C12 - 11.3 - $(outcomes\ per\ trial)^{\#\ of\ trials}\ Notes$

If you flip a coin five times what is the total number of outcomes? Draw a tree diagram to confirm.

If a test has 20 true and false questions how many answer keys are possible?

If a test has A, B, C, D, E, and F multiple-choice answers with six questions how many answer keys are possible?

If a family has 9 children what is the number of combinations of boys and girls?

If you have ten lights in your house how many combinations of on and off are there?

If a person has 5 phones and each can be on vibrate, ring or silent how many combinations are there?

If a survey has good, bad, and unsure, with 5 questions how many ways can someone fill out the survey?