

Grade 2 Unit 1 Cool-Down Guidance

Lesson	Response to Student Thinking	Support
1	Students find some of the expressions that equal 10, but not all of them.	During the launch of the next day's activity, have students use 10 frames and two-color counters to show sums of 10.
2	Students do not identify both equations that represent the cubes.	After the warm-up, ask students to connect the expressions in the Number Talk and their methods for finding the values to the image in this cool-down.
3	Students know sums within 20, but incorrectly identify subtraction expressions.	After the warm-up, ask students to find ways to make 10 to find the number that makes each equation in the cool-down true.
4	Students show evidence in their explanations or drawings that they count on by ones to find the value of sums and differences within 20.	Encourage students to use connecting cubes in towers of 10 and singles.
5	Students find values other than 32, 49, and 42 for the sums. Students find the value of $32 + 17$, but find a value other than 42 for $28 + 14$.	After the warm-up (Center Day), ask students to discuss their answers to the cool-down with a partner. Ask students to share how they can use one of the ways shared in the warm-up to find the value of one of the expressions from the cool-down.
7	Students share a way the representations are the same or a way they are different, but not both. Students do not finish sharing what they notice about the representations in writing.	During the warm-up of the next day display the cool-down from the previous lesson and ask, "What did you learn yesterday that was helpful in this activity?"
8	Students choose questions that cannot be answered by the data, for example "Who chose a lizard?"	During the launch of the next day's activity, have students compare a question that cannot be answered by the data with one that can and explain how they know.
9	Students answer a question with an amount not represented by the graph.	During the warm-up, have students use a ruler or straightedge to line up the rectangles with the scale to help them connect the number of sections in each bar to the numbers on the scale.
10	Students complete each graph, but the data from the graphs do not match.	Launch the lesson by asking students to discuss in groups how they found the data they needed.
11	Students incorrectly answer either the bar graph or picture graph questions.	Before the checkpoint and practice problems, have students practice asking and answering questions using the graph from the cool-down.
13	Students can write 1 equation, but not yet 2.	During the launch of the first activity in the next lesson, have students brainstorm with a partner all the equations that could represent the value.
14	Students find the correct difference, but label the tape diagram inaccurately.	Launch Activity 1 with a discussion about this cool-down.
15	Students circle the correct diagram, but don't write an explanation that supports their choice.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down. Provide time for students to summarize or restate their partner's thinking.
16	Students find the value of the difference between 17 and 9 (difference unknown) rather than the value of the sum of 17 and 9 (greater unknown).	During the warm-up (Center Day), have students practice labeling a diagram and discussing who has more.

Grade 2 Unit 2 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students find the sum of the cubes rather than the difference.	Before the warm-up, have students brainstorm ways to represent the problem and methods for finding how many more when comparing.
2	Students use blocks or drawings to add on to 36 or take away from 78, but do not clearly identify the number that makes the equation true.	Before the first activity, display examples of students adding on to find the unknown addend and examples of taking away to find the unknown addend. Compare the representations and discuss how each clearly shows the unknown addend.
3	Students find a value other than 89 and do not show evidence of using base-ten blocks or other representations.	Before the warm-up (Center Day) or practice problems, select students to share their representation of the story problem and how they found the solution. Invite students to make connections between any representations and the story problem and ask questions about how the selected student found the answer.
5	Students use base-ten blocks and show they know they need to decompose a ten to subtract enough ones, but find a value other than 66 (for example, 76).	During the launch of the first activity, use base-ten blocks to show $75 - 9$ by starting with 7 tens and 5 ones. Add 10 ones to your blocks and then subtract 9 ones. Invite students to agree or disagree with your method and whether your blocks show the value of $75 - 9$.
6	Students show how Mai could decompose 1 ten, but cross out 7 more ones to find the value as 43.	Before the warm-up, have students use base-ten blocks to represent Mai's work. Ask students to summarize what Mai had done before she got stuck, and what she has left to do.
7	Students find a value other than 29.	During the launch of the first activity, invite a student to share how they found the value of $61 - 32$ using base-ten blocks. Invite students to compare the value and the method with their
8	Students share something that is the same or something that is different, but not both.	Before the warm-up, have students work in groups of 2–4 to list different ways Mai and Lin's work are the same and ways they are different.
9	Students find a value of $95 - 26$ other than 69. Students find a value for $28 + 56$ other than 84.	Launch the warm-up or activities by highlighting important representations from previous lessons.
11	Students show they know that $42 - 28$ will find the value of Tyler's seeds, but find a value other than 14.	Before the warm-up, have students work in partners to share their methods for how to find the value of $42 - 28$.
12	Students show they understand the story problem can be solved by finding an unknown addend in their explanation, but chose a Compare diagram as the match.	During the launch to the warm-up, invite students to compare how the image for choice a and the image for choice c are the same and different.
13	Students only match one equation to the story problem.	Before the warm-up, invite students to work in small groups to discuss a correct response to this cool-down.
14	Students add the 38 new seeds in the second problem to only one addend from the first problem. Students add to solve the first problem, but find a value other than 38.	Before the warm-up (Center Day), pass back the cool-down and work in small groups to make corrections.

