback to your students using your responses to the Planning for Observations questions (Figure 1.1). Also, consider opportunities for student-to-teacher and student-to-student feedback.

INSIGHT

A blank version of the Planning for Observations Template is available for you to download at https://qrs.ly/wsetnnz.

FIGURE 1.1 • Planning for Observations

1. What will you expect to observe?
2. How will you know "it" if you see it?
3. What particular strengths or challenges might you observe?
4. How will you record and provide feedback of what you observe?