usage: is widely used for both testing and generating hypotheses and strongly pushing geology from observational to predictive natural science.

rule 1:numerical modeling is simple and is based on simple mathmatics

MMEE:

M:motivation

M:math

E:explanation

E:exercises

ruel 2:when numerical modeling looks complicate see rule 1

rule 3:numerical modeling consist of solving partial differential equation.(PDE)

equation of continuity

equation of motion

teperature equation

rule 4:read books on numerical methods several times

rule 5:repeat transformation of equation involved into numerical modeling

rule 6: visualizaiton

rule 7 :ask

This is the most efficient way of learning. Also, in geomodeling many small numerical know-how and ”tricks” are used which are extremely important but rarely discussed in publications