Kindergarten End-of-Year Test

This test is fairly long, so feel free to have your child or student to do it in more than one sitting. Use your judgment. The test is to be used as a diagnostic test. Thus, you may even skip those areas and concepts that you already know for sure your student has mastered.

The test does not cover every single concept that is typically included in kindergarten math, but it does cover the most important concepts and ideas. It evaluates the child's ability in the following content areas:

- counting items within 0-20, and knowing the counting sequence up to 100
- writing numbers up to 20
- comparing numbers within 0-10
- decomposing numbers within 11-19 into ten ones and some additional ones
- decomposing a number within 0-10 in several different ways
- concept of addition
- adding more to a given number in order to have 10 in total
- concept of subtraction
- basic shapes
- basic position words (under, behind, beside/next to, above, in front, etc.)

In order to start with *Math Mammoth Grade 1*, I recommend that the child gain a minimum score of 80% on this test, and that the teacher or parent review with him any content areas that are found weak. Children scoring between 70 and 80% may also go to grade 1, depending on the types of errors (careless errors or not remembering, vs. lack of understanding).

Please note that the concept of decomposing numbers within 11-19 is the least crucial aspect of this test, as it will be covered in grade 1. However, being able to *count* objects within that range is necessary before starting grade 1.

Instructions to the teacher:

Read each question to the child. The child is not required to write any words (e.g. questions 22-23, 25-28). Some questions can be done totally orally and are noted as such. Overall, the child should write the numbers in all the questions that require such unless the child has a learning disability. In such cases, use your judgment.

My suggestion for grading is below. The total is 147 points. A score of 117 points is 80%. A score of 103 points is 70%.

Question	Max. points	Student score
Counting and Writing Numbers		
1	6 points	
2	6 points	
3	4 points	
4	4 points	
	subtotal	/ 20
Comparing		
5	4 points	
6	3 points	
7	3 points	
8	6 points	
	subtotal	/ 16
Teen Numbers		
9	8 points	
10	8 points	
	subtotal	/ 16
Decomposing Numbers		
11	6 points	
12	6 points	
13	6 points	
	subtotal	/ 18

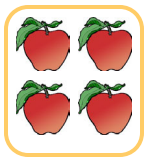
Question	Max. points	Student score
Addition		
14	6 points	
15	4 points	
16	6 points	
17	4 points	
	subtotal	/ 20
Add and Subtract		
18	6 points	
19	4 points	
20	6 points	
21	12 points	
22	6 points	
	subtotal	/ 34
Shapes and Positions		
23	8 points	
24	3 points	
25	the same: color (or being 2-D) 1 point	
	different: how many corners (or sides) 1 point	
26	3 points	
27	3 points	
28	4 points	
	subtotal	/ 23
TOTAL		**/ 147**

Kindergarten End-of-Year Test

Counting and Writing Numbers

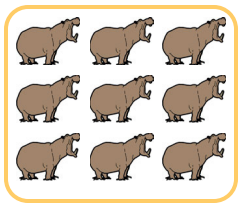
1. **To the teacher:** This exercise is to be done orally.
   a. Ask the student to count from 40 to 60. **b.** Ask the student to count from 87 to 100.
   c. Ask the student to count from 10 to 100 by tens.

2. Count and write the number.

a.  _____

b.  _____

c. _____

d.  _____

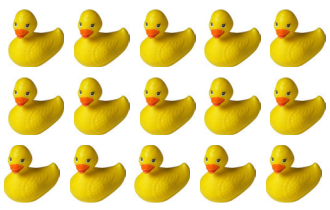
e.  _____

f. _____

3. Count and write the number.

a. _____

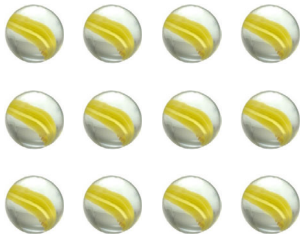
b. _____



c. _____

d. _____

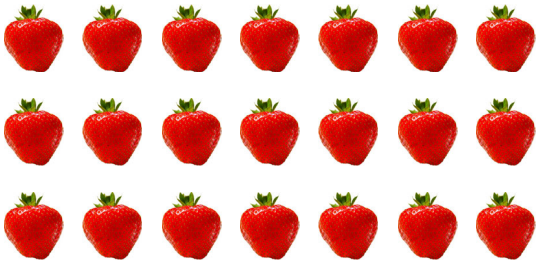
4. Group (draw a large circle around) the given number of items.



a. Make a group of eleven marbles.

b. Make a group of sixteen chicks.

c. Make a group of seventeen stars.

