EARTH SCIENCE 2020/2021 **HOMEWORK #15**

PLEASE SUBMIT YOUR WORK THROUGH GOOGLE CLASSROOM

We are going to do a <u>FACT CHECK</u> 😊**:**

A. Refer to Slide #9 of Lecture 15 and fill in the blanks below.

On average "the total amount of water in the atmosphere is sufficient to cover the surface of the planet with a layer of liquid water **approximately _____inches (_____mm)** thick". (This will be the fact we are going to check)

B. Calculate how much water that is. Hint - use VOLUME=AREA x THICKNESS formula, where AREA= The Earth's surface area ~510,000,000 km^2; note that 1km=1000m, 1mm=0.001m.

C. Refer to Slide #3 of Lecture 14 and fill in the blank below.

The total amount of water on Earth is approximately **V=_____ km^3**.

D. Refer to Slide #6 of Lecture 14 and fill in the blank below.
The percentage of Fresh Water on Earth is **X=_____%**; out of that amount, the percentage of Surface and Atmospheric Water is **Y=_____%**; out of that amount, the percentage of water in the Atmosphere alone is **Z=_____%**.

E. Using information from D, calculate the absolute percentage of water in the Atmosphere (out of all water on Earth). Hint – you should **use X * Y * Z** – can you explain why?

F. Using information from C and the percentage you got in E, calculate the total amount of atmospheric water.

G. <u>Compare results you got in B and F - are they close</u>? <u>How close</u>? So, does the fact in A seem to hold true (at least *approximately*)? Write your comments here.