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Student Name: \_\_\_\_\_

Teacher: \_\_\_\_\_ Date: \_\_\_\_\_

District: Miami-Dade County Public Schools

Assessment: 08 Mathematics Mathematics Benchmark 3

Description: MAFS.8.EE.1.4 PRACTICE

Form: 201

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1. Which expression is equivalent to  $(5.4 \times 10^{10})(3.3 \times 10^{21})$ ?

- A.  $8.7 \times 10^{31}$
- B.  $8.7 \times 10^{210}$
- C.  $1.782 \times 10^{32}$
- D.  $1.782 \times 10^{211}$

2. What is the total weight, in pounds, of 100 sharks that each weighs  $5.015 \times 10^3$  pounds?

- A.  $5.015 \times 10^2$
- B.  $5.015 \times 10^4$
- C.  $5.015 \times 10^5$
- D.  $5.015 \times 10^6$

3. The approximate mass of a hydrogen atom is  $1.7 \times 10^{-24}$  grams. The mass of a single lead atom is approximately  $3.4 \times 10^{-22}$  grams. How many times heavier is a lead atom than a hydrogen atom?

- A. 5 times heavier
- B. 20 times heavier
- C. 50 times heavier
- D. 200 times heavier

4. Tyler's math class found that it would take  $2.5 \times 10^8$  dollar bills to cover a square mile area. The surface area of the United States is about  $3.8 \times 10^6$  square miles. About how many dollar bills are needed to cover the United States?

- A.  $6.3 \times 10^{14}$
- B.  $9.5 \times 10^{14}$
- C.  $6.3 \times 10^{48}$
- D.  $9.5 \times 10^{48}$

5. A spaceship traveled at a speed of 5,000 miles per hour for 30,000 hours. How many miles, written in scientific notation, did this spaceship travel?

- A.  $15 \times 10^1$
- B.  $15 \times 10^7$
- C.  $1.5 \times 10^8$
- D.  $1.5 \times 10^{12}$