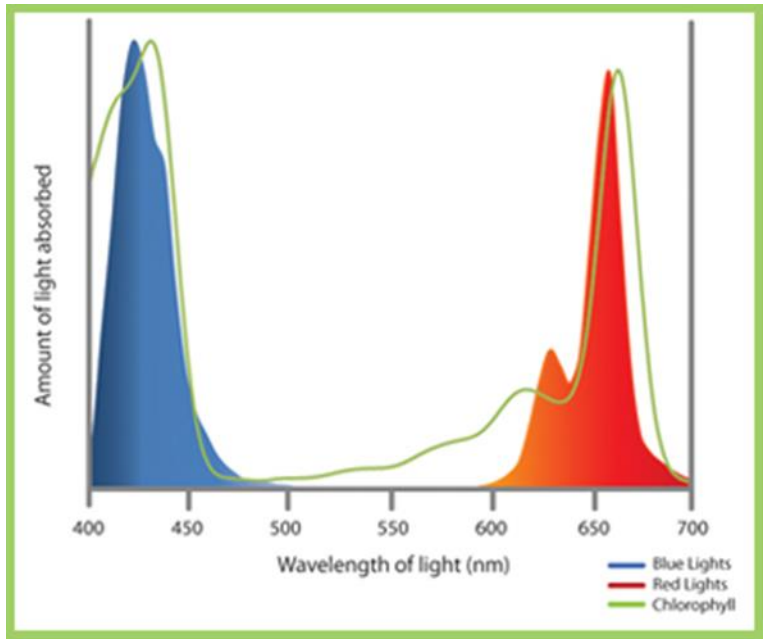
how long should I run these lights?

