what is the mass, in grams, of 150mL of liquid with a density of 1.4g/mL ?

The mass density or density of a material is its mass per unit volume. Using this definition mass can be calculated as follows:

$$\rho = \frac{m}{V} \Rightarrow m = \rho * V;$$

$$m = 1.4 \frac{g}{mL} * 150 \frac{mL}{1} = 210g$$

**Answer: m=210g**