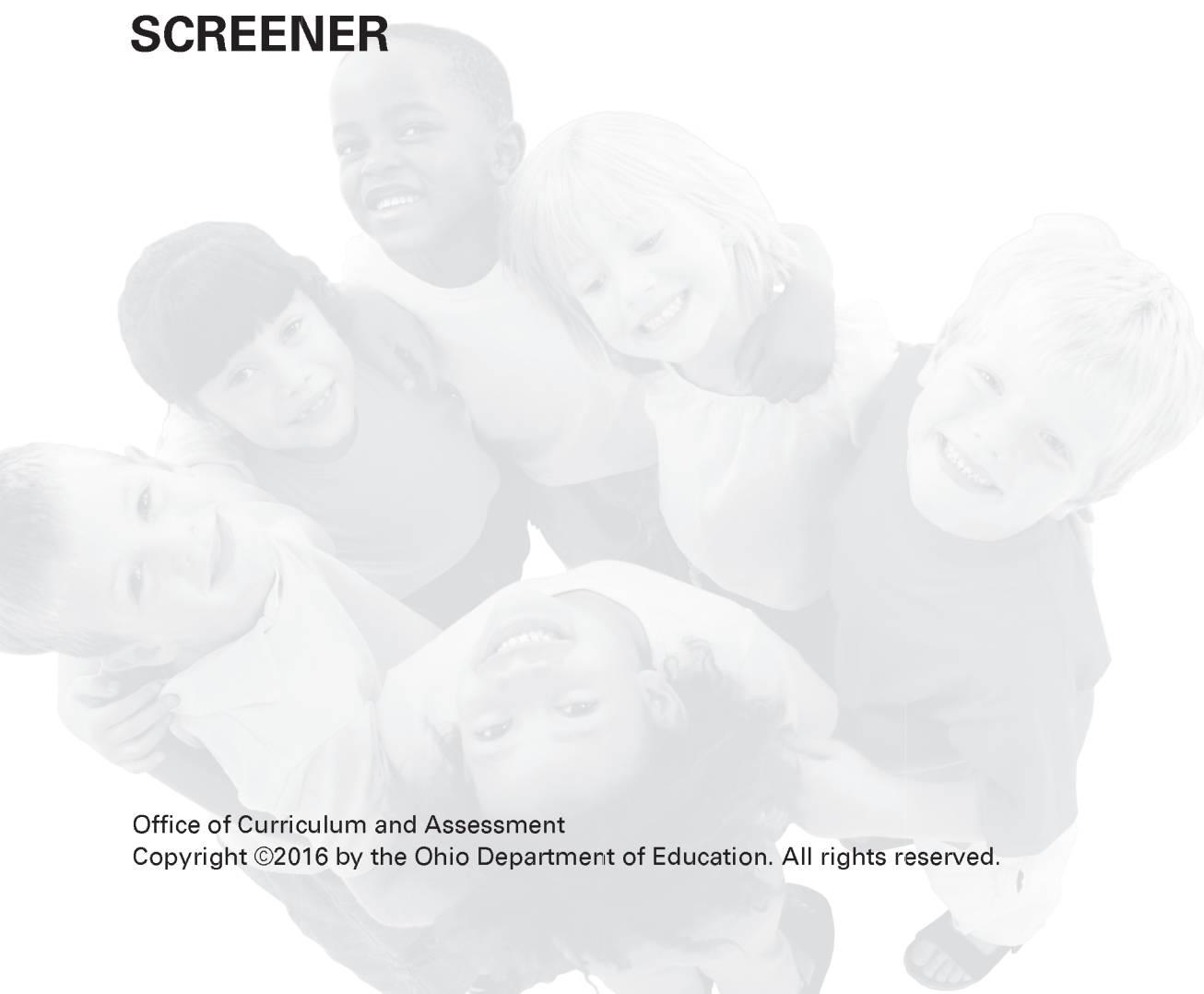


Ohio's Diagnostic Assessments

GRADE 2 MATHEMATICS

Directions for Administration Manual

SCREENER



The Ohio Department of Education does not discriminate on the basis of race, color, national origin, sex, religion, age, or disability in employment or the provision of services.

