Exercise –>																				
Interpret algebraic expression of Earth process																				
recognize variables controlling a process																				
Select and applying algebraic equations																				
Manipulate (multiple) algebraic eqns																				
trigonometric calculations (sin, cos, etc.)																				
Estimate physical quantities																				
conceptualize phys. quantities (vol,dens,temp...)																				
perform back−of−envelope calculations																				
Work in scientific notation																				
conceptualize/work in orders of magnitude																				
describe potential sources of error in calculations																				
Relate quantities using diff. systems of measure																				
Perform unit conversions																				
identify the logical system of units for a problem																				
Use concepts of flux and rate to evaluate a system																				
identify sources, sinks, reservoirs, fluxes in a system																				
recognize +/− feedback, equilibrium																				
draw or use flow charts																				
find frequencies of discrete events																				
understand concept of a derivative																				
Use spreadsheets to understand processes																				
use a spreadsheet for simple math calculations																				
use a spreadsheet to graph results of analysis																				
Use plots to understand processes																				
plot dependent variable vs. independent variable																				
identify trends (linear/non, cycles, slopes, etc.)																				
calculate slopes																				
create and read plots on a logarithmic scale																				
extrapolate data																				
interpret a histogram																				
Spatial Relations																				
plot data on a map																				
measure distances and direction on a chart/map																				
conceptualize spatial scales																				
visually translate, rotate objects																				
analyze trends in 3−D																				
Identify characteristics of a generic wave																				
use wavelength, period and amp. for waves																				
recognize periodic phenomenon in space and time																				
Evaluate probabilities																				
intuitively grasp diff. between 99%, 1% & 0.01%																				
use probabilities to judge risks																				
understand prob. only specifies average behavior																				
Use simple statistics																				
calculate mean, standard deviation and median																				
interpret error estimates on data																				
identify likely "outliers"																				