

Title I Inventories

These inventories were compiled in Title I several years ago as a measuring tool to show growth. These inventories were designed with the intention that each grade level test be given at the beginning of the year as a pretest for concepts to be acquired during the year. **When given as a pretest it is essential that students understand that they are not expected to know most of the material. Tell the students to merely peruse the inventory to see if there are any questions they feel they would like to attempt.** Explain to the students that these same tests will be given again at the end of the year to show how much they have learned. Every box is aligned to one or more of the ASD Performance Standards for the particular grade level.

In the past few years non-Title schools have requested these inventories. As well as a measure of growth, these inventories have been used to guide instruction by identifying gaps in a student's mathematical understanding. To use it for this purpose, teachers have been giving the inventories from **previous grade levels**.

In this packet you will find: the inventories, the answer sheets for the inventories, the alignments to the ASD Performance Standards, and the grade level ASD Performance Standards. Also included is a grid on which a teacher may record the correct and incorrect answers for each question.

Math Inventory Assessment Administration

Grade 4

- Inventories may take about 1 hour to administer.
- You may choose to administer them one page at time.
- You may read the problem if it does not include “reading a number correctly”.
- You should not use any other questioning strategies.
- Please do not define any terms.
- Manipulatives should be provided.
- The inventories may be copied on overheads and read item by item to the whole class. This is particularly important in the primary grades but may extend to the intermediate grades, as needed.
- Teachers should score the inventories and correlate them to the standards so that they can focus their future instruction more precisely. A tally sheet is provided to help you highlight patterns across the class.
- *To guide instruction, use the previous grade’s inventory in the fall.* Some teachers administer grade level inventories in January, as well as in September and April; this can aid in keeping instruction focused upon the children’s needs.
- *To show growth, use the current grade level inventory in the fall and the spring.*

Grade 4 Math Inventory

Name _____
Date _____
Teacher _____

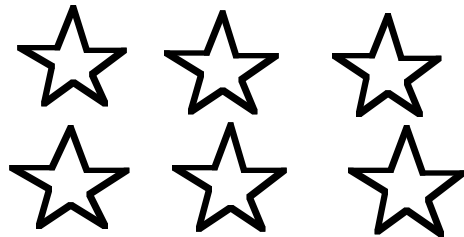
Directions: Show all your work

1.
$$\begin{array}{r} \$5.25 \\ +2.13 \\ \hline \end{array}$$

4. Write the number that has 2 thousands, 3 hundreds, and 2 ones.

2. Mary had \$3.15, and she bought a hamburger for \$1.56. **Estimate** how much money Mary has left.

5. **Circle** $\frac{1}{3}$ of this group of stars.

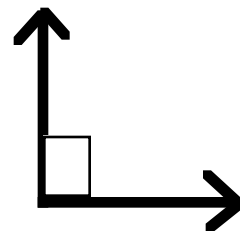


3. This line segment is $2\frac{1}{2}$ inches long. **Estimate** how many centimeters long the line is.



about _____ cm

6. Name the angle.



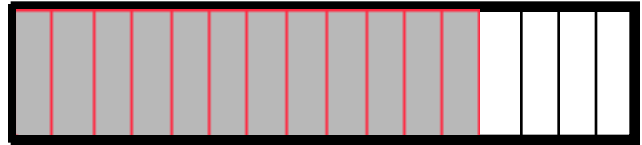
Grade 4 Math Inventory

Page 2

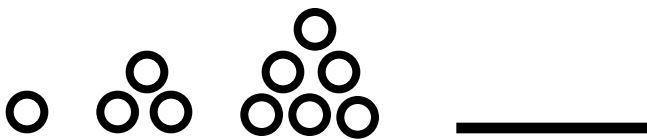
7.

$$\begin{array}{r} 21 \\ \times 32 \\ \hline \end{array}$$

10. Write 2 fractions to describe the shaded area of the bar below:



8. Look for the pattern in the picture. **Draw** what comes next.



11.