Grade 2 Unit 3 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students find a measurement other than 11 centimeter cubes.	After the warm-up, pair students up to use connecting cubes, including the 10-centimeter tools, to check their measurement from the previous day's cool-down.
2	Students find lengths other than actual lengths.	During the launch of the next day's activity, have students work in pairs to compare measurements and techniques.
3	Students measure each rectangle accurately, but find a difference other than 11 cm.	Before the warm-up, invite students to work in small groups to discuss a correct response to this cool-down.
4	Students make estimates that are unreasonably low (0–5 cm) or high (20 or more cm).	Launch the lesson by asking students to recap the important points for estimating and measuring accurately with different tools. Record responses, so students can refer to them later.
5	Students agree with Noah that 13 meters is a reasonable measurement for the gecko.	Launch Activity 1 with a discussion about this cool-down.
6	Students believe that Kiran's pet is longer than Han's and find the difference instead of finding the sum.	Before the warm-up (Center Day) or first activity, highlighting the diagrams from previous lessons. Make connections between the diagrams and the language of the longer and shorter in the context of length.
8	Students find lengths other than 4 in and 1 in.	Encourage students to use inch tiles to check their measurements and build their understanding of the length of an inch.
9	Students believe that 16 inches is a reasonable length for a great white shark.	Before the first activity, pair students up to discuss their responses.
10	Students say the length is 27 inches or they find the length of the picture frame, but do not write an equation that matches.	Before the warm-up, have students work in partners to discuss strategies they used to find the correct response to this cool-down.
11	Students find a difference other than 57 inches.	During the warm-up, review the representation used to solve the problem. Consider asking students to identify parts of the problem in the representation.
12	Students need to keep track of what is happening in the story.	Give students access to pre-made tape diagrams.
14	Students circle a line plot, but do not explain their reasoning in writing.	Before the warm-up, invite students to work in small groups to discuss a correct response to this cool-down.
15	Students represent the data with Xs, but some of the data points are missing or misrepresented.	Before the warm-up, have students compare their line plots from the previous activity. Discuss strategies for keeping track of the data and representing it in the line plot.
16	Students write 22 as the longest stick.	Before the warm-up, have students share the things that are helpful when representing and interpreting data in a line plot.

