

$$\frac{1 \text{ carat}}{1} \times \frac{0.2 \text{ grams}}{1 \text{ carat}} \times \frac{1 \text{ mol C}}{12 \text{ grams}}$$

$$\frac{6.02 \times 10^{23} \text{ atoms}}{1 \text{ mol C}} = 1 \times 10^{22} \text{ atoms of Carbon}$$