

15.)  $^{14}\text{C}$  70%  $T_{1/2} = 5730 \text{ ev}$   $t = ?$

$$\downarrow$$
$$\frac{A}{A_0} = 0,7$$

$$\lambda = \frac{\ln 2}{T_{1/2}}$$

$$A = A_0 e^{-\lambda t}$$

$$\lambda = \frac{\ln 2}{T_{1/2}} = \dots$$

$$\frac{A}{A_0} = e^{-\lambda t}$$

$$\ln\left(\frac{A}{A_0}\right) = -\lambda t$$

$$t = -\frac{\ln\left(\frac{A}{A_0}\right)}{\lambda} = \dots$$