Grade 2 Unit 4 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students label each tick mark with a number, but do not locate and mark 2 or 14 with a point.	During the warm-up of the next lesson, have students practice locating numbers on the number line with a partner.
2	Students write that Mai should make sure 6–10 are labeled correctly or that she should use the same amount of space between each number but do not write both.	During the warm-up of the next lesson, have a discussion about this cool-down.
3	Students show they are thinking about skip counting, but may not yet be using the structure of the number line to make sure the pattern makes sense. For example, on the second number line, students write 25 in the first blank instead of 30.	Before the warm-up, pass back the cool-down and work in small groups to discuss how they can prove their labels and points are accurate using the structure of the number line.
4	Students locate and compare numbers on the number line accurately, but do not complete their written explanation to show what they understand. Students locate a number other than 31 or a number that is not less than 31 on the number line.	Launch Activity 1 with a discussion about this cool-down.
5	Students make an estimate that is less than 43 or greater than 46.	During the launch of the next day's activity, have students compare their responses to the cool-down and discuss their reasoning.
7	Students circle the number line that represents $8 - 3$.	Launch Activity 1 with a discussion about this cool-down.
8	Students write an equation other than $22 - 17 = 5$.	Use the next day's warm-up to have students discuss representing equations on a number line.
9	Students find a difference other than 3.	Before the warm-up, discuss the number line representations showing difference and removal.
10	Students find a value other than 26.	After the warm-up, pair students up to discuss their cool-down from this lesson and make revisions.
11	Students find the value of the sum or difference. However, the number line doesn't match their work.	Before the warm-up, have students practice representing simple equations on a number line with a partner.
12	Students write something other than $59 + ? = 68$.	Launch Activity 1 by highlighting important notation from previous lessons.
13	The student writes a solution other than 13 cubes.	Before the launch of the first activity in the next lesson, have students compare their strategies for finding the number of cubes.

Grade 2 Unit 5 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students draw a small square with no label or students write that Andre could use 1 block without specifying the unit.	Launch warm-up or activities by highlighting important representations from previous lessons.
2	Students write a number other than 300, 3 hundreds, or 30 tens. For example, they write 30 instead of 30 tens.	During the launch of the next lesson, have students practice representing multiples of a hundred using base-ten blocks, tens, and hundreds.
3	Students represent 322 with more than 10 tens or ones in their drawings.	During the launch of the next lesson, have students practice representing numbers using different combinations of blocks and discuss how they know they have used the fewest number of blocks.
4	Students write numbers in the blanks that match the order of the digits on the other side of the equation, but do not create true equations.	Launch Activity 1 with a discussion about this cool-down.
5	Students write numbers that do not match the numbers given in the problems.	During the launch of the next day's activity, have students use base-ten blocks or diagrams to represent the numbers in the cool-down.
6	Students write something other than one hundred forty-seven.	Before the warm-up, have students work in partners to discuss this cool-down and share different representations.
8	Students label the points with a number other than 600 and 60.	Before the warm-up, have students practice skip counting by 10 and 100 and discuss the cool down with a partner.
9	Students write comparison statements that are not true or do not finish sharing their reasoning in writing.	Launch Activity 1 with a discussion about this cool-down.
10	Students write something other than $427 > 426$.	Before the next day's warm-up, pass back the cool-down and work in small groups to make corrections.
11	Students write comparison statements that are not true.	Launch Activity 1 with a discussion about this cool-down.
12	Students write the numbers in an order other than least to greatest.	Before the next day's warm-up, pass back the cool-down and work in small groups to make corrections.

Grade 2 Unit 6 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students identify some, but not all of the pentagons or hexagons.	Before the warm-up, pass back the cool-down and work in small groups to make corrections.
2	Students identify the shapes using names other than quadrilateral and pentagon.	Launch Activity 1 with a discussion about this cool-down.
3	Students draw sides that are much shorter or longer than 2 in or draw 2 sides that are 2 cm long rather than 2 in long.	Before the warm-up, pass back the cool-down and work in small groups to make corrections.
4	Students circle A or D, but not both.	Before the warm-up, have students practice making cubes using the designs from this lesson.
6	Students circle shapes that composed of some, but not all, equal-size shapes or they circle fewer than 3 shapes that are made of equal-size shapes.	Launch Activity 1 with a discussion about this cool-down.
7	Students partition the rectangle into more than or fewer than 3 pieces or label the shaded piece a term other than a third.	Before the warm-up, share and discuss examples and non-examples of thirds.
8	Students write that either Andre or Noah painted more.	After the warm-up in the next lesson, pair students up to discuss their responses.
9	Students partition the circle into two pieces but do not write that two halves or the whole circle is shaded.	After the warm-up in the next lesson, pair students up to discuss their responses.
11	Students circle quarter till 8.	Launch activity 1 with a discussion about this cool-down.
12	Students say the clock shows 10:50 because the hour hand is closer to 10.	Before the warm-up, have students work in partners to practice reading times close to the next hour.
13	Students choose p.m. instead of a.m. or a.m. instead of p.m.	Before the warm-up, have students work in groups of 2 to discuss a correct response to this cool-down.
15	Students find a value for the coins other than 62¢.	Before the warm-up, have students practice counting coin values using nickels, dimes, and pennies.
16	Students write a value other than 87¢.	Before the warm-up, have students practice counting coin values using quarters, nickels, dimes, and pennies.
17	Students write a total value other than 1 dollar and 16 cents or 116 cents.	Launch Activity 1 with a discussion about this cool-down.
18	Students find Mai's coin value to be an amount other than 75 cents or find she has more or less than 43 cents left over.	After the warm-up in the next lesson, pair students up to discuss their responses.
19	Students write an amount other than \$83.	Launch Activity 1 with a discussion about this cool-down.

