Multiplication is just grouping of objects:

\[ 3(4) = 3 + 3 + 3 + 3 \]
\[ = 4 + 4 + 4 \]
\[ = 12 \]

"Three times four"
"Four times three"

Exponents are the same thing. Instead of addition, it's multiplication:

\[ 3^4 = (3 \cdot 3 \cdot 3 \cdot 3) \]
\[ = 81 \]

\[ -3^2 = -3 \cdot -3 \]
\[ (-3)^2 = (-3)(-3) \]
\[ = 9 \]

\[ -(-3)^2 = -(-3)(-3) \]
\[ = -9 \]

\[ -3^4 = -(3)(3) \]
\[ = -81 \]

\[ -(3)^2 = -(3)(3) \]
\[ = -9 \]
The parts of an exponent (any number, variable or math "thing", actually).

1) \( 2^5 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 = 32 \)

2) \( (6.5)^2 = (6.5)(6.5) = 42.25 \)

3) \( \left(\frac{4}{3}\right)^3 = \left(\frac{4}{3}\right)\left(\frac{4}{3}\right)\left(\frac{4}{3}\right) = \frac{4 \cdot 4 \cdot 4}{3 \cdot 3 \cdot 3} = \frac{64}{27} \)

\[ = 2 \frac{10}{27} \]

4) \( \frac{4}{3} = \frac{4(4)}{3(3)} = \frac{16}{9} = 5 \frac{1}{3} \)

5) \( \frac{4^3}{3^3} = \frac{4(4)(4)}{3(3)(3)} = \frac{16}{27} \)