ADMINISTRATION MANUAL

Introduction

This *Directions for Administration Manual (DFAM)* for the Ohio Diagnostic Assessments contains information on administering the Screener.

Before administering the Screener, Test Administrators (TAs) must review this DFAM to familiarize themselves with the policies and procedures, and materials necessary for conducting the administration.

For guidance on statewide requirements for administering and reporting results from the Ohio Diagnostic Assessments, please refer to the Ohio Department of Education website. Go to education.ohio.gov and search key words: Diagnostic Assessments.

Third Grade Reading Guarantee

Districts/schools must administer a reading diagnostic assessment to all students in grade one through grade three by September 30 and to all students in kindergarten by November 1 of each school year to meet the requirements of the Third Grade Reading Guarantee. Districts/schools must administer a mathematics diagnostic assessment to all students in grades one and two, and a writing diagnostic assessment to all students in grades one, two and three at least once during the school year. All results must be reported in the EMIS data collection.

Use of Format

The Ohio Diagnostic Assessments were developed in two formats:

- **Screener** – Kindergarten, one, two, three for reading and writing; and kindergarten, one and two for mathematics.
- **Full Measure** – Kindergarten, one, two, three for reading and writing; and kindergarten, one and two for mathematics.

A specific format is to be administered at different times of the year to assess specific skills. The Screener will measure the end-of-year expectations of the previous year's standards; the reading Screener will be used to meet the requirements of the Third Grade Reading Guarantee. The Full Measure will measure end-of-year expectations of the current grade level.

There is no Short Screening Measure for the Ohio Diagnostic Assessments.

Test Administrator Criteria

The test administrator must meet this criteria:

- The person must be an employee of the district or school;
- The person must hold a current permit, license or certificate issued by the Ohio Dept. of Education.

If the person providing the accommodation is also administering the diagnostic assessment, then that person must also meet the test administrator criteria.

Content Alignment

	Page Number	Item Number	Domain(s)	Standard(s)
Activity 1				
	10	1	Measurement and Data	1.MD.C.4
	10	2	Measurement and Data	1.MD.C.4
	11	3	Measurement and Data	1.MD.C.4
	11	4	Measurement and Data	1.MD.C.4
	11	5	Measurement and Data	1.MD.C.4
Activity 2				
	13	6	Number and Operations in Base Ten	1.NT.B.3
	13	7	Number and Operations in Base Ten	1.NT.B.3
	14	8	Operations and Algebraic Thinking	1.OA.A.1
	16	9	Operations and Algebraic Thinking	1.OA.B.4
	18	10	Geometry	1.GA.1
	20	11	Geometry	1.GA.3
	21	12	Operations and Algebraic Thinking	1.OA.B.4
	23	13	Number and Operations in Base Ten	1.NT.A.1

	Page Number	Item Number	Domain(s)	Standard(s)
Activity 3				
	25	14	Number and Operations in Base Ten	1.NT.A.1
	27	15	Number and Operations in Base Ten	1.NT.C.5
	27	16	Number and Operations in Base Ten	1.NT.C.5
	28	17	Number and Operations in Base Ten	1.NT.C.4
	30	18	Number and Operations in Base Ten	1.NT.C.6

Students Who Require Accommodations

Definition of an Accommodation

For Ohio’s Diagnostic Assessments, accommodations are considered to be adjustments to the testing conditions, test format or test administration that provide equitable access during assessments for students with disabilities and students who are English language learners.

Criteria for the Use of Accommodations

Accommodations should:

- Provide equitable access during instruction and assessment;
- Mitigate the effects of a student’s disability or English language learner status;
- Not reduce learning or performance expectations;
- Not change the construct being assessed;
- Not compromise the integrity or validity of the assessment;
- For students with disabilities, be documented in the IEP or 504 plan.

