

**CW# 8~
THE NUTS & BOLTS
OF CHEMISTRY**

REVIEW:

MATTER

MIXTURE

**PURE
SUBSTANCE**

ELEMENT

COMPOUND

REVIEW:

MATTER

```
graph TD;
  A[MATTER] --> B[MIXTURE];
  A --> C[PURE SUBSTANCE];
  C --> D[ELEMENT];
  C --> E[COMPOUND];
```

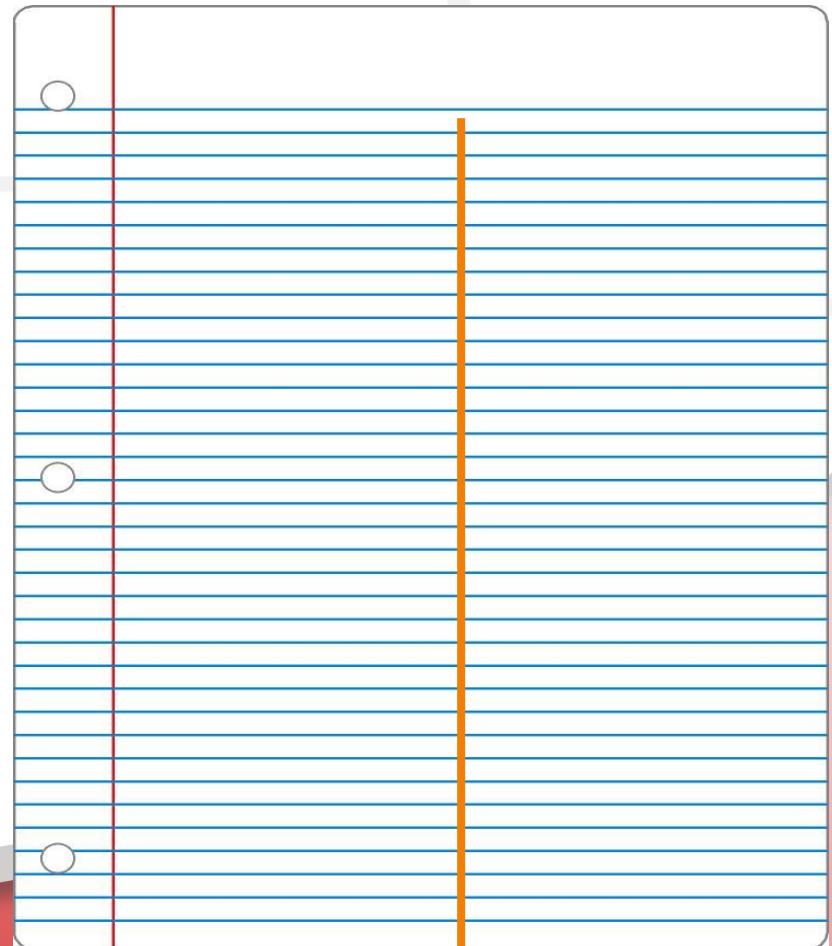
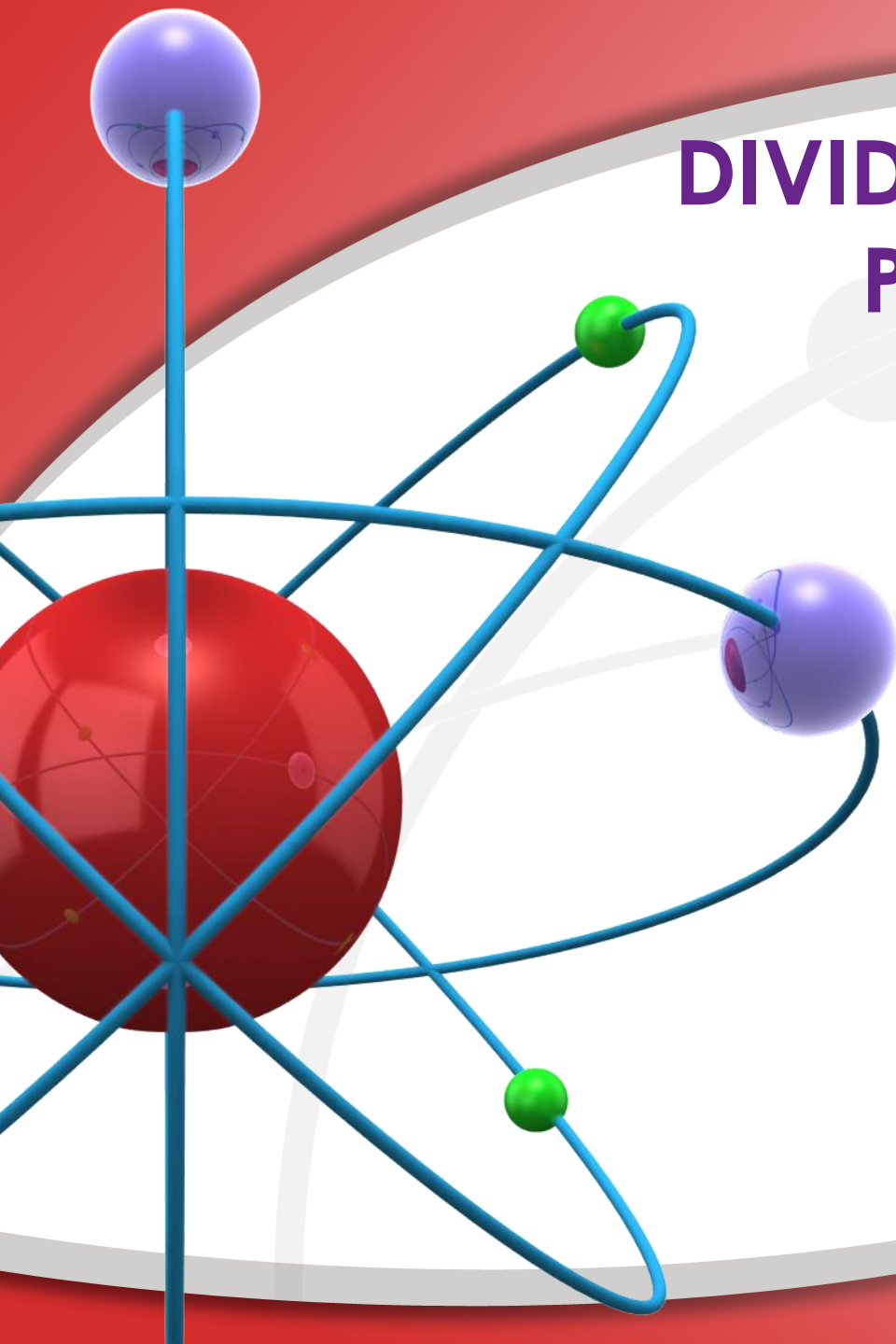
MIXTURE

