Student Name: _____



Mathematics Test Booklet Grade 3

Paper-Based Item Sampler

Alaska Department of Education & Early Development



Copyright © 2021 by Alaska Department of Education & Early Development. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

DO NOT MARK ON THIS PAGE

Part 1

Mathematics

Now you will be taking the mathematics portion of the Performance Evaluation for Alaska's Schools. This test has two parts that contain different types of questions. Record all your answers in your test booklet.

Calculators are NOT allowed on the mathematics assessment.

This test includes questions that will ask you to provide your answer in a variety of ways.

- Most questions have four answer choices and only one correct answer.
- Some questions may have more than four answer choices and more than one correct answer. You will be asked to identify all the correct answers.
- Some questions may ask you to fill in your answer to provide your response. To fill in your answer, write your answer in the boxes at the top of the grid. Only one number or symbol is allowed in each box. Write mixed numbers as improper fractions. You may start anywhere. Fill in the bubble that matches the number or symbol at the top. See the examples in the pictures.

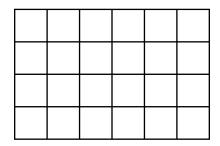
Answer 23 is shown here.	Answer ½ is shown here.	
23	7 / 2	
\(\times \) \		

All questions will be answered in your test booklet ONLY. When you come to the word STOP at the end of a part, you may go back and review to check your answers. You may only review the part you just completed. You may not look at any other part in the test booklet.

Make sure you have marked all your answers clearly and that you have completely erased any marks you do not want. When you are finished, close your test booklet. Then raise your hand.



1. A rectangle with 24 squares is shown.



Which expression could be used to find the number of squares in one row of the rectangle?

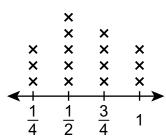
- 24 + 4
- B 24 4
- © 24 × 4
- D 24 ÷ 4
- 2. Mr. Jones bought a rectangular rug that is 7 feet long and 4 feet wide. What is the area of the rug?
 - A 11 square feet
 - B 21 square feet
 - © 22 square feet
 - 28 square feet

3. Ms. Green's class planted seeds for a science project. The students measured the heights of their plants after one week.

Plant Height (inches)	Number of Plants
$\frac{1}{4}$ inch	2
$\frac{1}{2}$ inch	4
$\frac{3}{4}$ inch	6
1 inch	3

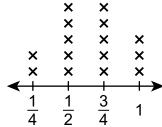
Which line plot matches the students' information?

A



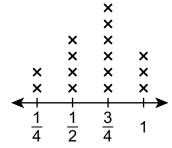
Plant Height (inches)

lacksquare



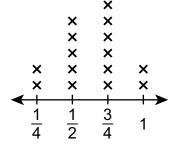
Plant Height (inches)

©



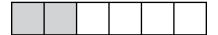
Plant Height (inches)

D



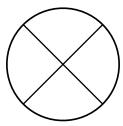
Plant Height (inches)

4. A rectangle is shown.



What fraction of the rectangle is shaded?

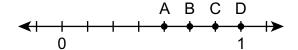
- \odot $\frac{2}{8}$
- ① $\frac{4}{6}$
- 5. Kelly cuts a pizza into four equal-sized pieces, as shown.



What fraction of the area of the whole pizza is represented by one piece?

- \odot $\frac{4}{4}$
- \bigcirc $\frac{1}{1}$

- 6. Lisa is solving the division problem $54 \div 6$. Which number sentence can help Lisa find the answer?
 - 6 + 48 = 42
 - 6 + 54 = 60
 - © $6 \times 9 = 54$
 - $6 \times 54 = 324$
- 7. Mark has all of his books on 6 shelves. Each shelf has 7 books. How many books, in total, does Mark have?
 - A 13
 - **B** 35
 - © 42
 - **D** 48
- 8. A number line is shown.



Which point shows $\frac{7}{7}$ on the number line?

- A
- B
- © C
- D

Part 2

Mathematics

Now you will be taking the mathematics portion of the Performance Evaluation for Alaska's Schools. This test has two parts that contain different types of questions. Record all your answers in your test booklet.

Calculators are NOT allowed on the mathematics assessment.

This test includes questions that will ask you to provide your answer in a variety of ways.

- Most questions have four answer choices and only one correct answer.
- Some questions may have more than four answer choices and more than one correct answer. You will be asked to identify all the correct answers.
- Some questions may ask you to fill in your answer to provide your response. To fill in your answer, write your answer in the boxes at the top of the grid. Only one number or symbol is allowed in each box. Write mixed numbers as improper fractions. You may start anywhere. Fill in the bubble that matches the number or symbol at the top. See the examples in the pictures.

Answer 23 is shown here.	Answer ½ is shown here.	
23	7 / 2	
000000000000000000000000000000000000		

All questions will be answered in your test booklet ONLY. When you come to the word STOP at the end of a part, you may go back and review to check your answers. You may only review the part you just completed. You may not look at any other part in the test booklet.

Make sure you have marked all your answers clearly and that you have completely erased any marks you do not want. When you are finished, close your test booklet. Then raise your hand.



9. Quincy counts the number of birds at a bird feeder each morning. The table shows how many birds are at the bird feeder for each of four mornings.

Birds at Bird Feeder

Day	Birds	
Saturday	6	
Sunday	3	
Monday	5	
Tuesday	2	

Quincy makes a picture graph. Which picture graph correctly shows how many birds are at the bird feeder for each of the four mornings?

A

Day	Birds at Bird Feeder
Saturday	ナナナナナナ
Sunday	ナナナ
Monday	ナナナナナ
Tuesday	++

Key: → = 2 birds

lacksquare

Day	Birds at Bird Feeder
Saturday	++
Sunday	ナナナナナ
Monday	ナナナ
Tuesday	ナナナナナ

Key: → = 2 birds

©

Day	Birds at Bird Feeder
Saturday	+
Sunday	ナナィ
Monday	*
Tuesday	444

Key: → = 2 birds

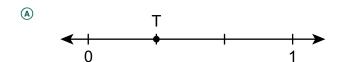
D

Day	Birds at Bird Feeder
Saturday	++
Sunday	}
Monday	+
Tuesday	+

Key: → = 2 birds



10. Which number line shows T located at $\frac{1}{4}$?



- ® T → 1 → 1 → 1

- 11. Multiply.

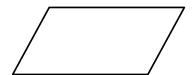
 4×70

- <a>A 28
- ® 74
- © 240
- [®] 280

12. Which number makes the equation true?

 $? \div 8 = 4$

- <a>A
- **B** 4
- © 12
- ^D 32
- 13. A shape is shown.



Which word describes the shape?

- A square
- B rhombus
- © parallelogram
- p rectangle

- 14. Which expression has the same value as 3×7 ?
 - A 7 × 3
 - B 21 ÷ 3
 - © 21 × 3
 - ① 7 ÷ 3
- 15. Which array represents 3×4 ?
 - A



B



© _____

D



- 16. Nolan rounds the number of people at a swimming pool to the nearest ten. He says, "There are 40 people at the swimming pool." How many people could be at the swimming pool?
 - A 34
 - **B** 35
 - © 46
 - 0 49
- 17. Jacki draws a quadrilateral on her notebook. How many sides does a quadrilateral have?

 Enter your answer in the gridded response area.

	\bigcirc	\bigcirc	\bigcirc	
\odot	\odot	\odot	\odot	\odot
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
(5)	(5)	(5)	(5)	(5)
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9





Mathematics
Test Booklet
Grade 3
Paper-Based Item Sampler