

MONDAY, DECEMBER 17th

DO NOW

- In your notebooks, to be checked, solve this problem...

There are about 2 pounds in 9 Newtons. These are units of weight!

Know:

$$2lb \approx 9N$$

Asked: How many Newtons are in 24 pounds?

TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!
 - Today's **QP** = QP BOOK REVIEW = Using pg. 50-67 LIST 5 things you already know about Chemistry (The study of Matter!) and then DRAW the Atoms in a Solid, Liquid, and a Gas!
2. Open books, **WORK** on today's **AO**!
3. ***HW** = Finish Volab Vocab Terms!

TODAY'S ACADEMIC OBJECTIVE

Today you will **UNWRAP** the structure of our world by **DECIPHERING** the composition of **MATTER**!

TUESDAY, DECEMBER 18th

DO NOW

Know: Heterogeneous Mixtures are made of two or more substances that can be separated by physical means.

Asked: Which of the following best describes a Heterogeneous Mixture?

A: A cup of sugar water

B: A mug of coffee

C: A bowl of cereal and milk

TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!
 - Today's **QP** = SKETCH how much larger you think the Earth is compared to an Atom and then, using Pg. 157 & R14 of your book, DRAW the PLANETS around the SUN and what an Atom is made of!
2. Open books, **WORK** on today's **AO**!
3. ***HW** = Read & Do Pg. 156-159!

TODAY'S ACADEMIC OBJECTIVE

Today you will **VISUALIZE** the relative sizes of **MATTER** in order to **COMPREHEND** our place in the universe!

WEDNESDAY, DECEMBER 19th

DO NOW

Know: Physical Properties can be observed without changing a substance, but Chemical Properties can only be observed by causing the substance to undergo a reaction.

Asked: Which statement refers to a Physical Property of a substance?

A: Carbon combines with Oxygen to form Carbon Dioxide

B: Acids are corrosive

C: Copper melts at 1,085°C and its Density is 8.9g/cm³

TODAY'S PLAN

1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!

▪ Today's **QP** = QP BOOK REVIEW = Using your book, SKETCH at least 5 different types of ENERGY and then ANSWER the following; What is Energy and What is Temperature!

2. Open books, **WORK** on today's **AO**!

3. ***HW** = Read & Complete Pg. 160-161!

TODAY'S ACADEMIC OBJECTIVE

Today you will **REVIEW** the basics of Matter and Energy in order to **PREPARE** yourselves to learn about **CHEMISTRY**!

THURSDAY, DECEMBER 20th

DO NOW

- In your notebooks, to be checked, solve this problem...

There are 10 Ångströms in 1 nanometer. These are units of Atomic Length!

Know:

$$10\text{Å} = 1\text{nm}$$

Asked: How many Ångströms are in 80 nanometers?

TODAY'S PLAN

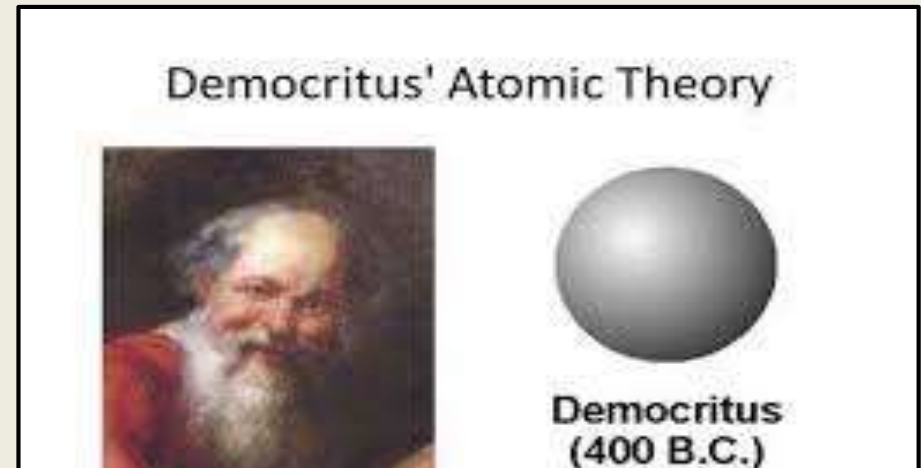
1. Do and review the **DO NOW** and **Qualitative Prompt (QP)**!
 - Today's **QP** = LABEL and DRAW 3 things EVERYONE has in common and then LIST 3 things EVERYTHING (aka Matter!) has in common!
2. Open books, **WORK** on today's **AO!**
3. ***HW** = Read & Do Pg. 162-163 + Finish HW Problems & Questions!

TODAY'S ACADEMIC OBJECTIVE


Today you will **MODEL** the development of Atomic Theory by **UTILIZING** scientific reasoning skills to **INFER** general conclusions!

Atomic Theory– Jot This Down!

- The current accepted MODEL of an Atom took many years to develop!
 - 400-300 BC = DEMOCRITUS created the first Atomic Model, modeling Atoms as SOLID SPHERES and also naming them!
 - 1808 = JOHN DALTON expanded on these ideas, also viewing Atoms as tiny, solid spheres, while creating the first 4 parts of “Atomic Theory”!



Dalton's Atomic Theory - Summary




John Dalton, F.R.S.

1. matter is composed of indivisible particles (atoms)
2. all atoms of a particular element are identical
3. different elements have different atoms
4. atoms combine in certain whole-number ratios

Dalton's Model

- Solid Sphere Model or Bowling Ball Model
- Proposed by John Dalton



This complex block features a portrait of John Dalton at the top left, followed by a list of four points summarizing his atomic theory. Below the list, it is labeled 'Dalton's Model' and includes two bullet points: 'Solid Sphere Model or Bowling Ball Model' and 'Proposed by John Dalton'. A solid blue sphere is shown at the bottom left of this section.