Worksheet Number (3)

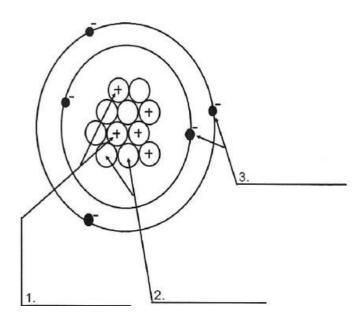
| | Grade & Section: 6 th (|) | Unit: 1 | |
|-------------------|--------------------------------------|----------------|---------------------------|------|
| Student's Name: _ | | Da | nte:// | |
| | Lesson: Atoms (pages | 22 + 23) | | |
| Educational Ou | itcome: Identify the atom's p | parts | | |
| ******** | *********** | ******* | ************************* | : |
| Atom is the sma | allest particle of an element | that has the p | roperties of the elen | ıent |

Activity 1:

Watch the video then answer the following questions:

https://www.youtube.com/watch?v=ajg07Dnc1BQ

Label the parts of an atom on the diagram below.



- 4. What type of charge does a proton have?
- 5. What type of charge does a neutron have?
- 6. What type of charge does an electron have?
- 7. Which two subatomic particles are located in the nucleus of an atom?

Activity 2:

Complete the following table to compare between proton, electron and neutron

| | Proton | electron | neutron |
|----------|--------|----------|---------|
| Location | | | |
| Charge | | | |

The atomic number: is the number of protons in an atom

Activity 1:

Fill in the blank

The atomic number tells you the number of _______ in one atom of an element. It also tells you the number of ______ in a neutral atom of that element.

No two different elements will have the ______ atomic number.

Activity 2:

look at the following figure and answer the following

| | | | | 18 |
|--------------|---|---|---|--|
| | | | _ | VIIIA |
| 14 | 15 | 16 | 17 | 2 |
| IVA | $\mathbf{V}\mathbf{A}$ | VIA | VIIA | He |
| | | | | 4.0026 |
| 6 | 7 | 8 | 9 | 10 |
| \mathbf{C} | N | O | \mathbf{F} | Ne |
| 12.0112 | 14.0067 | 15.9994 | 18.9984 | 20.179 |
| 14 | 15 | 16 | 17 | 18 |
| Si | \mathbf{P} | S | Cl | Ar |
| 28.086 | 30.9738 | 32.064 | 35.453 | 39.948 |
| 32 | 33 | 34 | 35 | 36 |
| Ge | $\mathbf{A}\mathbf{s}$ | Se | Br | Kr |
| 72.59 | 74.9216 | 78.96 | 79.909 | 83.80 |
| | 6 C 12.0112 14 Si 28.086 | 6 7 N 12.0112 14.0067 14 15 P 28.086 30.9738 32 33 Ge As | 6 7 8 O O O O O O O O O O O O O O O O O O | IVA VA VIA VIIA 6 7 8 9 C N O F 12.0112 14.0067 15.9994 18.9984 14 15 16 17 Si P S Cl 28.086 30.9738 32.064 35.453 32 33 34 35 Ge As Se Br |

a. Give the symbol and number of protons in one atom of:

Helium: Nitrogen:

Neon: Oxygen:

- b. How many electrons are found in a Chlorine atom?
- c. True or false
 - 1. Electrons dart around the nucleus in high-speed motion (very fast).
 - 2. atoms of an elements can have different numbers of neutron.
- d. Explain helium-filled ballon rises through the air.