**PURE
SUBSTANCE**

ELEMENT

COMPOUND

DIVIDE YOUR NOTEBOOK PAGE INTO TWO COLUMNS



COMPOUNDS:

- Made of two or more different types of atoms that are chemically bonded together

MIXTURE:

A combination of two or more substances mixed together (not chemically combined)

COMPOUNDS:

- Always follows a specific ratio or recipe

MIXTURE:

- Can be any recipe

COMPOUNDS:

- Requires a chemical change to separate into elements

MIXTURE:

- Can only be separated by physical changes (filtering, evaporation etc.)

COMPOUNDS:

- Can only be separated into the elements that formed them

MIXTURE:

- Can be separated into elements, compounds or both

COMPOUNDS:

- The properties of the compound are different than the elements that form it

EXAMPLE:

Element Hydrogen: flammable gas

Element Oxygen : flammable gas

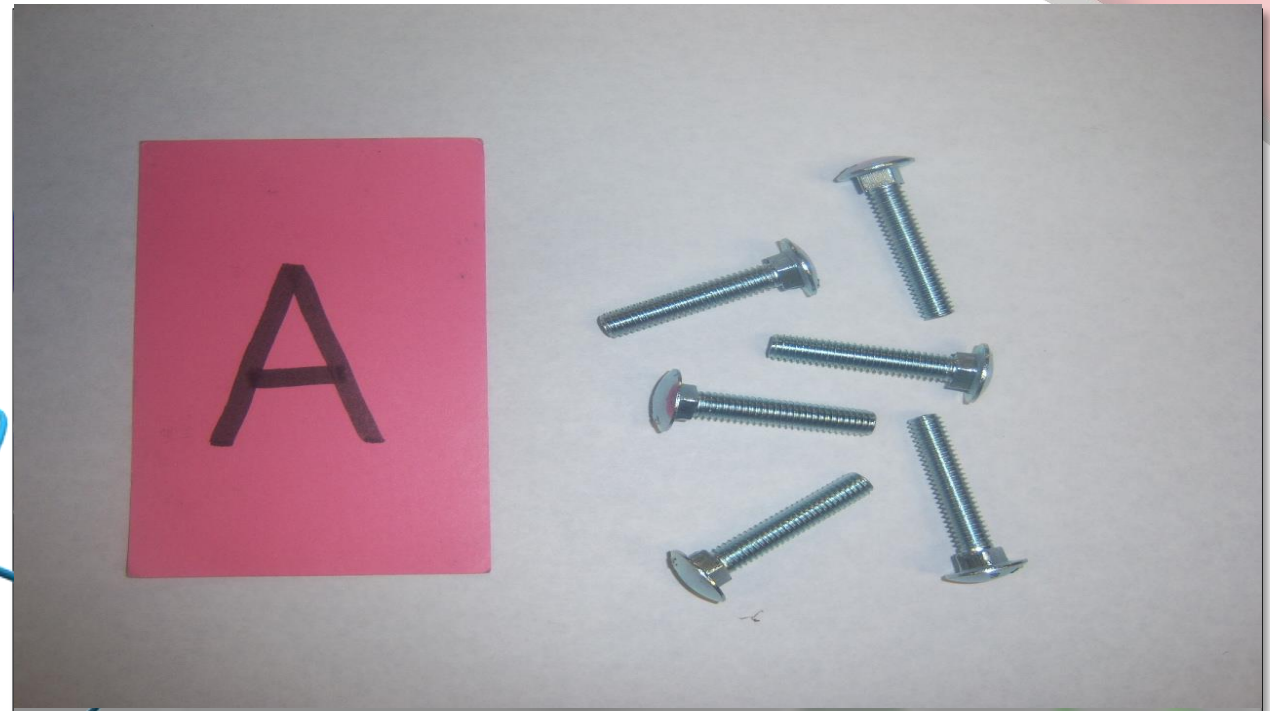
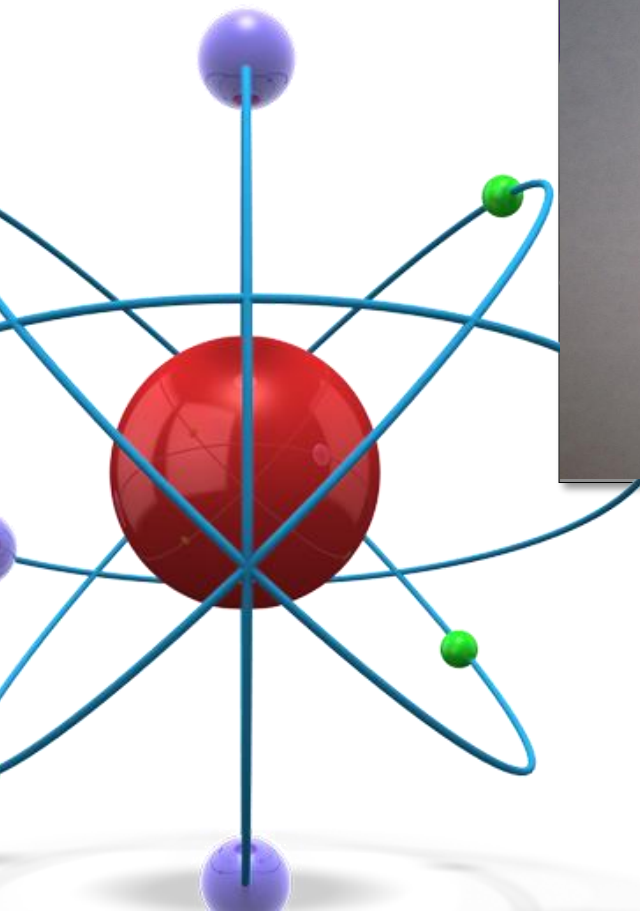
Compound water: non flammable liquid