Special Considerations for the Read-Aloud, Scribe and Mathematical Tools Accommodations for Students with Disabilities

As with all testing accommodations, the read-aloud, scribe and mathematical tools accommodations should not change the construct being assessed, i.e., change what is being measured by the task. Therefore, consider these guidelines when providing these accommodations:

- *Read-Aloud*: The test administrator should consider the read-aloud for the reading diagnostics on an activity-by-activity basis. For example, if the Strand/Topic for an activity is *Literature: Key Ideas and Details*, then reading the passage and items in the task will not change what the activity is measuring. However, if the Strand/Topic for an activity is *Foundational Skills: Phonics and Word Recognition* or *Foundational Skills: Fluency*, then reading any of the activity to the student would change what the activity is measuring and therefore should not be read aloud.
- *Scribe*: The test administrator should consider use of a scribe for the writing diagnostics on an activity-by-activity basis. For example, if the Strand/Topic for an activity is *Language: Conventions of Standard English*, then use of a scribe would not be appropriate in many cases since writing for the student would change what the activity is measuring. However, if an activity is testing multiple Strands/Topics, for example, *Writing: Text Types and Purposes* and *Language: Conventions of Standard English*, use of a scribe may be appropriate. Since rubrics for writing activities include multiple skills, use of a scribe in these instances would allow a student who qualifies for the accommodation to show what they know and can do in areas other than *Conventions* such as *Content*, *Written Expression* and *Grammar*. The scribe should write the student's verbatim response without changing the response in any way. The student should indicate capitalization and punctuation. Please refer to Appendix C - Protocol for Scribing and Transcribing Student Responses in Ohio's Accessibility Manual with Appendices for more details.

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- *Mathematical tools:* Calculators are not allowed on Ohio’s Diagnostic Assessments. Students with disabilities may use mathematical tools as an accommodation to assist mathematical problem solving. These manipulatives allow the flexibility of grouping, representing or counting without numeric labels. Allowed mathematical tools include 100s chart, base 10 blocks, counters and counting chips, cubes, square tiles, two-colored chips and algebra tiles.

There are no special versions (e.g., large print, Braille, English audio CD or foreign language CDs) of the Ohio Diagnostic Assessments.

Accommodations for English Language Learners

Allowable accommodations for English language learners (ELLs) on any of Ohio’s Diagnostic Assessments include use of a word-to-word dictionary and extended time. Additionally, mathematics tests may be orally translated. The department does not reimburse for translators for the diagnostic tests. Test administrators should determine accommodations for ELLs on a student-by-student basis, taking into consideration the student’s language acquisition level and familiarity with the accommodation. For example, a word-to-word dictionary may not be appropriate for a student with low English language acquisition or who does not use a dictionary regularly.

For more information on accessibility and accommodations, refer to the *Ohio’s Accessibility Manual*. Go to education.ohio.gov and search keywords: *accessibility manual*.

Test Administration Procedures

Before the Test

Materials Needed for Testing

Please print these materials from the website.

- TAs will need this manual.
- a Student Booklet (one per student)
- a Student Score Sheet (one per student)

Teacher Provided Materials

- Base Ten Blocks or Cubes
- Paper and Pencil Optional

The teacher provided materials are intended to be instructional materials that may be found in the classroom. It is not the intent to have the teacher purchase additional materials.

Preparing to Give the Test

The following steps are recommended to prepare for the administration:

- Collect the necessary materials listed above
- Review the script to ensure you are familiar with the assessment
- Check which students are to receive accommodations and make sure the students are familiar with the procedure.

During the Test Administration

Administration Types: Group vs. Individual

The Ohio Diagnostic Assessment activities have two different administration types: group and individual, or one-on-one.

Oral Scripts

To ensure standardized administration conditions across the state, this manual contains directions that you will read to students, including oral scripts. All information to be read aloud to students will be printed in **bold** type. Do not deviate from the directions or the scripts. TAs may read the question and related text up to three times, if needed or requested by the student, unless stated otherwise in the directions for a particular activity.

After the Test

At the conclusion of testing, TAs must use the scoring guidelines presented in the DFAM to score the students' responses. TAs must then mark the appropriate score on the Score Sheet.