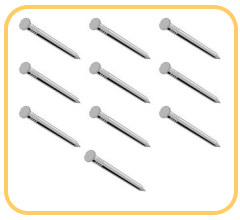


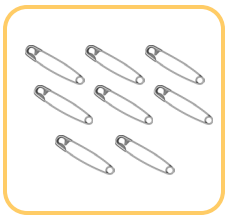
d. Make a group of nineteen strawberries.

Comparing

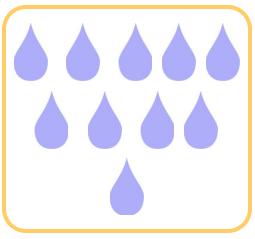
5. Circle the group that has MORE things. Circle both if they have the same number of things.

a.



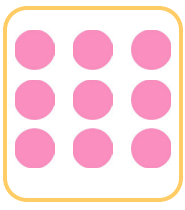


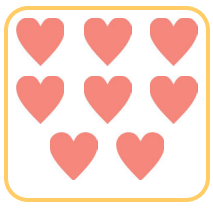
b.



c.

d.





6. Circle the bigger number.

a. 9 7	**b.** 8 10	**c.** 5 4

7. Circle the smaller number.

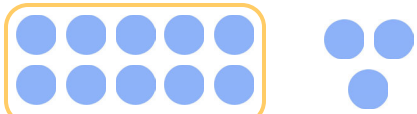
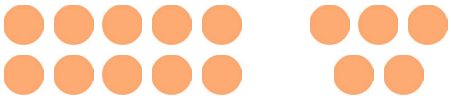
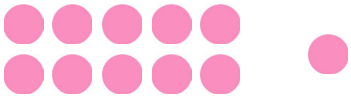
a. 1 4	**b.** 5 6	**c.** 9 8

8. Write the number that is 1 more.

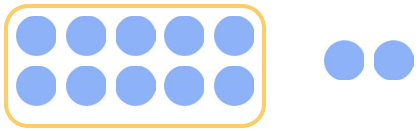
a. 8 _____	**b.** 6 _____	**c.** 3 _____
d. 12 _____	**e.** 16 _____	**f.** 19 _____

Teen Numbers

9. Each illustration has between 11 and 19 objects. Circle the ten objects. Then count the ones that are not in the ten-group. Lastly, write the total as a sum of "10 + some number".

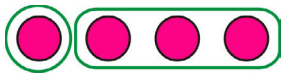
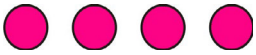
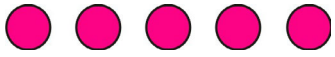
 **a.** 10 + 3 13	 **b.** 10 + _____ _____
 **c.** _____ + _____ _____	 **d.** _____ + _____ _____

10. Write each number as a sum of 10 and some other number. Draw dots to illustrate the equation: draw a group of 10 dots, and some more dots.

 **a.** 12 = _____ + _____	**b.** 17 = _____ + _____
c. 14 = _____ + _____	**d.** 19 = _____ + _____

Decomposing Numbers

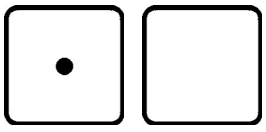
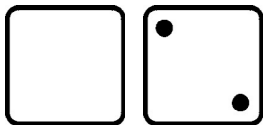
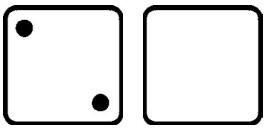
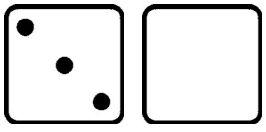
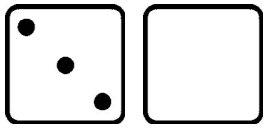
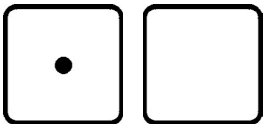
11. Make two groups. Write how many are in the second group.

a. 4  1 and 3	**b.** 4  2 and _____	**c.** 5  4 and _____
d. 5  1 and _____	**e.** 5  3 and _____	**f.** 5  0 and _____

12. Decompose 6 and 8 into pairs in different ways. First, draw as many dots as the number shows. Then divide them into two groups, in different ways. Lastly write how many are in each group.

a. 6 _____ and _____	**b.** 6 _____ and _____	**c.** 6 _____ and _____
d. 8 _____ and _____	**e.** 8 _____ and _____	**f.** 8 _____ and _____

13. The number at the top is the total. Draw the missing dots on the face of the blank dice. Write on the lines how many dots are on the face of each dice.

a. 3  _____ and _____	**b.** 6  _____ and _____	**c.** 5  _____ and _____
d. 4  _____ and _____	**e.** 6  _____ and _____	**f.** 5  _____ and _____

Addition

14. Write the number of things in each group. Add. Read the addition sentences aloud using “plus” and “equals”.

a. 

1 + 3 = ☐

b. 

_____ + _____ = ☐

c. 