MIXTURE:

- Parts of a mixture keep their own properties

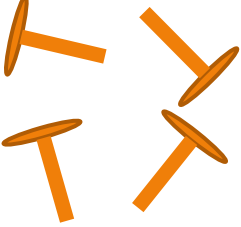
EXAMPLE:

Lemonade

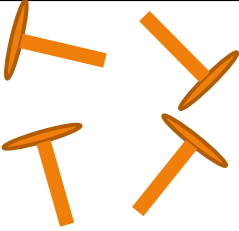


•ELEMENT, MIXTURE OR
COMPOUND?

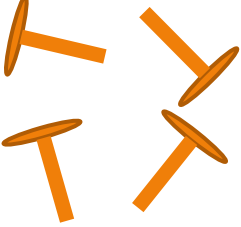
TURN OVER YOUR PAPER AND COPY THE TABLE BELOW

SKETCH	ELEMENT	COMPOUND	MIXTURE		
			OF ELEMENTS	OF COMPOUNDS	OF BOTH E & C
					

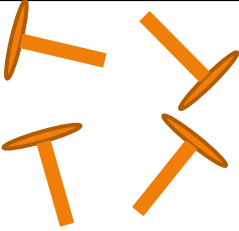
TURN OVER YOUR PAPER AND COPY THE TABLE BELOW

SKETCH	ELEMENT	COMPOUND	MIXTURE		
			OF ELEMENTS	OF COMPOUNDS	OF BOTH E & C
	X				

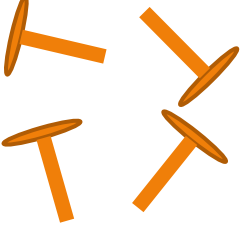
TURN OVER YOUR PAPER AND COPY THE TABLE BELOW

SKETCH	ELEMENT	COMPOUND	MIXTURE		
			OF ELEMENTS	OF COMPOUNDS	OF BOTH E & C
		X			

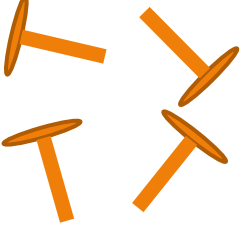
TURN OVER YOUR PAPER AND COPY THE TABLE BELOW

SKETCH	ELEMENT	COMPOUND	MIXTURE		
			OF ELEMENTS	OF COMPOUNDS	OF BOTH E & C
			X		

TURN OVER YOUR PAPER AND COPY THE TABLE BELOW

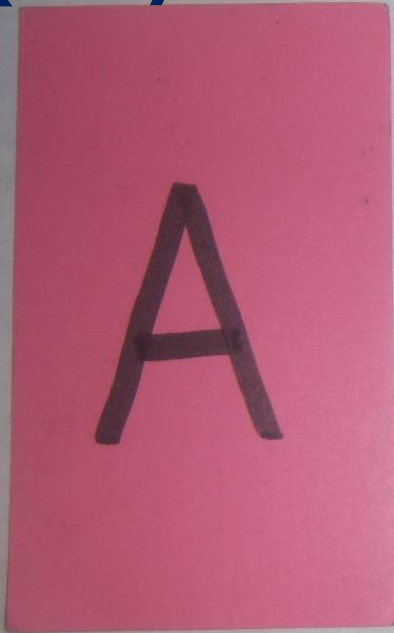
SKETCH	ELEMENT	COMPOUND	MIXTURE		
			OF ELEMENTS	OF COMPOUNDS	OF BOTH E & C
				X	