Activity 1

Questions 1 – 5

Type of Administration: Group

Estimated Time to Administer: 15 – 20 minutes

Materials

- Student Booklet
- Student Score Sheet

Notes

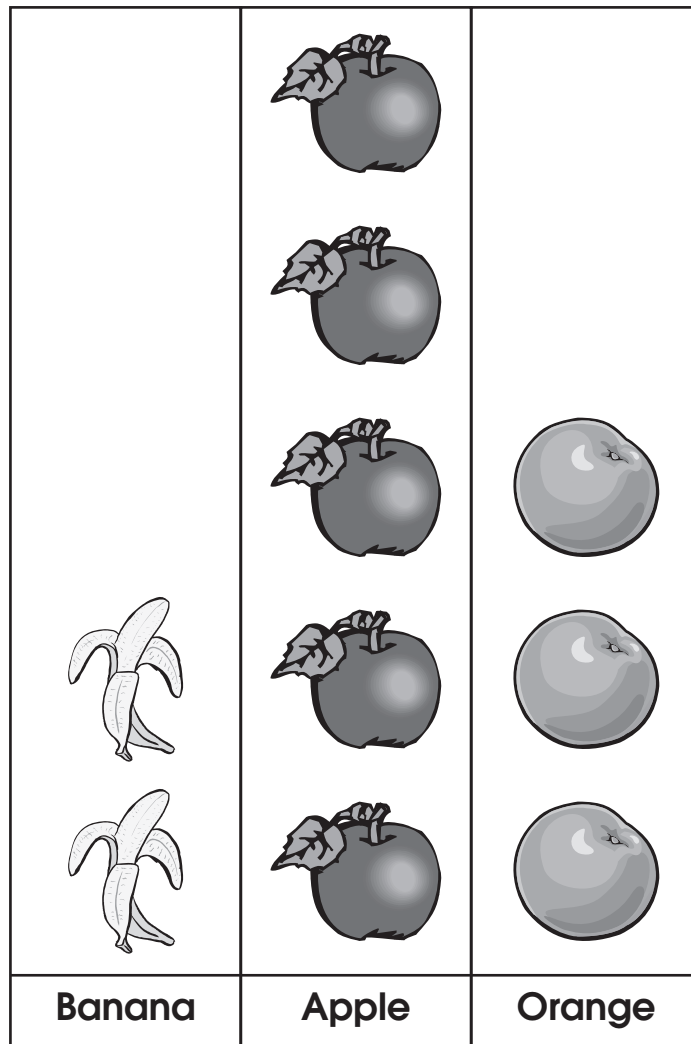
- TAs will read the bold text to guide students through the administration of the items and should reference the item numbers to orient students. You may repeat any information up to three times.
- Students will respond directly in the Student Booklets provided with the test materials. Some items may ask students to write a response; others may call for circling an option or selecting from three options (A, B or C). TAs should be mindful in allowing sufficient time for students to respond to each item after it is read aloud.
- After testing, TAs will complete the Score Sheets by either marking the letter of the student’s response or entering the appropriate score based on the student’s response.

Getting Started

Ask students to open the Student Booklet to page 2.

Today you will be doing a math activity in this booklet. At the bottom of some pages you will see the word “STOP.” This means you should wait for directions before you go on. You may look back at your writing to check your work. When you are finished, put your pencil down.

Favorite Fruits



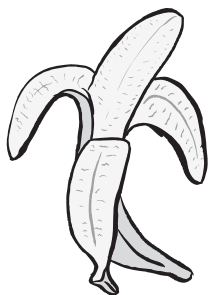
Point to the page with the Favorite Fruit chart.

Each child has put a picture on the chart to show their favorite fruit.

Point to each column.

Some children like bananas, some like apples, and some like oranges. Now I will ask you questions about the chart.

-
1. Circle the fruit that most students picked.



Banana



Apple



Orange

If necessary, you may prompt students by repeating, “the fruit the students chose the MOST.”

Scoring Guidelines

Points	Student Response
1	The student correctly circles the apple.
0	The response is incorrect or irrelevant.

2. How many students chose banana as their favorite fruit? _____

Scoring Guidelines

Points	Student Response
1	The student writes “2” or “two.”
0	The response is incorrect or irrelevant.

3. How many students chose apple as their favorite fruit? _____

Scoring Guidelines

Points	Student Response
1	The student writes 5 or five.
0	The response is incorrect or irrelevant.

4. How many more children picked apples than oranges? _____

Scoring Guidelines

Points	Student Response
1	The student writes 2 or two.
0	The response is incorrect or irrelevant.

