PURPOSE: WHAT'S THE DIFFERENCE BETWEEN PHYSICAL and CHEMICAL?

#1 CHANGES

(A) IN PHYSICAL CHANGES THE SUBSTANCE HAS THE SAME PROPERTIES BEFORE AND AFTER

(B) IN CHEMICAL CHANGES A NEW SUBSTANCE IS PRODUCED WITH NEW PROPERTIES.

Example: MELTING AN ICE CUBE IS PHYSICAL

TODAY

1) NOTES
2) FRY AN EGG
3) CHECK HOMEWORK
4) DESTROY WOOD TO MAKE CHARCOAL [BE SAFE!]

Method to make charcoal

1) Put wood in a test tube.
2) Heat it like crazy in the absence of air.

E.H.S. CHEMISTRY
MR. GENEST

TEST 1

Name:
Date: September 22, 2016
Your Period:

IS
A
MELTING
ICE
CUBE

PHYSICAL
OR
CHEMICAL?

Answer: Physical

Predict — Phys Chem → definition — wood splints Goggles / air / fire → post # substances

substance or mixture?

E.H.S. CH#M!S+ry

Mr. Genest

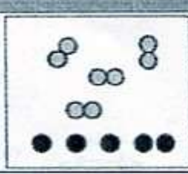
Name ANSWERS

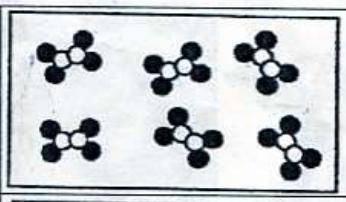
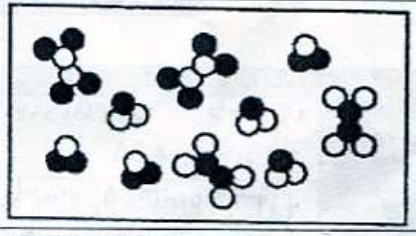
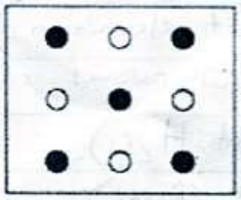
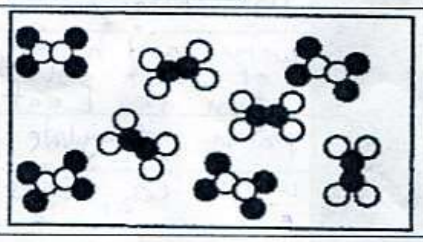
Date

Tutors! Adults! Help this young chemist by visiting http:genest.weebly.com with any smart phone

We think this stuff is	Name of stuff	If you said it's a mix, what's it a mix of?
□ a substance ☑ a mix of substances	a hot serving of Cinnamon-Raisin Oatmeal	• oats • raisin • cinnamon
□ a substance ☒ a mix of substances	Plain hot oatmeal	fat, protein, carb
☒ a substance □ a mix of substances	a sheet of aluminum foil	(just aluminum)
□ a substance ☒ a mix of substances	Snickers®	peanuts, caramel, chocolate, et al
☒ a substance □ a mix of substances	steam	(just H_2O)
☒ a substance □ a mix of substances	an iron frying pan	(Just IRON)
□ a substance ☒ a mix of substances	hot tea (after you take the tea bag out)	water and hundreds of plant substances from tea Leaf
□ a substance ☑ a mix of substances	an apple	protein, carbohydrate
□ a substance ☒ a mix of substances	Pepsi®	water, CO_2, sugar, etc.
□ a substance ☒ a mix of substances	water with sugar dissolved in it	water Sugar
□ a substance □ a mix of substances	very smooth peanut butter	fat, protein, carbohydrates

ANSWERS MAY VARY. IF YOUR COLUMN MAKES SENSE, YOU CAN HAVE VARYING COLUMN ANSWERS

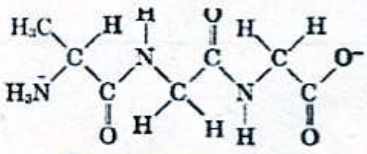
We think this stuff is	Picture of stuff	If you said it's a mix, what's it a mix of? (draw one of each type of particle)
□ a substance ☒ a mix of substances		8 and ●

☒ a substance ☐ a mix of substances		
☐ a substance ☒ a mix of substances		AND ETC.
☐ a substance ☒ a mix of substances		
☐ a substance ☒ a mix of substances		AND (they are as different as Cookies Oreos + Oreos with Double Stuff)

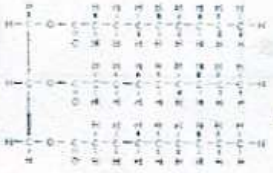
Using notes from last week, calculate the Calories that are in a piece of food that contains 4 grams of fat, 5 grams of protein and 6 grams of carbohydrate.

Fat $4 \times (9) = 36$
Protein $5 \times (5) = 25$
carb $6 \times (5) = 30$
91 Calories

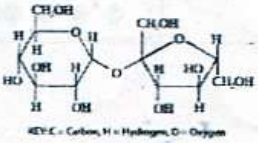
Under each write either carbohydrate, fat, or protein:



PROTEIN



FAT



CARB