TURN OVER YOUR PAPER AND COPY THE TABLE BELOW

SKETCH	ELEMENT	COMPOUND	MIXTURE		
			OF ELEMENTS	OF COMPOUNDS	OF BOTH E & C
					X

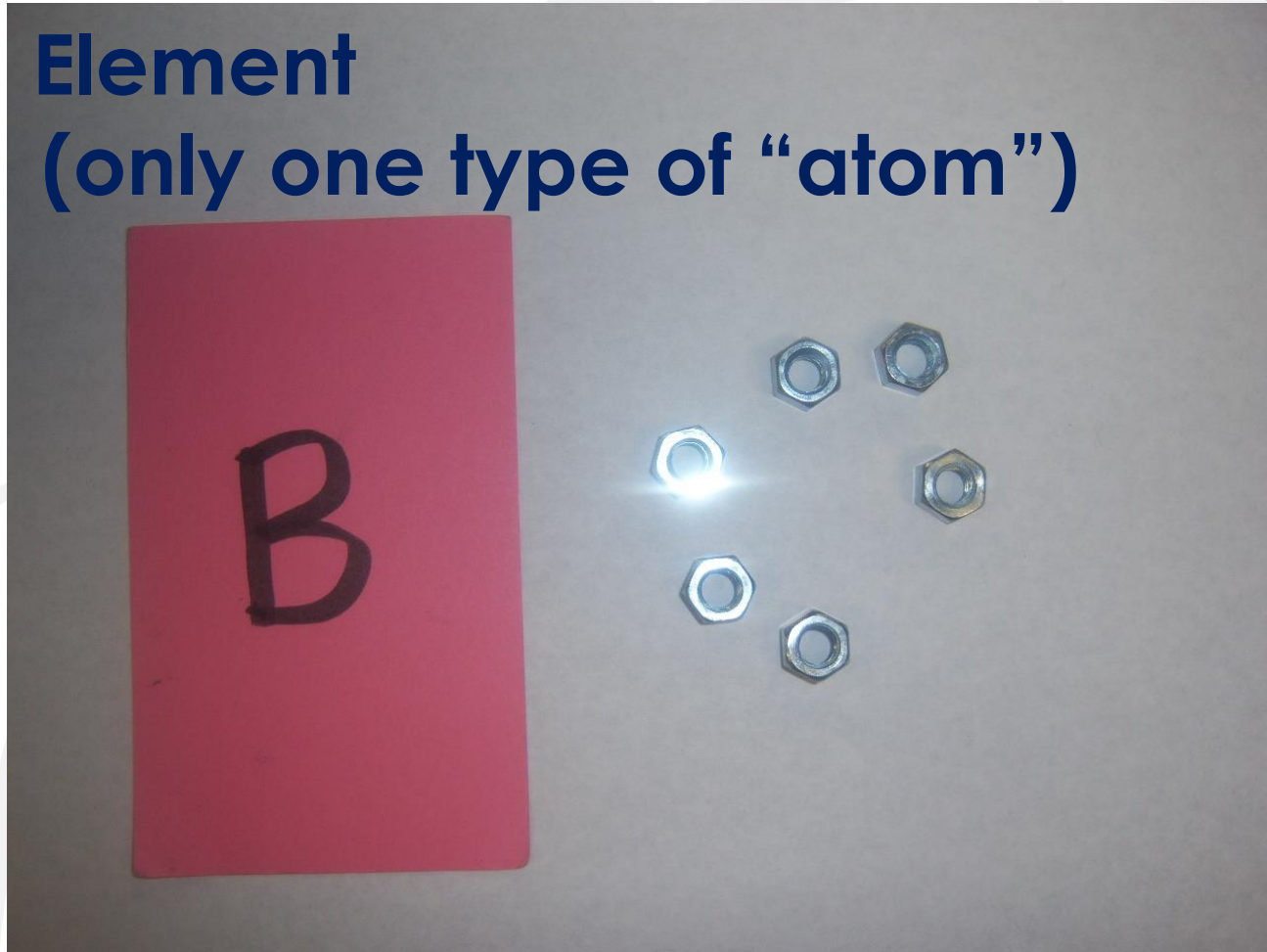
•Element, Compound or Mixture?

