Name _____

1. Convert 1.57×10^{5} kL to mL.

2. Convert 1.57×10^{11} cm^3 to km^3.

3. Convert 1.57×10^{5} kL to km^3.

4. What do you notice about questions 1 & 2 versus question 3?

5. Convert 1.57×10^{-4} km^3 to kL.

1. Convert 1.57×10^5 kL to mL.

> (3 + 3) x 1 + 5 = 11
>
> 1.57×10^{11} mL

2. Convert 1.57×10^{11} cm^3 to km^3.

> **(-2 - 3) x 3 + 11 = -4**
>
> **1.57×10^{-4} km^3**

3. Convert 1.57×10^5 kL to km^3.

> **1.57×10^{-4} km^3**

4. What do you notice about questions 1 & 2 versus question 3?

> Question 3 is a liters-to-cubic-meters question.
>
> Question 1 and 2 just break that question up into 2 easier-to-solve steps.

5. Convert 1.57×10^{-4} km^3 to kL.

> First km3 to cm3: (3 + 2) x 3 -4 = 11
>
> Then mL to kL: 14 + (-3 - 3) = 5.
>
> 1.57×10^5 kL
>
> **Notice how you just reversed Question 3.**