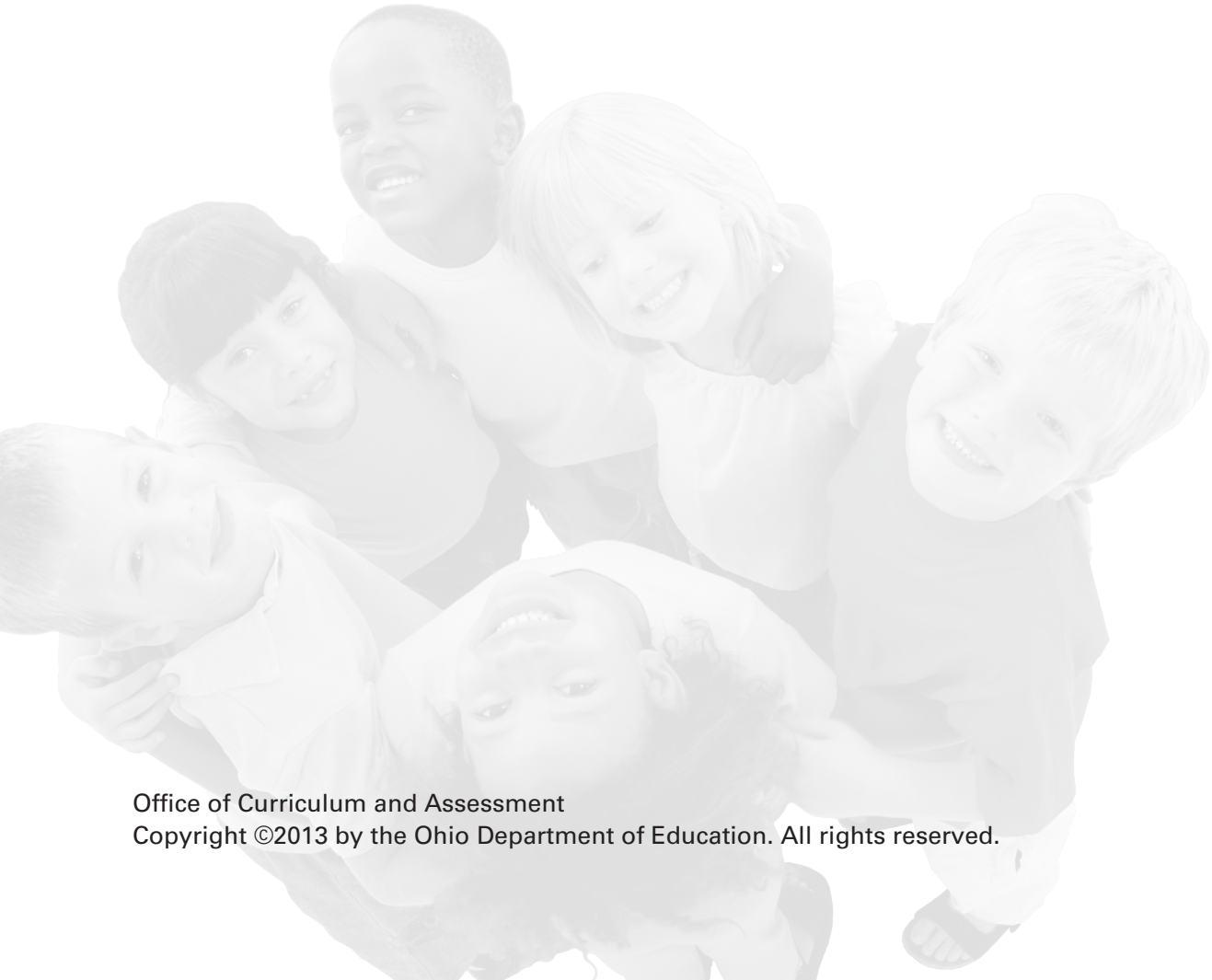
Ohio | Department of Education

Ohio's Diagnostic Assessments

GRADE 2 MATHEMATICS

Student Booklet

FULL MEASURE



Office of Curriculum and Assessment
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1. Write "five hundred eighty-six" as a number: _____

2. Write "two hundred fifty-three" as a number:

_____

3. There are ones, tens and hundreds places in this number: 846

What digit is in the ones place in 846?