Jonathan Ebba

TriState IPM Seminar

2020



quality

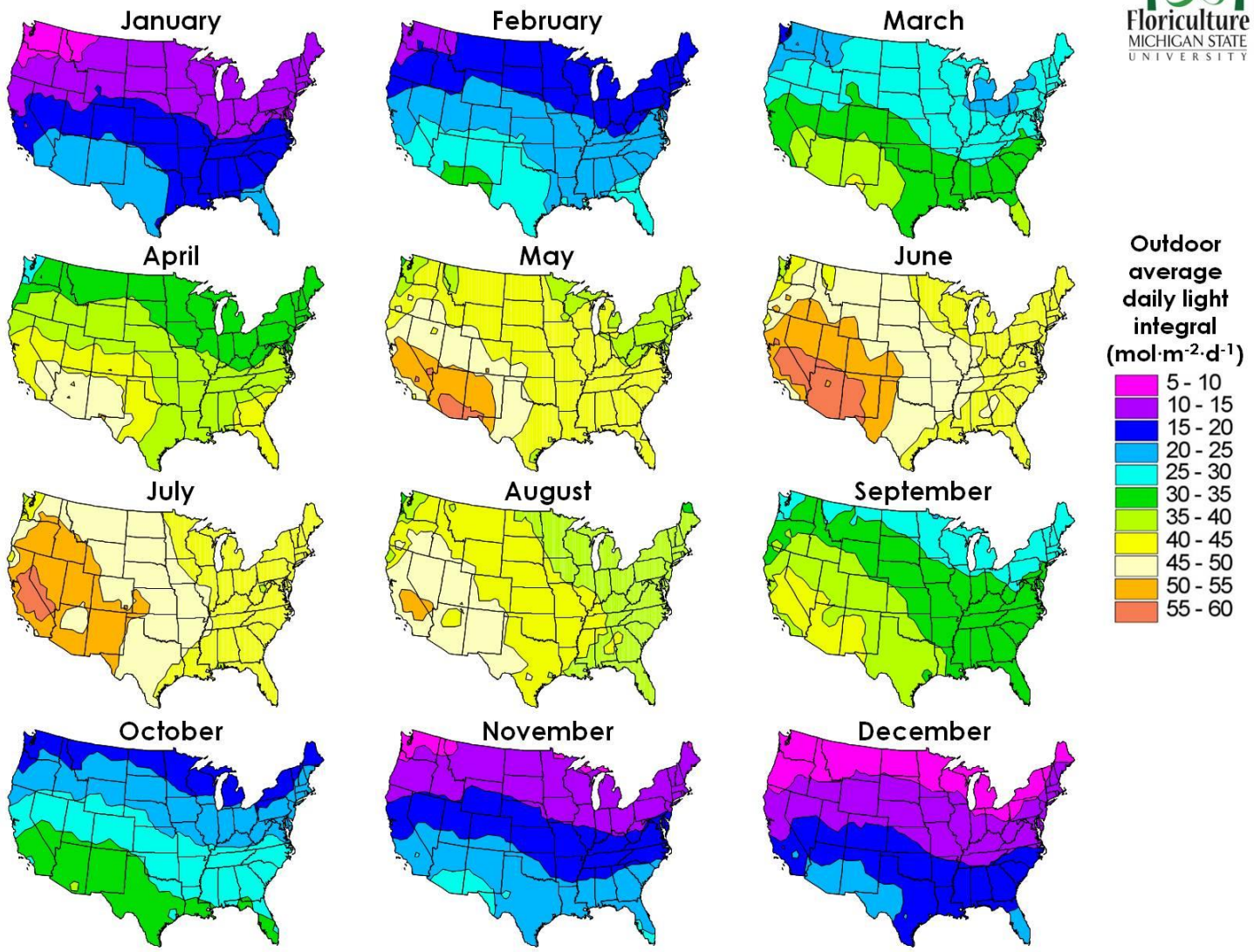
duration

intensity

accumulated

Outdoor Daily Light Integral (DLI) Maps

developed by Jim Faust, Clemson University



To estimate the DLI inside your greenhouse for a particular month:

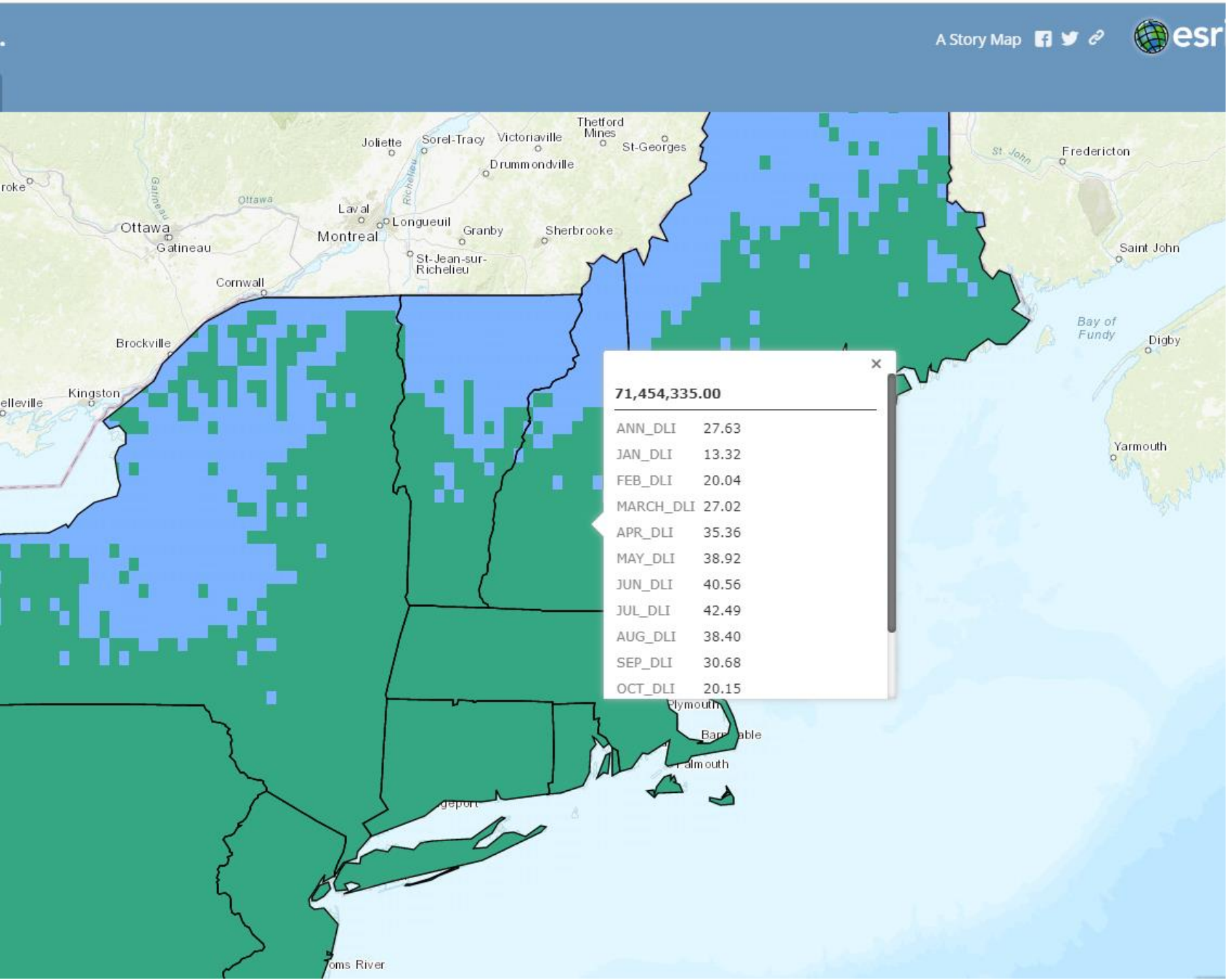
(1) Use a light sensor to determine light intensity outdoors at noon on a clear day.

