**Unit 1: Expressions and Exponents**

**Learning Target 5: Scientific Notation**

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 **The areas of the world’s oceans are listed in the table. Order the oceans according to their area from least to greatest.**



Rewrite each of the areas to the same power of 10. Then compare the areas.

|  |  |
| --- | --- |
| **Ocean** | **Area (mi2)** |
| Atlantic | 29.6 × 106 |
| Arctic | 5.43 × 106 |
| Indian | 26.5 × 106 |
| Pacific | 60.0 × 106 |
| Southern | 7.85 × 106 |

 Since 5.43 < 7.85 < 26.5 < 29.6 < 60.0, the oceans in order from least to greatest area are Arctic, Southern, Indian, Atlantic, and Pacific.



 **Fill in the with <, >, or = to make 6.25 × 103 6.3 × 103 a true statement.**

Rewrite each of the numbers in standard form to compare them.

6.25 × 103 = 6,250 Move the decimal point 3 places to the right.

6.3 × 103 = 6,300 Move the decimal point 3 places to the right.

Since 6, 250 < 6, 300, 6.25 × 103 < 6.3 × 103.