_____

What digit is in the tens place in 846?

_____

What digit is in the hundreds place in 846?

_____

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4. Use the <, > or = symbol to compare these two numbers:

981 _____ 989

5. Use the <, > or = symbol to compare these two numbers:

542 _____ 489

6. Measure this paper clip in inches and in centimeters.

Paper clip length: _____ inches

Paper clip length: _____ centimeters

Why is there a difference in the two measures?

_____

_____

_____

_____

7. June has 4 bags of candy. There are 3 pieces of candy in each bag.

   Show pictures or an equation that would help you solve this problem.

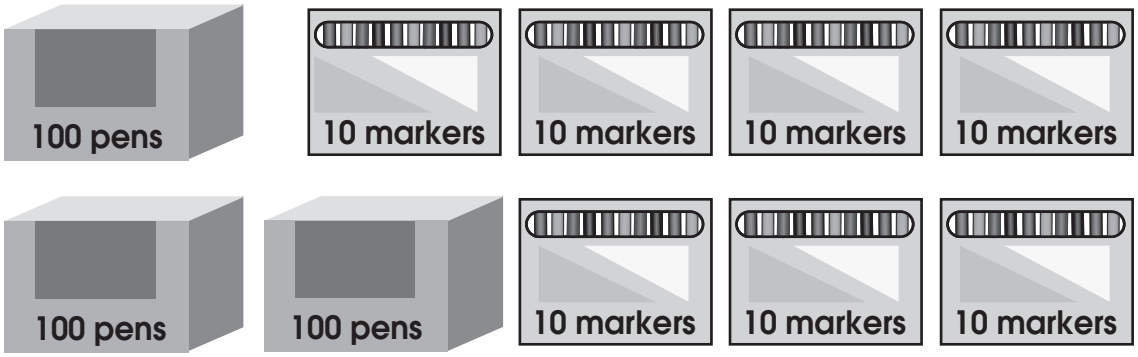
How many pieces of candy does June have altogether?

_____

8. Write 194 in expanded form: _____

9. Write 850 in expanded form: _____

10. Mr. King has boxes that hold 100 pens. He also has packs of 10 markers as shown.



Write the total number of pens and markers:

_____

Write the total number of pens and markers in expanded form:

_____

Go to the next page

11. You are going to count up by 5s. Start with 80 and count up by 5s.

80, _____, _____, _____, _____,

_____, _____, _____, _____

12. Solve 56 – 37.

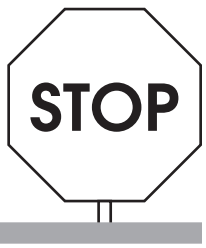
Show how you found your answer.

13. Solve 13 + 11 + 25.

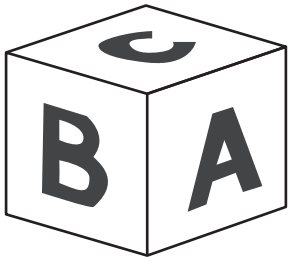
Show how you found your answer.

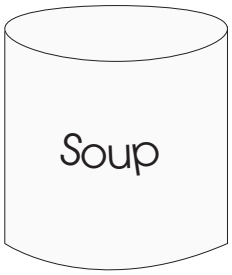
14. Circle the number that is 100 less than 496.

596 396 486

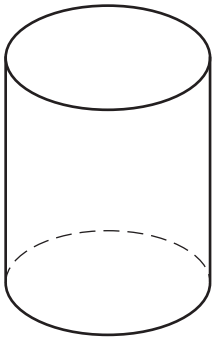


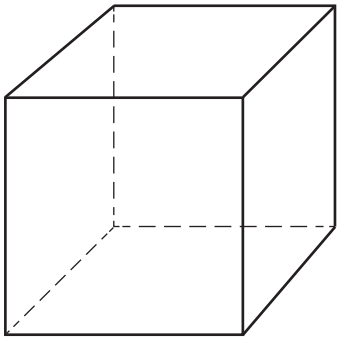
15. Circle the object with the greatest number of edges.