5. How many children in all put a picture of their favorite fruit on this chart? _____

Scoring Guidelines

Points	Student Response
1	The student writes 10 or ten.
0	The response is incorrect or irrelevant.

Activity 2

Questions 6 – 13

Type of Administration: Group

Estimated Time to Administer: 15 – 20 minutes

Materials

- Student Booklet
- Student Score Sheet

Notes

- TAs will read the bold text to guide students through the administration of the items and should reference the item numbers to orient students. You may repeat any information up to three times.
- Students will respond directly in the Student Booklets provided with the test materials. Some items may ask students to write a response; others may call for circling an option or selecting from three options (A, B or C). TAs should be mindful in allowing sufficient time for students to respond to each item after it is read aloud.
- After testing, TAs will complete the Score Sheets by either marking the letter of the student’s response or entering the appropriate score based on the student’s response.

Getting Started

Ask students to open the Student Booklet to page 4.

Today you will be doing a math activity in this booklet. At the bottom of some pages you will see the word “STOP.” This means you should wait for directions before you go on. You may look back at your writing to check your work. When you are finished, put your pencil down.

Now you will be comparing numbers.

6. Use one of these symbols to compare 42 and 24.

$<$ $>$ $=$

42 24

Scoring Guidelines

Points	Student Response
1	The student correctly writes ">."
0	The response is incorrect or irrelevant.

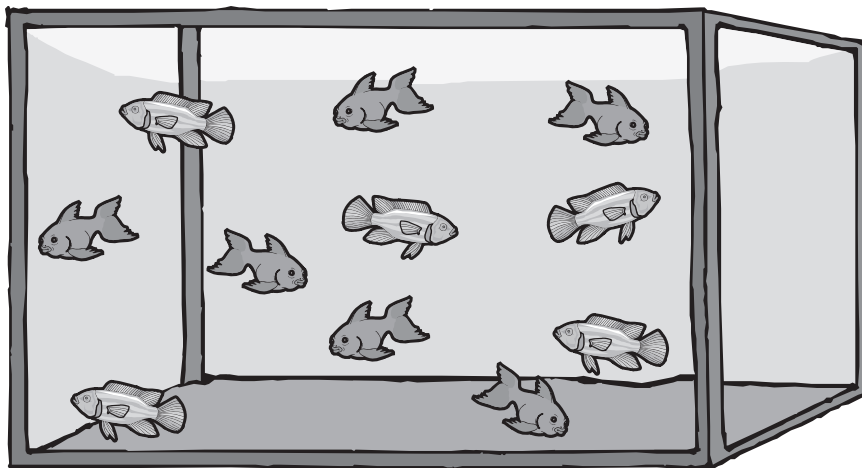
7. Circle the number that has more tens.

42 38

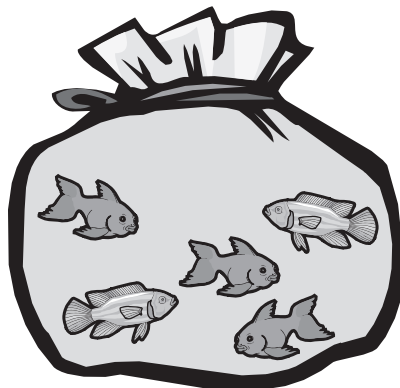
Scoring Guidelines

Points	Student Response
1	The student correctly circles 42.
0	The response is incorrect or irrelevant.

8. There are 11 fish in this fish tank.



Hank adds these 5 fish to the tank:



A. Write an equation that shows your thinking. _____

B. What will be the total number of fish in the tank? _____

Scoring Guidelines

Exemplar Response: <ul style="list-style-type: none">• $11 + 5 = 16$ 16	
Points	Student Response
2	The response has a correct equation and correctly identifies the total number of fish, 16.
1	The response provides a correct equation with an incorrect or missing value for the total number of fish. OR The response provides the correct number of fish with an incorrect or missing equation.
0	The response is incorrect or irrelevant.

-
9. Henry needs to score 10 points to win a game. He has already scored 4 points.

How many more points does Henry need?

Show your thinking using pictures or an equation here. Point to answer box.

