CHAPTER 2 : POISSON DISTRIBUTION

* If $X \sim Po(\lambda)$ then $P(X=x) = \frac{e^{-\lambda}\lambda^{x}}{x!}$ where λ is the rate.

* Conditions: ① Events occur independently
② Events occur singly in space or time
③ Events occur at a constant rate

* $E(X) = \lambda$
* $Var(X) = \lambda$

} Hence if for some data collected the mean and variance are close, this is a good indicator for Poisson being a suitable model

* For $P(X \leq x)$ you can use the tables provided λ is a multiple of 0.5 and at most 10.

BINOMIAL OR POISSON?
For Binomial look for the words trials, proportion, fixed number
For Poisson look for the words rate, events.