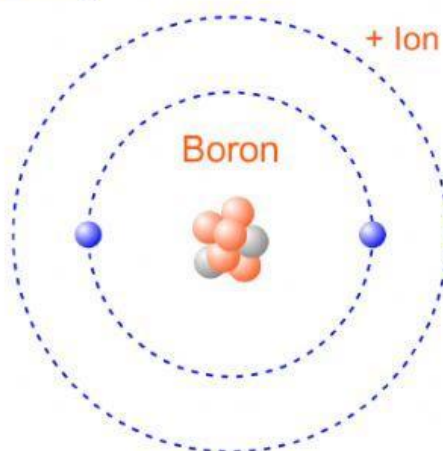


Name _____ Date _____ Class _____

Structure of Matter Review

Protons: 
Neutrons: 
Electrons: 



Model:

 Orbits

☐ Cloud

Protons Neutrons Electrons

Element



A periodic table of elements with the title "Element" in a yellow box at the top left. The element Boron (B) is highlighted with a large black box in the center. The periodic table includes elements from Hydrogen (H) to Oganesson (Og). The element Boron (B) is located in the second period, group 13.

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt	De	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og

Net Charge

A diagram showing a net charge of +3. It consists of a semi-circular gauge with a blue left half and a red right half, a black needle pointing towards the red side, and a white box below it containing the text "+3". To the right of the gauge is a small box containing a minus sign and a plus sign, followed by three plus signs.

Mass Number

A balance scale is shown with the number 7 on its base. The scale is balanced, with equal weights on both pans.

Show

- ☒ Element
☒ Neutral/ion
☐ Stable/unstable



Use the model above to answer the questions

1. What is the chemical symbol (1 or 2 letters) for the element?
2. How many protons are in the nucleus?
3. How many neutrons are in the nucleus?
4. What is the mass number?
5. How many electrons are in the model?
6. What is the net charge?
7. Is this a neutral atom, cation, or anion?
8. Fill in the three boxes in the atomic symbol:

Protons:

Neutrons:

Electrons:

Element

C

Symbol

12

C

6

-1

Model:

Orbits

Cloud

Protons

Neutrons

Electrons

Show

☒ Element
 ☒ Neutral/Ion
 ☐ Stable/Unstable

Use the model above to answer the questions

9. What is the chemical symbol (1 or 2 letters) for the element? _____
10. What is the name of the element? _____
11. How many protons are in the nucleus? _____
12. How many neutrons are in the nucleus? _____
13. What is the mass number? _____
14. How many electrons are in the model? _____
15. What is the net charge? _____
16. Is this a neutral atom, cation, or anion? _____

17. Complete the chart below to describe the three particles that make up atoms:

Particle	Charge	Relative Mass	Location in the Atom
<u>Electron</u>			
<u>Proton</u>			
<u>Neutron</u>			