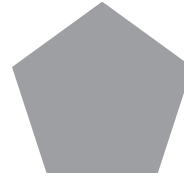
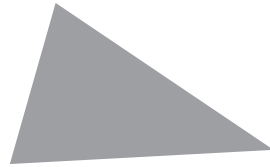
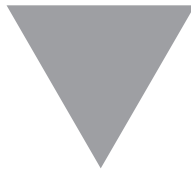


Henry needs _____ more points.

Scoring Guidelines

Exemplar Response:	
Points	Student Response
2	The response provides the correct solution with adequate supporting work.
1	The response provides a partial solution. 1 point sample answer: For example, the response may: <ul style="list-style-type: none">• Identify that 6 more points are needed but does not adequately show or explain how the answer was found.• Adequately show or explain an appropriate strategy but gets an answer other than 6.
0	The response provides an inadequate solution. 0 point sample answer: For example, the response may: <ul style="list-style-type: none">• Be incorrect or irrelevant.• Restate the information provided in the item.• Be blank or give irrelevant information.

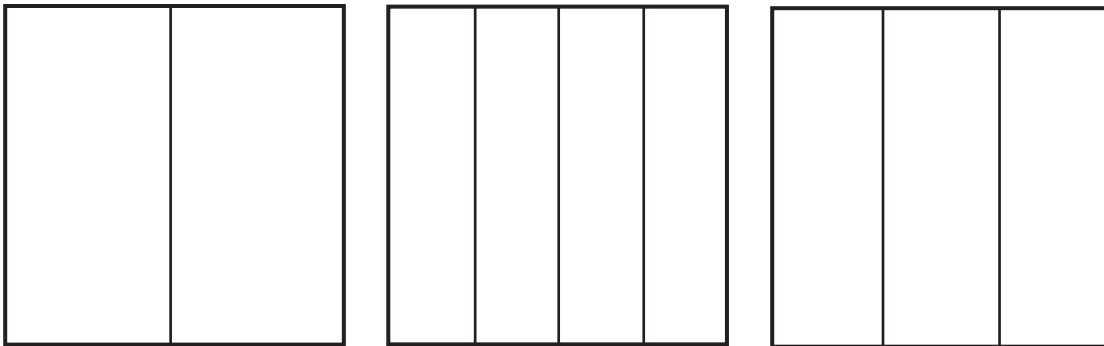
10. Put an X on all of the triangles.



Scoring Guidelines

Points	Student Response
2	<p>The focus of this task is distinguishing between defining attributes versus nondefining attributes. The response provides a correct identification of all three triangles.</p>
1	<p>The response shows partial evidence of distinguishing between defining attributes versus nondefining attributes; however, the solution may be incomplete or slightly flawed.</p> <p>1 point sample answer:</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Indicate two triangles and one or two incorrect shapes. • Indicate three triangles and one quadrilateral. • Indicate one triangle and zero or one incorrect shape. • Indicate only two triangles.
0	<p>The response provides inadequate evidence of distinguishing between defining attributes versus nondefining attributes. The response provides major flaws in explanations or irrelevant information.</p> <p>0 point sample answer:</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Indicate one triangle and two or more incorrect shapes. • Be incorrect or irrelevant. • Restate the information provided in the item.

-
11. Put an X on the figure that is divided into 2 equal shares.



