

## AP Statistics END OF THE YEAR

### PROJECT

#### Chapter 11: UNDERSTANDING RANDOMNESS (Summary)

##### Important terms to know:

Random- an event is random if we know what outcomes could happen, but not which particular values will happen.

Simulation- a simulation models random events by using random numbers to specify event outcomes with relative frequencies that correspond to the true real-world relative frequencies we are trying to model.

Simulation component- the most basic situation in which something happens at random.

Outcome- an individual result of a component of a simulation is its outcome.

Trial- the sequence of several components representing events that we are pretending will take place.

Response variable- Values of the response variable record the results of each trial with respect to what we were interested in.

To create a simulation we must:

- Identify the component to be repeated
- Explain how you will model the outcome
- Explain how you will simulate the trial
- State clearly what the response variable is
- Run several trials
- Analyze the response variable
- State your conclusion in context of the problem

You can also use a calculator to simulate trials for you! Simply go to:

MATH

PRB

randInt (

Choose the integers you would like to produce and how many time(s) you would like to produce them. (i.e (0, 9, 5) which tells the calculator to choose from 0-9-- 5 times)