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| Name:  | Period: | Seat #:  |
| **REVIEW WORK FOR SUBSTITUTE DAY** |
| **INSTRUCTIONS:**1. Complete the following Jumpstart Question on the BACK of this paper: What is the molar mass for Mg(OH)2
2. Check your answers to p. 30 worksheet using the answers on the whiteboard.
	1. Correct your work in green pen!
	2. Try to fix any mistakes you made, figure out how to get the correct answer!
3. When done please turn your Jumpstart paper into the pink basket on my lab table
4. Complete the following problems on a piece of binder paper
	1. Show work if ANY math is involved (adding, subtracting, multiplying, dividing, etc)
	2. No math? Then use FULL SENTENCES
5. Staple this paper to the FRONT of your binder paper when the bell rings
6. Turn your packet into the “DUE NOW” basket – ***EVEN IF YOU ARE NOT FINISHED***
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| **TOPIC** | **QUESTIONS** |
| Models of the atom | 1. Who discovered each particle: proton, neutron, electron
2. Describe the Gold Foil Experiment including what they thought they would see versus what they actually saw, and how that changed their model of the atom.
3. Describe how a cathode ray tube can tell us about electrons (think about magnets!)
4. What is different about the Quantum model compared to the Bohr model? Why is Quantum better?
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| Scientific Notation | 1. Convert 450000 into scientific notation
2. Convert 0.00000385 into scientific notation
3. Convert 2.56 x 103 into standard notation
4. Convert 1.95 x 10-4 into standard notation
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| Metric system | 1. What are the base units for: length, mass, volume?
2. What prefixes do we need to have memorized?
3. What is the mnemonic you use to remember the order of the memorized prefixes?
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| Metric conversions | 1. Convert 32mm into Dm
2. Convert 20cm into Km
3. Convert 13 km into dm
4. Convert 55,000 km into cm AND put your final answer in scientific notation
5. Convert 3.5x10-8 Hg into cg AND put your final answer in scientific notation
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| Isotopes | 1. What is the definition of an isotope?
2. What is the isotope name for the element that has 14 protons and a mass of 30?
3. Write the isotope symbol for the element that has 8 protons and 8 neutrons
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| Counting atomic numbers | 1. How many protons, neutrons and electrons does Aluminum-28 have?
2. How many protons, neutrons and electrons does Magnesium-24 have?
3. What is the mass number for an element that has 9 protons and 10 neutrons?
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| Atomic numbers for ions | 1. What is the ion symbol for the element that has 20 protons and 18 electrons?
2. What is the ion symbol for the element that has 33 protons and 36 electrons?
3. How many protons, neutrons and electrons does Se2- have?
4. How many protons, neutrons and electrons does B3+ have?
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| Molar mass | 1. What is the molar mass of Mg?
2. What is the molar mass of Tungsten?
3. What is the molar mass of K2S?
4. What is the molar mass of Mg(NO3)2 ?
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| Dimensional analysis | 1. Convert 37in into miles
2. Convert 40gallons into pints
3. Convert 50 grams of water into moles of water (H2O) \*Hint\* use the molar mass of water!
4. How many grams would 2.5 moles of table salt weigh? \*Hint\* Table salt is NaCl (sodium chloride), and use the molar mass for it!
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