1. False. A pmf is never a pdf. (And a pdf is never a pmf.)

2. True. It is the binomial distribution with $n = 1$ and p the probability of getting heads.

3. (a) n is the number of independent trials, and p is the probability of success in each trial.

   (b) The outcome space is $\{0, 1, \ldots, n\}$ because any number of successes between 0 and n is possible.

   (c) Just use the formula $f(k) = \binom{n}{k} p^k (1-p)^{n-k}$ with $n = 3, p = \frac{1}{2}$, and $k = 0, 1, 2, 3$. This gives:

k	0	1	2	3
$f(k)$	$\frac{1}{8}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{8}$