(2) Go into your greenhouse and take light intensity measurements at plant level.

(3) Use these values to determine the percentage of light outdoors that reaches your crops. For example, if you measure 6,300 footcandles outside the greenhouse and an average value of 4,100 footcandles inside, your light transmission value is about 65%.

(4) Multiply the DLI value indicated in the maps above by the transmission value to obtain the average DLI inside your greenhouse. For example, if your transmission value is 65% and the DLI for your location is 20 mol·m^{-2}·d^{-1}, then your average DLI that month is 13 mol·m^{-2}·d^{-1}.

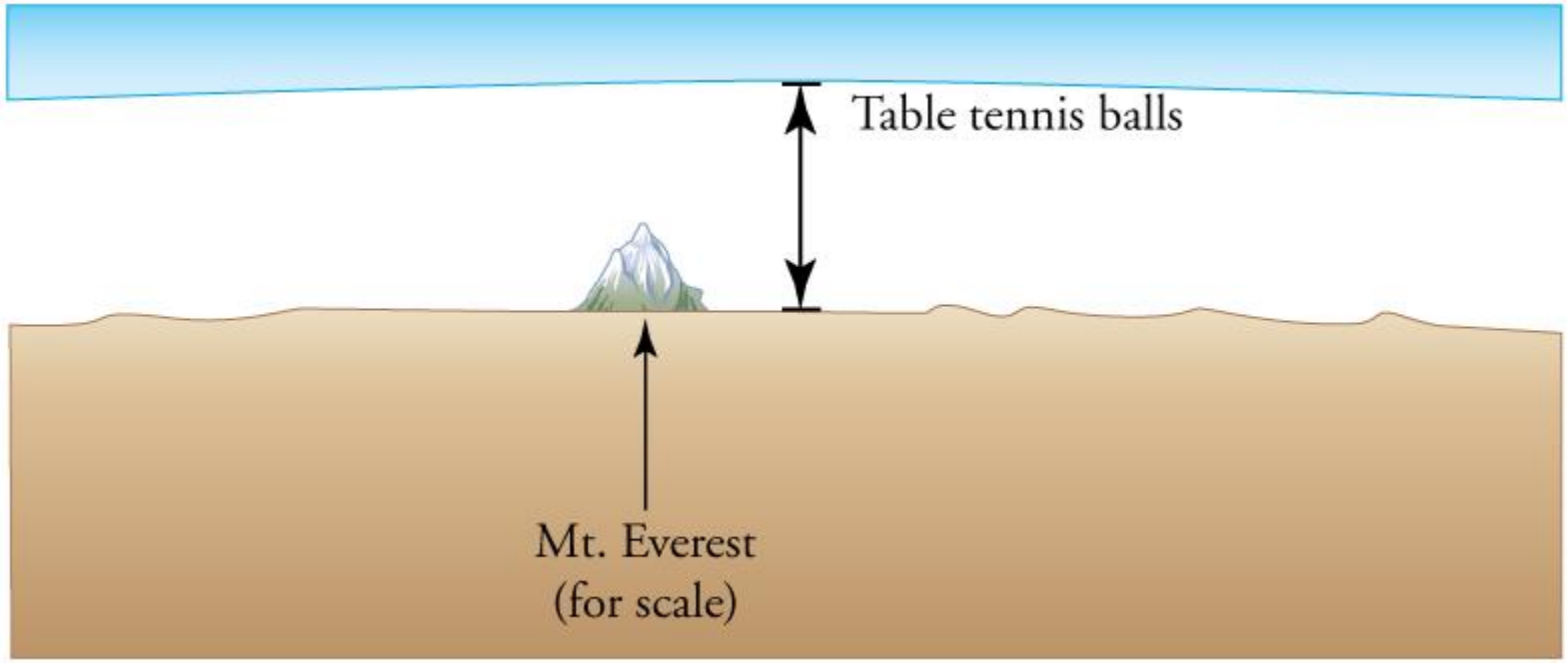
https://www.canr.msu.edu/uploads/resources/pdfs/dli-maps.jpg