Answer: Element
(only one type of “atom”)



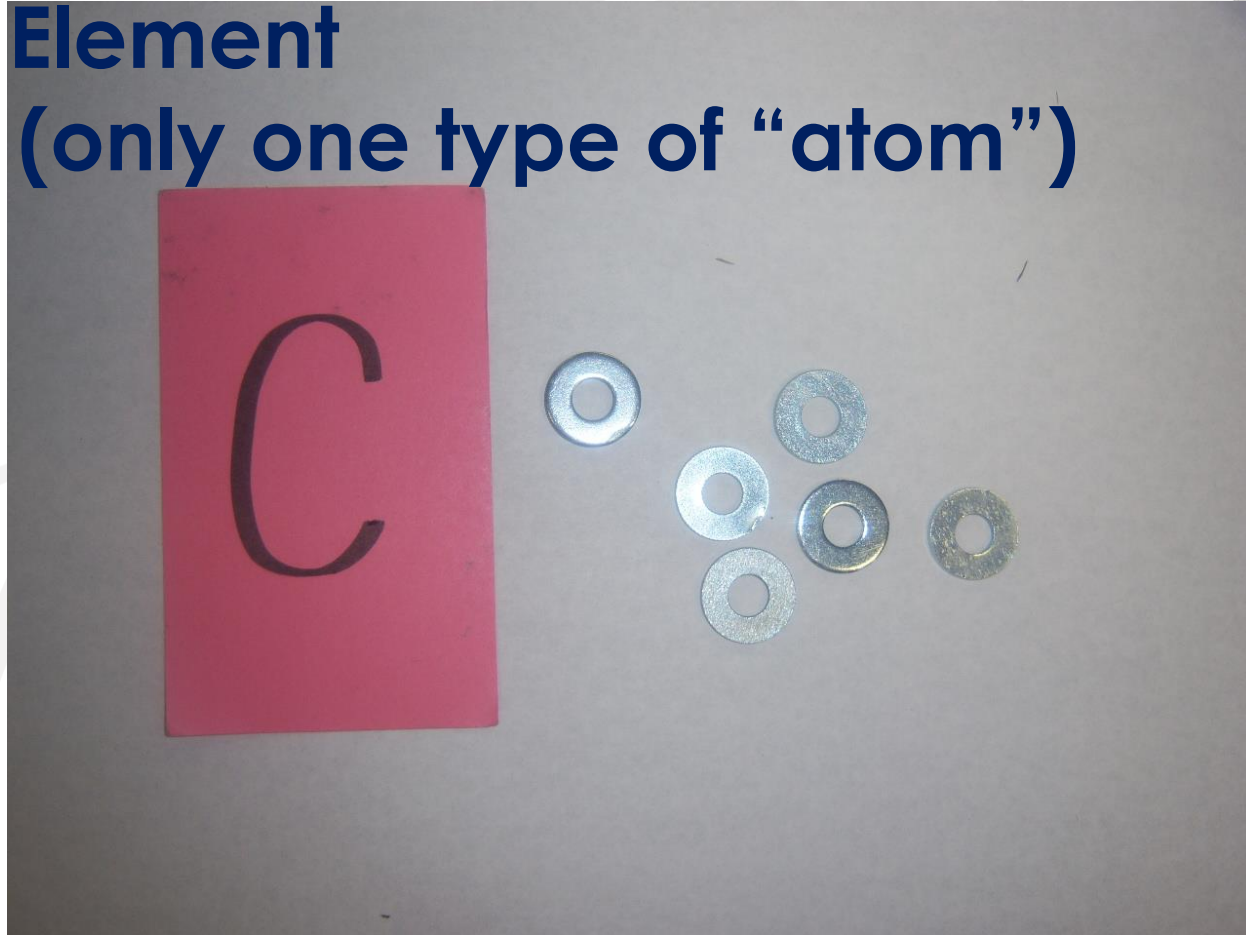
•Element, Compound or Mixture?

Answer: Element
(only one type of “atom”)