$$\underline{\quad} + 26 = 54$$

$$\underline{\quad} * 25 = 100$$

12. A rock collector had 136 rocks in her collection. She took them to a geologist who said that 57 of them were not valuable. **How many of them were valuable?**

9.

$$36 \div 3 = \underline{\quad}$$

Grade 4 Math Inventory Page 3

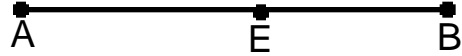
13.

a. 30 inches = _____ feet + _____ inches

b. 8 feet = _____ yards + _____ feet

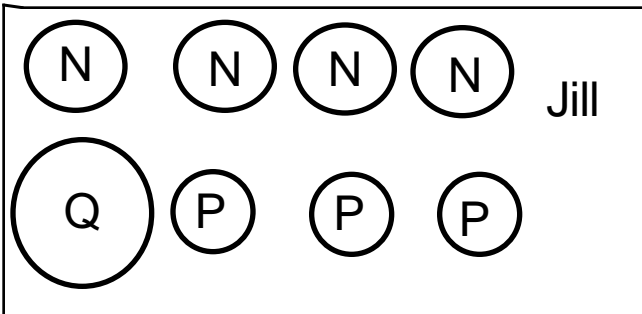
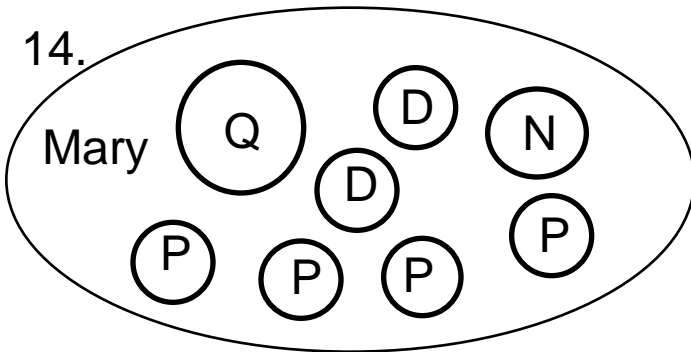
16.

a. Draw \overline{CD} parallel to \overline{AB}



b. Draw \overline{EF} perpendicular to \overline{AB}

14.



How much **more** money does Mary have than Jill?

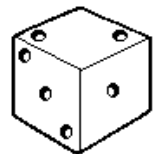
\$ _____ .

17. The chart below shows the Smith's trip expenses for **two days**.

Expenses of the Smith Family	
Hotel	\$\$\$\$\$\$\$\$\$\$\$\$
Food	\$\$\$\$\$\$
Entertainment	\$\$\$\$
Each \$ = \$10	

How much more money would they need to stay one more day?

18. When you roll a number cube, what is the probability:



a. You will roll a 3? _____

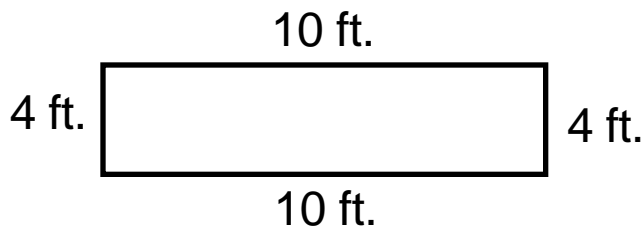
b. You will roll a number larger than 4? _____

15. Tia had 30¢. She found some money. Then she had 94¢. How much did she find? $30¢ + n = 94¢$
 $n =$ _____ ¢

Grade 4 Math Inventory

19. a. $5 * 20 =$ _____
b. $7 * 30 =$ _____

20. a. Find the area: _____ sq. ft.
b. Find the perimeter: _____ ft.



21. Three friends cut a pizza into 12 slices. They shared them equally.

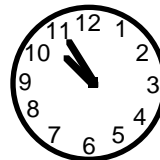
What fraction of the pizza did each one get? _____

How many slices did each one get? _____

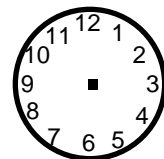
22. Draw an obtuse angle.