https://endowment.org/dlimaps/

counting donuts…

counting light…

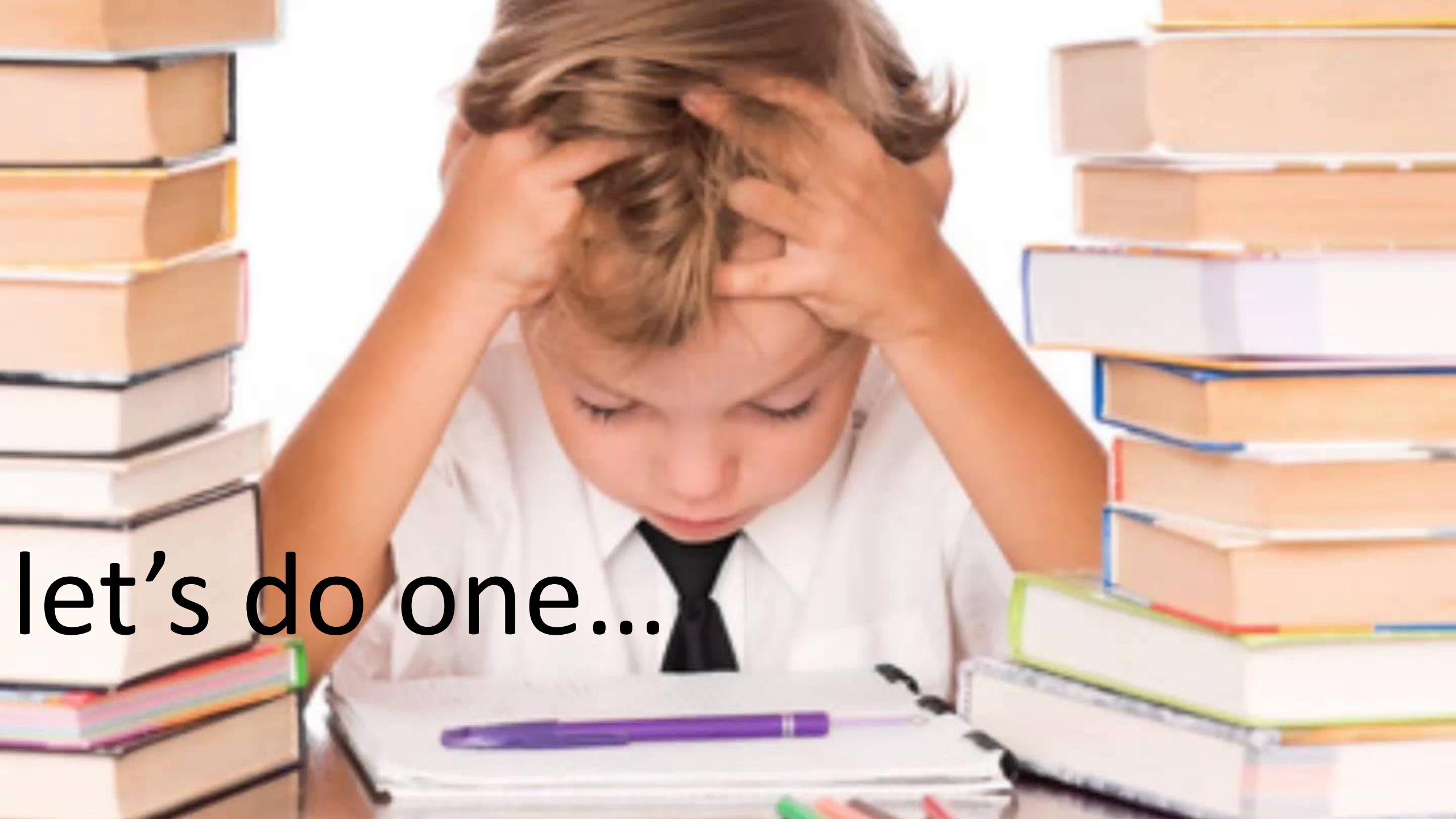


quintillions

602,200,000,000,000,000,000,000

sextillions quadrillions trillions billions millions

1 mole


let’s do one…