_____ + _____ = ☐

d. 

_____ + _____ = ☐

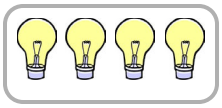
e. 

_____ + _____ = ☐

f. 

_____ + _____ = ☐

15. Add with zero.

a. 

_____ + _____ = _____

b. 

_____ + _____ = _____

c. 

_____ + _____ = _____

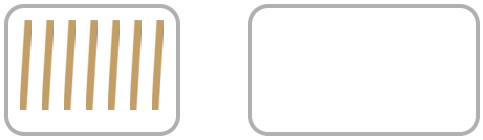
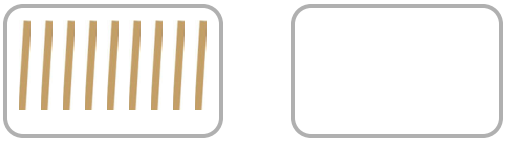
d. ☐ ☐

_____ + _____ = _____

16. Add. You can draw sticks, circles, or other pictures to help you.

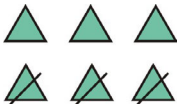
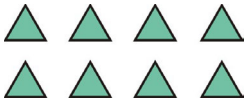
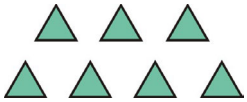
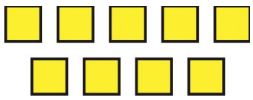
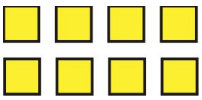
a. 4 + 3 = _____	**b.** 5 + 5 = _____	**c.** 7 + 1 = _____
d. 9 + 0 = _____	**e.** 3 + 6 = _____	**f.** 3 + 4 = _____

17. Draw another group of sticks so that you will get 10 in total. Write the numbers in each group.

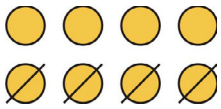
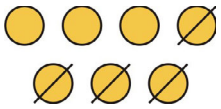
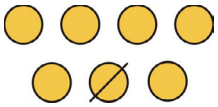
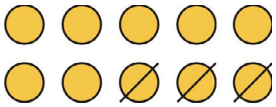
a.  _____ and _____	**b.**  _____ and _____
c.  _____ and _____	**d.**  _____ and _____

Add and Subtract

18. Cross out objects. How many are left?

 **a.** 6 – 3 = 3	 **b.** 8 – 6 = _____	 **c.** 7 – 3 = _____
 **d.** 9 – 3 = _____	 **e.** 8 – 4 = _____	 **f.** 5 – 5 = _____

19. Write a subtraction sentence to match each picture.

 **a.** _____ – _____ = _____	 **b.** _____ – _____ = _____
 **c.** _____ – _____ = _____	 **d.** _____ – _____ = _____

20. Subtract. You can draw sticks or circles to to help you.

a. 8 – 3 = _____	**b.** 5 – 1 = _____	**c.** 10 – 7 = _____
d. 7 – 2 = _____	**e.** 6 – 3 = _____	**f.** 9 – 7 = _____

21. Add and subtract.

a. 4 + 1 = _____ 2 + 2 = _____	**b.** 4 + 1 = _____ 1 + 1 = _____	**c.** 3 + 1 = _____ 0 + 5 = _____
d. 2 – 2 = _____ 5 – 3 = _____	**e.** 3 – 2 = _____ 4 – 3 = _____	**f.** 4 – 0 = _____ 3 – 1 = _____

22. Solve. You can draw something to help you, or act it out. (Can be done orally.)

a. Henry saw 3 cookies on one plate and 5 cookies on another. How many cookies in total did Henry see?

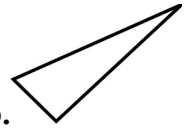
b. There were nine birds in a tree. Then two of them flew away. How many birds are still in the tree?

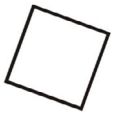
c. Lily drew five bunnies sleeping. Then she drew two more. How many bunnies did Lily draw in all?

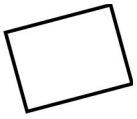
Shapes and Positions

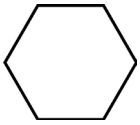
23. Name each shape. (To be done orally.)

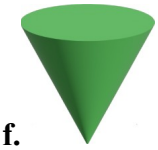
a. 

b. 

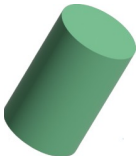
c. 

d. 

e. 

f. 

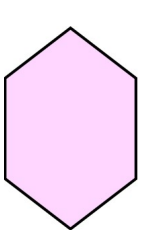
g. 

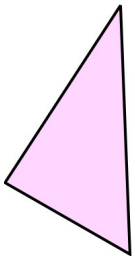
h. 