23. My clock is 20 minutes slow. **Draw** the hands on clock B to show the correct time.

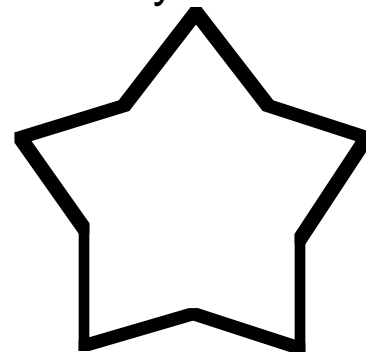
My Clock



Clock B



24. Draw all the lines of symmetry.



Grade 4 Math Inventory

25. Draw lines to match what you expect.

- | | |
|---|--------------|
| 1. The earth will spin in the opposite direction. | a. likely |
| 2. An apple grows on an apple tree. | b. unlikely |
| 3. You will be in school next week. | c. certain |
| 4. The president of the United States will come to your class tomorrow. | d. no chance |

28. I arrived at practice at 10:30 AM. We practiced until 2:45. How long did we practice?

How did you figure it out?

26. For the five games below, what is the:
range? _____
mean? _____

Hockey	Points
Game 1	10
Game 2	8
Game 3	12
Game 4	14
Game 5	11

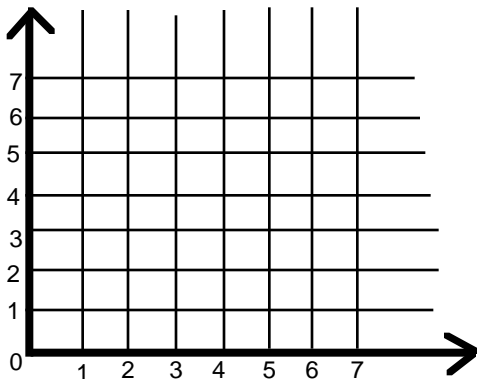
29. Name the quadrilaterals:







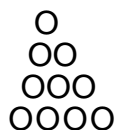
27. Find and **Mark** the points of these ordered pairs: (3, 2) and (6, 4).



30. A teacher has 24 desks, and she wants to put them in equal rows. Draw an **array** that shows what the desks will look like.

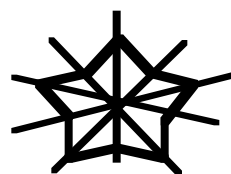
Fourth Grade Math Inventory Answer Key

1. \$7.38
2. \$1.50 or reasonable answer.
3. 6 cm. or reasonable answer
4. 2302
5. 2 of the 6 stars circled and shaded
6. right angle or 90°
7. 672
8. 10 circles stacked



9. 12
10. $\frac{3}{4}$, $\frac{6}{8}$, $\frac{12}{16}$
(1/2 pt. for any correct)
11. 28; 4 (1/2 pt. each)
12. 79
13. 2 ft. 6 in.; 2 yds. 2 ft.
(1/2 pt. each)
14. 6 cents, \$.06
15. $n=64$ cents
16. A E B
C ● ● D
 ● ●
 |
 F
17. \$100
18. $\frac{1}{6}$; $\frac{2}{6}$ or $\frac{1}{3}$ (1/2 pt. each)
19. 100, 210 (1/2 pt each)

20. 40 sq. ft.; 28 ft. (1/2 pt each)
21. ($\frac{1}{3}$, $\frac{4}{12}$, or $\frac{2}{6}$), 4 slices
(1/2 pt. each)
22. shows an angle more than 90° and less than 180°
23. Clock B should show 11:15.
24. All 5 lines for pt.



25. 1-d; 2-c; 3-a; 4-b (any 2= 1/2pt.)
26. 8 through 14 OR 6 ; Mean=11
(1/2 pt. for each)
27. shows 2 dots at the following coordinates:
over 3, up 2; over 6, up 4.
28. 4hrs. 15 mins./explanation
(1/2 pt. each)
29. Trapezoid, Rhombus
Parallelogram, Kite
(1/2 pt. for any 2 correct)
30. shows an array of 1 rows of 24, 2 rows of 12, 3 rows of 8, 4 rows of 6 or each in reverse.