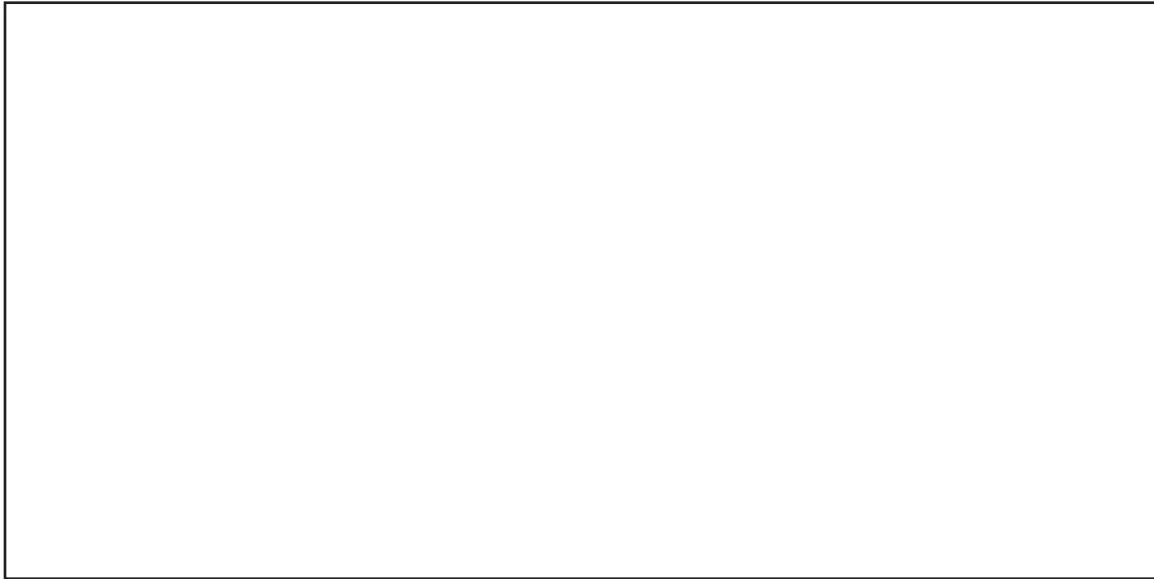
Scoring Guidelines

Points	Student Response
1	The response shows an X on the first figure.
0	The response is incorrect or irrelevant.

12. Zora bought 12 apples. She needs 7 apples to bake a pie.

How many apples will she have left after she bakes a pie?

Show your thinking using pictures or an equation.

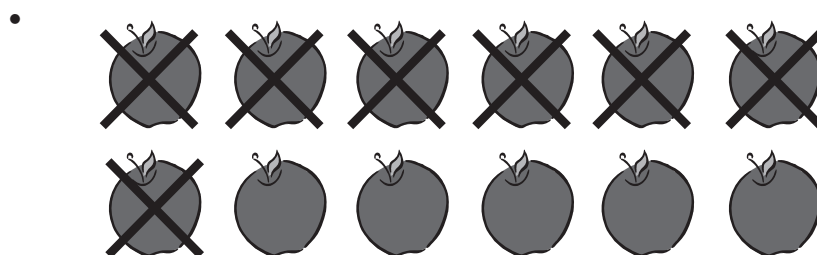


Zora will have _____ apples left.

Scoring Guidelines

Exemplar Response:

- Student writes a number sentence to show that 5 apples will be left. For example, $12 - 7 = 5$, $7 + 5 = 12$ or $7 + 2 + 2 + 1 = 12$. (Other answers exist.)



5

Points	Student Response
2	The focus of this task is understanding subtraction as an unknown-addend problem. The response provides the correct answer with an adequate explanation or supporting work.
1	<p>The response shows partial evidence of understanding subtraction as an unknown-addend problem; however, the solution may be incomplete or slightly flawed.</p> <p>1 point sample answer:</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Adequately show or explain an appropriate strategy but gets an answer other than 5. • Identify that 5 apples will be left but does not adequately show or explain how the answer was found.
0	<p>The response provides inadequate evidence of understanding subtraction as an unknown-addend problem. The response provides major flaws in explanations or irrelevant information.</p> <p>0 point sample answer:</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Be incorrect or irrelevant. • Restate the information provided in the item. • Be blank or give irrelevant information.



13. Start with 95 and count to 101. Write these numbers on the lines.

95, _____, _____, _____, _____, _____, _____

Scoring Guidelines

Points	Student Response
2	The student writes the correct six numbers: 96, 97, 98, 99, 100, 101.
1	The student writes the numbers with one or two omissions or mistakes. An omission or mistake is reversing two numbers, placing one number out of sequence by more than one place, or skipping a number.
	1 point sample answer: For example, the response may be: <ul style="list-style-type: none">• 96, 95, 97, 98, 99, 100, 101• 96, 97, 98, 99, 101
0	The student writes the numbers with three or more omissions or mistakes.
	0 point sample answer: For example, the response may: <ul style="list-style-type: none">• Include three or more mistakes.• Be incorrect or irrelevant.• Be blank or give irrelevant information.

