While both .NET Framework and C# are developed by Microsoft Inc., C# is a modern multi-paradigm programming language, while .NET Framework is a software framework, or otherwise a reusable software platform used to develop applications and software solutions. .NET Framework includes compilers, code libraries and other tools used develop programs, including C# programs.

The Framework includes virtual execution system called the Common Language Runtime, which is the basis for creating the execution and development environment.

More specifically the relation between C# and .NET Framework is that C# programs are compiled into the intermediate language, then the intermediate language code is stored in an .exe/.dll file (executable file). The executable is called an assembly. When the user executes the program, the assembly is loaded into the Common Language Runtime. Then the Common Language Runtime has to perform the so called Just In Time compilation which converts the intermediate language to machine instructions. Then those instructions are executed by the hardware of the machine.