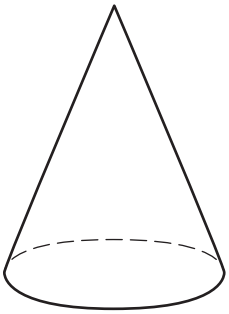




16. Here are three shapes.







A. Circle the cylinder.

B. What is one flat shape needed to make a cylinder?

_____

C. How many of those flat shapes were used?

_____

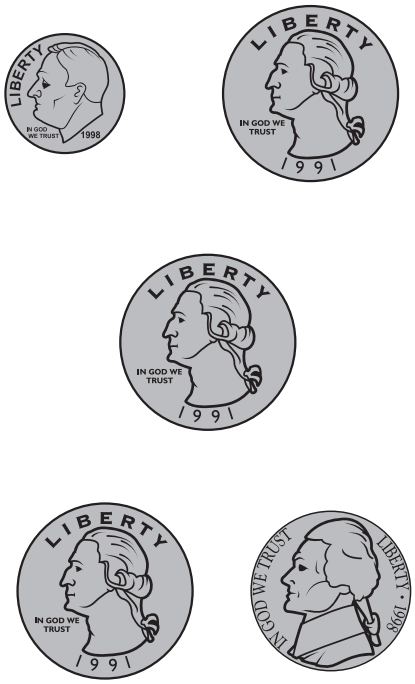
17. The coins show how much Sam earns doing his chores each week.

Using the cent sign (¢), write the amount of money he earned.

_____

Go to the next page

18. Alana found these coins in her pocket.



How much money did Alana find?

_____ ¢

Go to the next page

19. Lisa found these coins in her pocket.

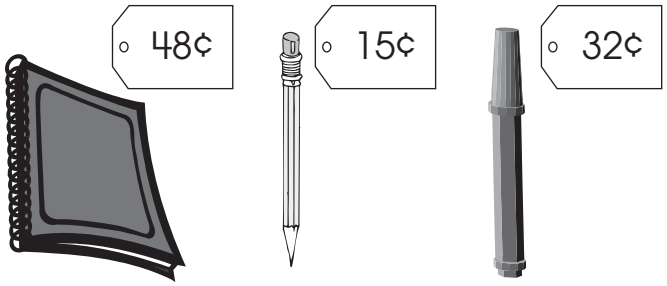
How much money did Lisa find?

Using the cent sign (¢), write the amount of money Lisa found.

_____

Go to the next page

20. Mary bought two of these three objects. She spent 47 cents.



A. Which two objects did she buy?

_____ and _____

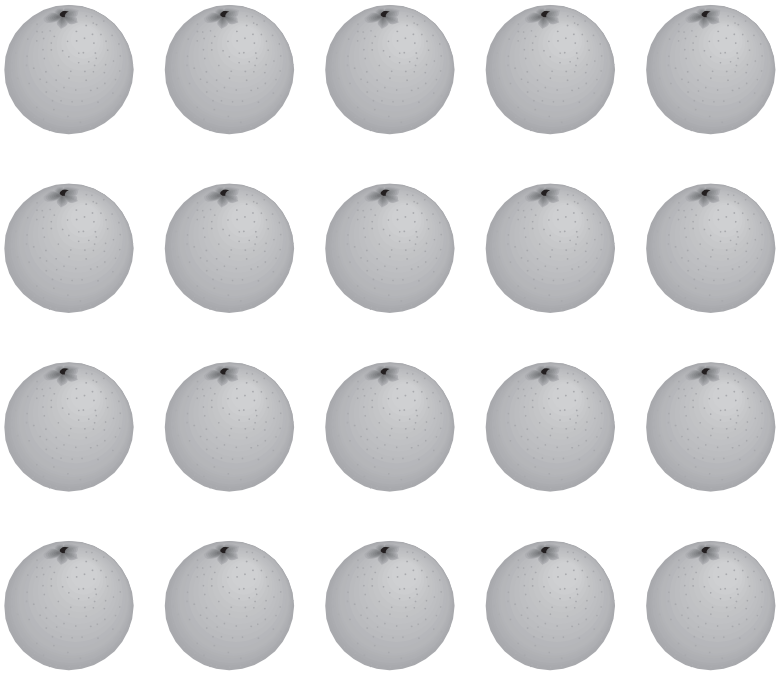
She gave 90 cents to the salesperson.