Activity 3

Questions 14 – 18

Type of Administration: Individual

Estimated Time to Administer: 5 – 10 minutes per student

Materials

- Student Score Sheet
- Student Booklet

Teacher Provided Materials

- Base Ten Blocks or Cubes
- Paper and Pencil Optional

Notes

- TAs will read the bold text to guide students through the administration of the items. You may repeat any information up to three times.
- Use the Scoring Guidelines to score each student’s response and complete the Student Score Sheet.

Teacher Provided Materials

- Questions 15 and 16 require students to perform addition and subtraction. Students should not be provided aids, such as blocks or paper/pencil, for these questions; students also should not have access to Question 14 in the Student Booklet. Students must be asked to solve these questions mentally.
- Question 17 requires the use of base ten blocks. TAs may record notes on the blank areas of the score sheet, if needed, to aid in scoring.
- Question 18 requires students to perform subtraction. TAs may provide base ten blocks (ones cubes and rods of 10) and/or paper and pencil for students to solve the problem.

Getting Started

Ask students to open the Student Booklet to page 10.

Today you will be doing a math activity in this booklet. At the bottom of some pages you will see the word “STOP.” This means you should wait for directions before you go on. You may look back at your writing to check your work. When you are finished, put your pencil down.

-
14. Here is a chart with some missing numbers. Fill in the missing numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	

If necessary, prompt, **“What comes next?”** or **“Then what?”**

Scoring Guidelines

Points	Student Response
2	The student writes the numbers from 80 to 100.
1	The student writes the numbers from 80 to 100 with one or two errors. OR Student correctly writes 9 numbers in a row.
0	The student makes more than three errors and requires many prompts when counting.

15. What number is 10 less than the number 40? _____

Scoring Guidelines

Points	Student Response
1	The student mentally identifies the number 30 (does not have to count); for example, the student says "30" and does not use tools/fingers.
0	The response is incorrect or irrelevant.

16. What number is 10 more than 68? _____

Scoring Guidelines

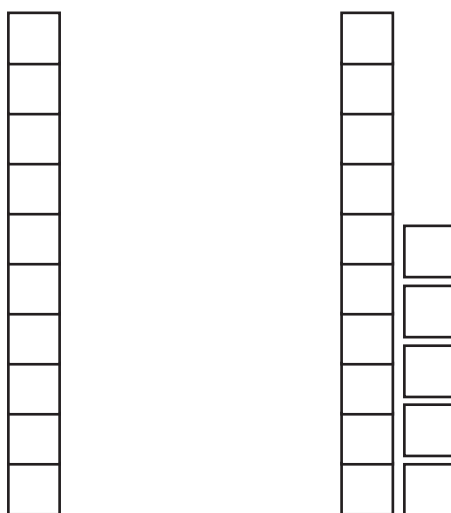
Points	Student Response
1	The student mentally identifies the number 78 (does not have to count); for example, the student says "78" and does not use tools/fingers.
0	The response is incorrect or irrelevant.

Base 10 Blocks

We will use these base ten blocks to answer some questions.

Provide the student with 15 one cubes and 10 ten rods. You may also choose to use other blocks or cubes as appropriate.

17. Use base ten blocks to form the numbers 10 and 15. Place the blocks into two distinct groups in front of the student, as shown.



Sandra has this many blocks.

Point to the group of blocks that shows the number 10.

She adds this many more blocks.

Point to the group of blocks that shows the number 15.

How many blocks does she have altogether?

Wait for a response.

Tell me how you found your answer.

Record notes about the strategy.

Scoring Guidelines

Points	Student Response
2	The response correctly states that the answer is 25 AND shows a correct strategy.
1	The response correctly states that the answer is 25 but is not able to explain how they found it. OR The response provides an appropriate strategy for determining the answer but makes an error resulting in an incorrect value.
0	The response is incorrect or irrelevant.

18. What is $30 - 10$? _____

Explain your thinking using pictures, numbers or these blocks.

Provide student with blank paper if necessary.

Scoring Guidelines

Points	Student Response
2	The response correctly states that the answer is 20 AND provides a correct strategy.
1	The response correctly states that the answer is 20 but is not able to explain how they found it. OR The response provides an appropriate strategy for determining the answer but makes an error resulting in an incorrect value.
0	The response is incorrect or irrelevant.

