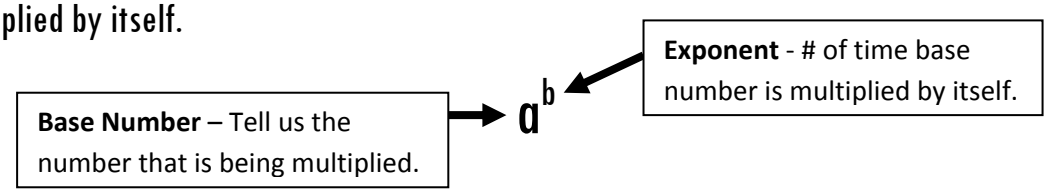
Converting Between Expanded Form and Exponents Guided Lesson Explanation

Method for solving 1 and 2:

Exponential form tells us a base number and the exponent tells us how many times it is multiplied by itself.



1) **Base Number** – 8 will be multiplied. → 8^5 ← **Exponent** – Base (8) multiplied by itself 5 times.

Putting it all together: 8 x 8 x 8 x 8 x 8

2) **Base Number** – 4 will be multiplied. → 4^6 ← **Exponent** – Base (4) multiplied by itself 6 times.

Putting it all together: 4 x 4 x 4 x 4 x 4 x 4

Method for solving 3 and 4:

Expanded can be converted to exponential form by identifying the base number (number being multiplied by itself) and the number of times the base number is multiplied by itself.

3) 6 x 6 x 6 x 6 Base number = 6 Exponent = 4 (Multiplied by itself 4 times)

Putting it all together: 6^4

4) 9 x 9 x9 Base number = 9 Exponent = 3 (Multiplied by itself 3 times)

Putting it all together: 9^3