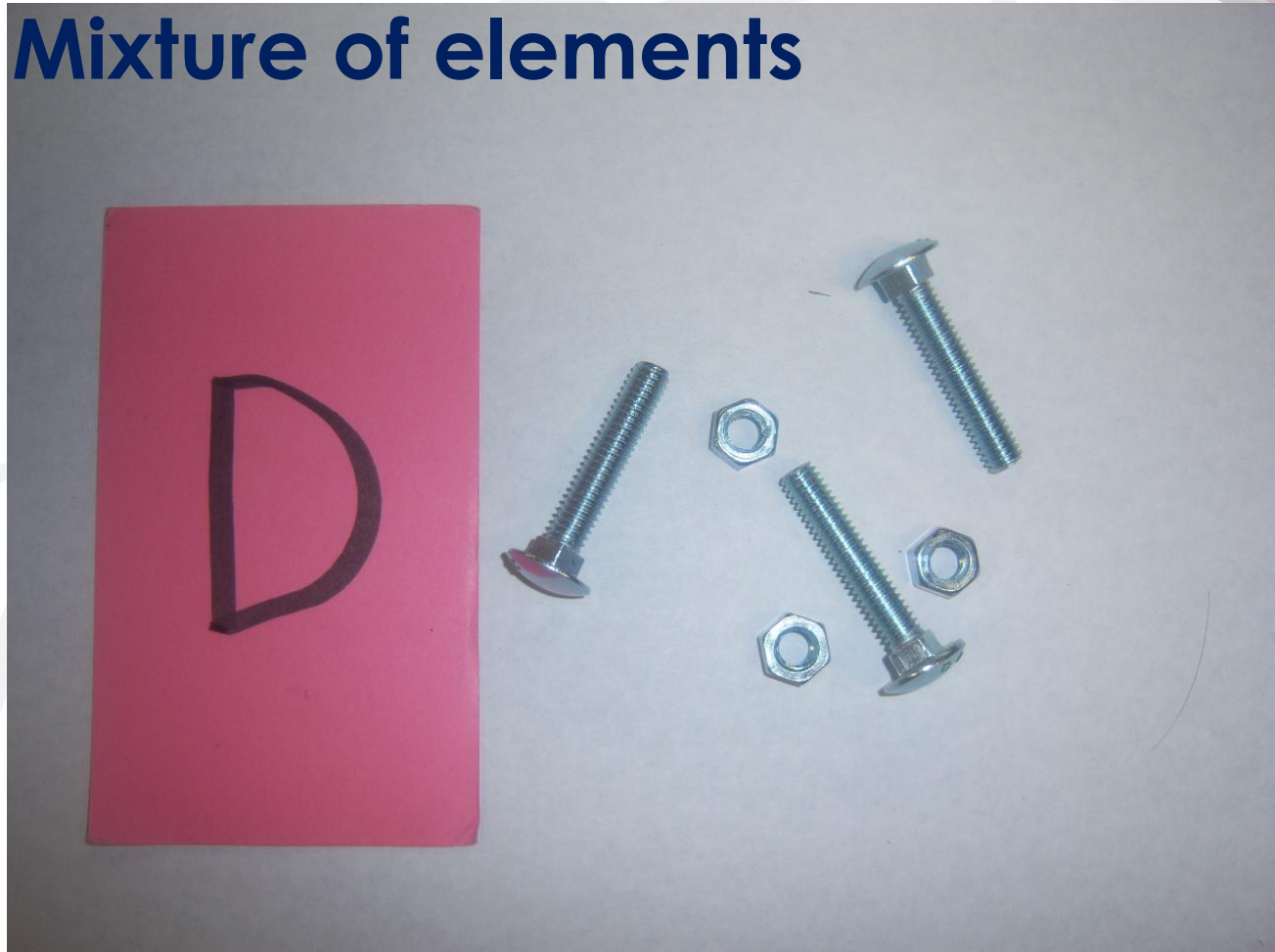
•Element, Compound or Mixture?

Answer: Element
(only one type of “atom”)



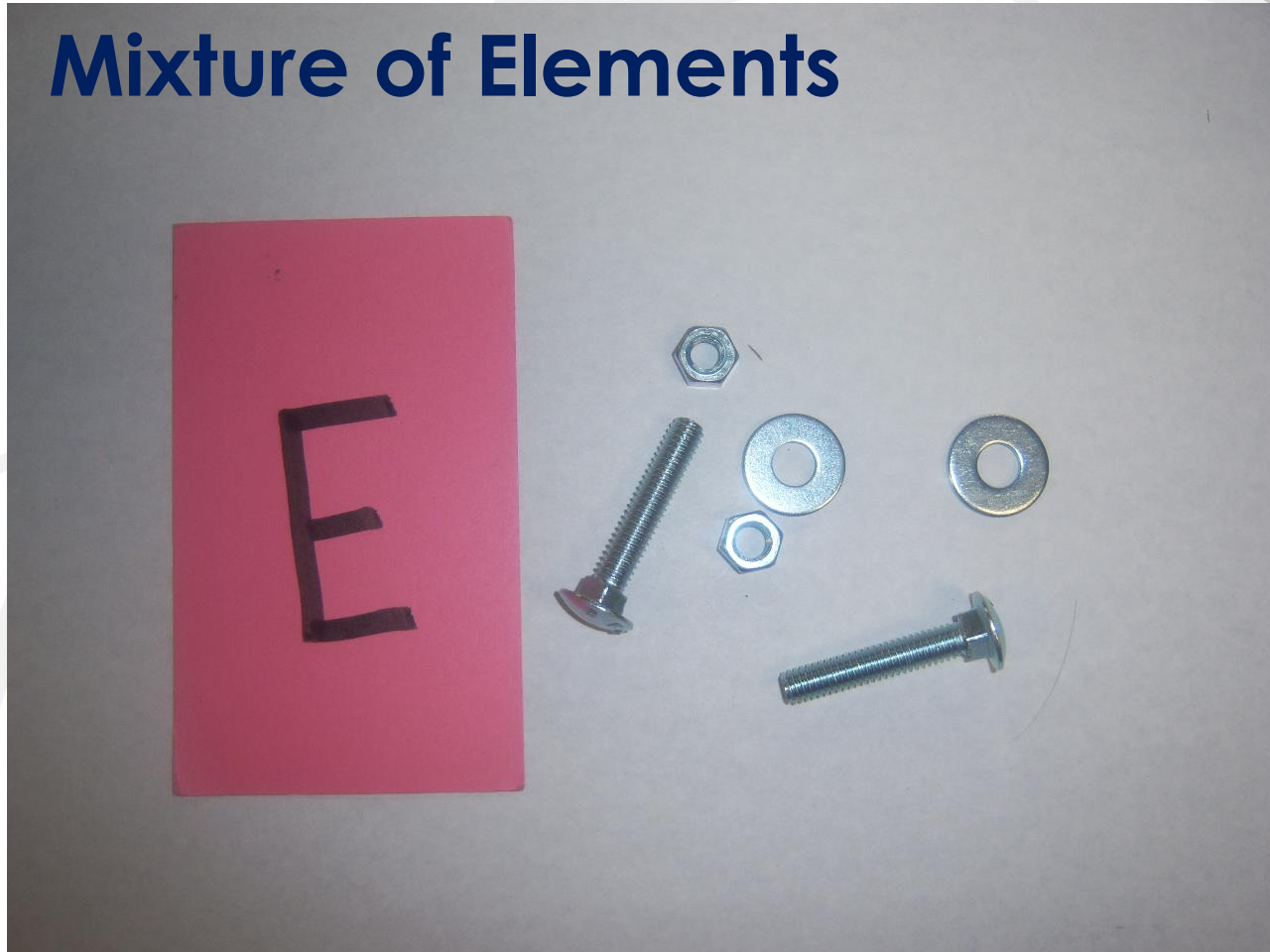
•Element, Compound or Mixture?