24. Draw here a triangle, circle, and rectangle. (An approximate sketch is sufficient.)

a. Draw a triangle.	b. Draw a circle.	c. Draw a rectangle.

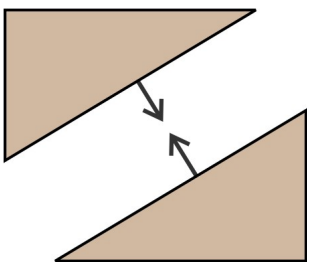
25. What is the same and what is different about these two shapes?
(To be done orally.)



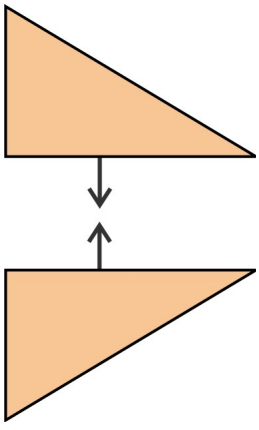


26. If you put together these shapes, what new shape will you get?
(To be done orally, you may cut out the shapes.)

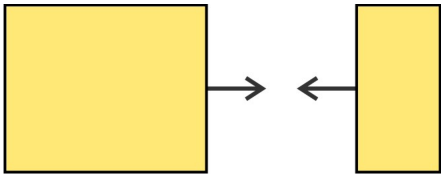
a.



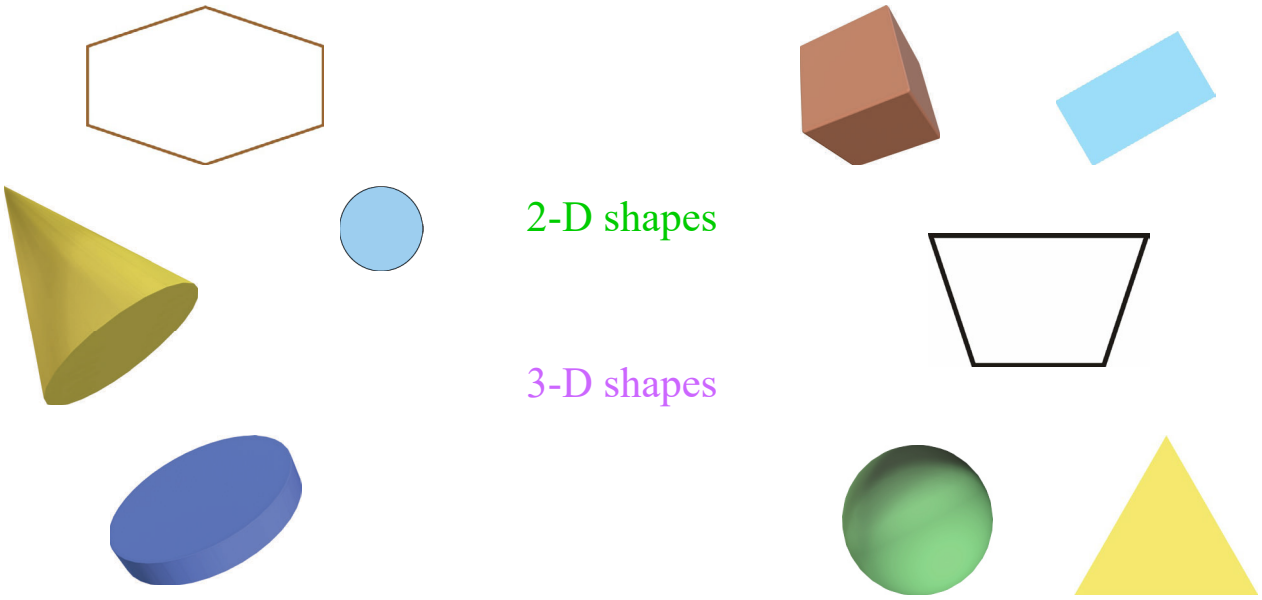
b.



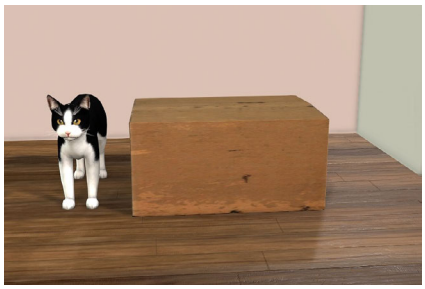
c.



27. Are the shapes flat/two-dimensional (2-D) or solids/three-dimensional (3-D)?
(Can be done orally, or the child can draw a line from each shape to the correct answer.)



28. Where is the cat? Describe the relative positions of objects. (To be done orally.)

a.  The cat is _____ the box.	**b.**  The cat is _____ the box.
c.  The table is _____ the sofa.	**d.**  The ball is _____ the table.