Grade 2 Unit 7 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students find the difference by subtracting 559 from 562.	Before the warm-up review strategies used to solve the cool-down of today's lesson.
2	Students find a value for the sum other than 511 or write an equation that shows a sum other than $300+211=511$.	Launch Activity 1 with a discussion about this cool-down.
3	Students find a difference other than 240.	Launch Warm-up or Activity 1 by highlighting important ideas from previous lessons.
4	Students find a sum other than 598 or a difference other than 272.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down.
6	Students find a value other than 190 for the sum.	Launch Activity 1 with a discussion about this cool-down.
7	Students show a sum other than 429.	Before the warm-up review strategies and solution for the cool-down.
8	Students find a value other than 343.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down.
9	Students say Priya's work is correct or disagree without an explanation.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down.
10	Students use the same method for both sums.	After the warm-up in the next lesson, pair students up to discuss their responses.
12	Students find a solution other than 628.	Before the warm-up, pass back the cool-down and work in small groups to make corrections.
13	Students find a difference other than 283.	Before the warm-up, select a student's cool-down from the previous lesson. Ask students to identify what the student did well and what the student needs to do to improve the cool-down.
14	Students choose expressions that match what Han is looking for, but they do not find an accurate value for the difference(s).	Before the warm-up, pass back the cool-down and work in small groups to make corrections.
15	Students find the mistake, but create a diagram or equations that show an incorrect response.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down.
16	Students use the same method for both expressions.	After the warm-up in the next lesson, pair students up to discuss their responses.

Grade 2 Unit 8 Cool-Down Guidance

Lesson	Response to Student Thinking	Next Day Support
1	Students create equal groups that are smaller than 5 and have more than 1 leftover or have 2 groups that aren't equal.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down.
2	Students say that all students will have a partner and show 1 group of 3 students.	Launch Warm-up or Activity 1 by highlighting key vocabulary from previous lessons.
3	Students identify the number of balloons as odd or the number of circles as even.	Launch Warm-up or Activity 1 by highlighting key vocabulary from previous lessons.
4	Students recognize the image of 13 dots as odd, but attempt to write an equation with equal addends. For example, $13 = 6 + 6$.	Launch warm-up or Activity 1 by highlighting important ideas from previous lessons.
5	Students focus their explanation for why $8 + 1$ is odd by drawing 9 objects to show that 9 is odd.	Launch warm-up or Activity 1 by highlighting important ideas from previous lessons.
7	Students identify the number of columns and total of each column rather than rows.	Create a poster with important terms or vocabulary from this cool-down.
8	Students identify the number of rows and how many in each row instead of the number of columns.	Create a poster with important terms or vocabulary from this cool-down.
9	Students circle $3 + 3 + 3$ or $4 + 4 + 4 + 4$.	Before the warm-up, have students work in partners to discuss a correct response to this cool-down.
10	Students write equations that do not represent the rows and columns of the array shown.	Before the warm-up, pass back the cool-down and work in small groups to make corrections.
11	Students create more than or fewer than 6 equal-size squares to complete the space in the rectangle or write expressions that do not represent the number of squares in the rectangle.	Launch the warm-up or activities by highlighting important representations from previous lessons.
12	Students create squares that are significantly different sizes or write expressions that do not match the array.	Before the warm-up, select a student's cool-down from the previous lesson (name anonymous). Ask students to identify what the student did well and what the student needs to do to improve the cool-down.