Answer: Mixture of elements



•Element, Compound or Mixture?

Answer: **Mixture of Elements**



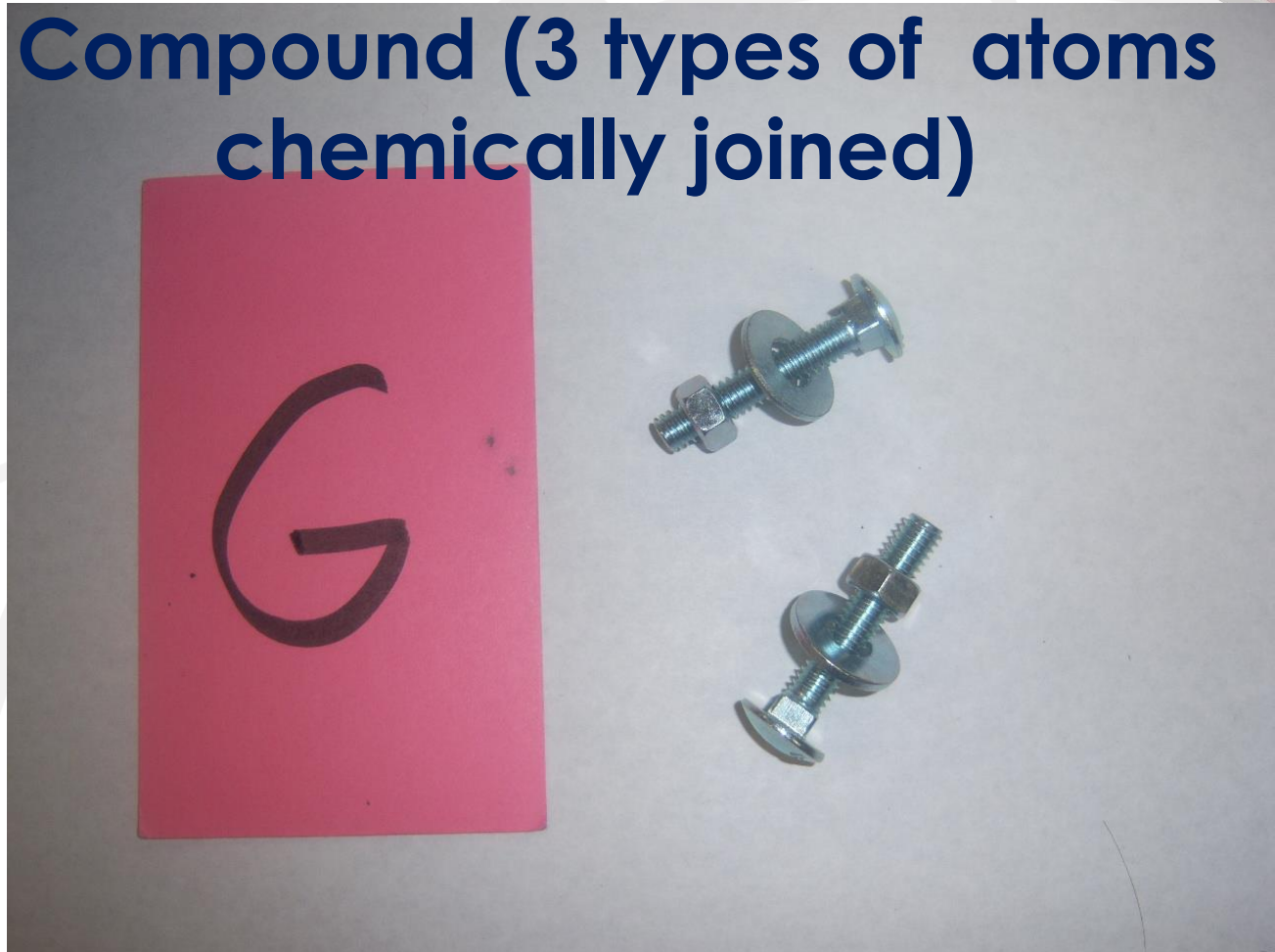
•Element, Compound or Mixture?