B. Write an equation that shows how to find the amount of change.

_____

C. Her change was _____.

21. Mrs. Jones has these oranges.



Use the rectangular array to write an equation that shows the number of oranges that Mrs. Jones has.

_____

22. Brian has 60 marbles. He gave some to his friend and now has 25 marbles left.

Write an equation with a symbol for the unknown number to represent this problem.

_____

Use pictures, numbers, or words to show how many marbles Brian gave his friend.

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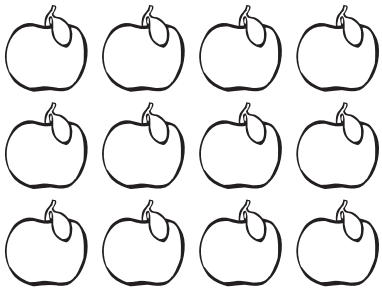
23. Molly picked the apples shown.



Part A. How many apples did Molly pick? _____

Part B. Circle the word that describes the number of apples she picked.

Odd Even

Part C. Molly wants to put an equal number of apples into each of two baskets.

How many apples should she put in each basket?

_____

Part D. Show how to find the number of apples in each basket with an equation.

24. Measure this paintbrush in inches.

The paintbrush is _____ inches long.

25. Here is a paintbrush.

Kara will measure this paintbrush in centimeters and in inches.

Would the number of centimeters be more or less than the number of inches?

A. Circle your answer.

More Less

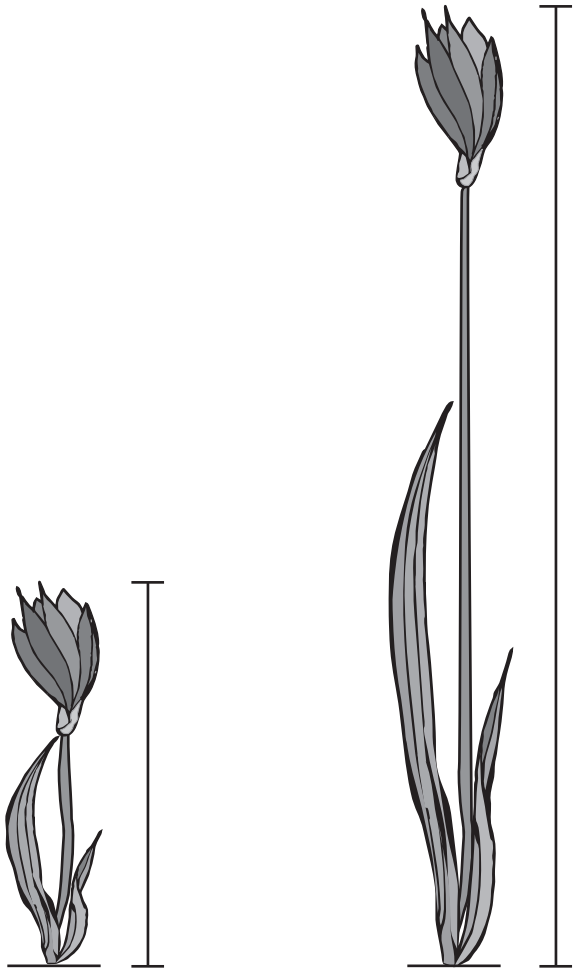
B. Explain how you know.

_____

_____

_____

26. Jen and Kim grew these two flowers.



Jen's Flower **Kim's Flower**

In inches, how much taller is Kim's flower? _____

Show or explain how you found your answers.

_____

_____

_____

Go to the next page

27. Draw a shape with five sides and five angles.

Write the name of your shape:

_____

Go to the next page

28. Draw the shape that has three equal sides and three angles.

Write the name of your shape: _____

Go to the next page

29. Draw a shape with four sides.

Write the name of your shape: _____