Answer: Compound (2 types of atoms chemically joined)



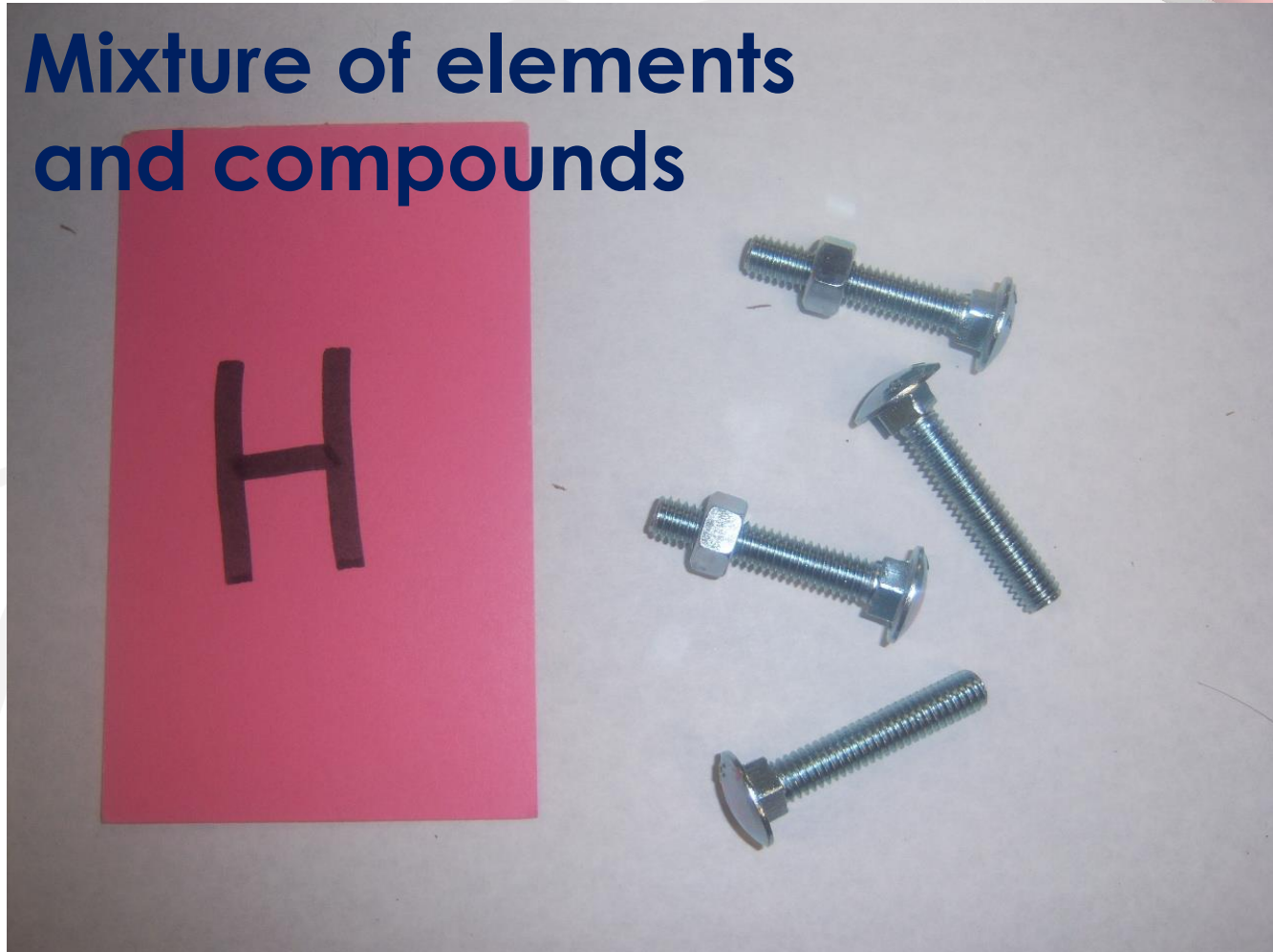
•Element, Compound or Mixture?

Answer: Compound (3 types of atoms chemically joined)



•Element, Compound or Mixture?

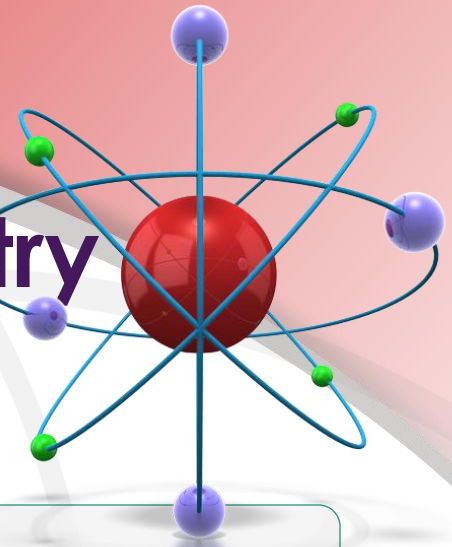
Answer: Mixture of elements
and compounds



•Element, Compound or Mixture?

Answer: **Mixture of compounds**





•CW#9~Nuts & Bolts of Chemistry

PART 2

STEP 1

GLUE PAPER INTO YOUR NOTEBOOK

STEP 2

WORK WITH YOUR GROUP TO CLASSIFY (A-E) EACH PICTURE USING THE "KEY" ON TOP

STEP 3

RAISE YOUR HAND AND ASK QUESTIONS IF YOU ARE NOT SURE

STEP 4

RAISE YOUR HAND WHEN YOU ARE DONE FOR THE TEACHER CHECK

STEP 5

IF YOU FINISH EARLY,
WORK ON HOMEWORK