

Name: \_\_\_\_\_

Period: \_\_\_\_\_

Seat#: \_\_\_\_\_

## Section 1: Dalton's Theories

- Site: [https://drive.google.com/file/d/1VBYfxYsn2KZ9Yi\\_yfT8BDuaVj\\_FKc491/view?usp=sharing](https://drive.google.com/file/d/1VBYfxYsn2KZ9Yi_yfT8BDuaVj_FKc491/view?usp=sharing)
- Site: [https://drive.google.com/file/d/1VAylmVN\\_M1edTrRmbvGG7AUP3aFlnfQt/view?usp=sharing](https://drive.google.com/file/d/1VAylmVN_M1edTrRmbvGG7AUP3aFlnfQt/view?usp=sharing)

- 1) Summarize (in your own words) the five parts to Dalton's Atomic Theory.
- 2) What are two problems with Dalton's Atomic Theory that we know with today's knowledge?

## Section 2: First Subatomic Particle of the Atom

- Site: <https://drive.google.com/file/d/1V48kxBnzey-ExwajSQQ2qd4DymFb94qf/view?usp=sharing>
- Site: [https://drive.google.com/file/d/1UtzkBmJBVFP\\_8EOW\\_sCFPanhcK5vyRv/view?usp=sharing](https://drive.google.com/file/d/1UtzkBmJBVFP_8EOW_sCFPanhcK5vyRv/view?usp=sharing)  
(scroll way down to look for Thomson)

- 3) "Atoms are small, indivisible particles. There is nothing smaller than an atom." Why would Thomson disagree with this statement?
- 4) What subatomic particle did Thomson discover and what was its charge?
- 5) Describe how Thomson found the subatomic particle?
- 6) If the positive side of a magnet was placed near the cathode ray would the ray bend towards or away from the magnet? Explain.
- 7) What is the name of the main piece of equipment used by Thomson? After doing some internet search what is it used for today?

## Dougherty Valley HS Chemistry

### Atomic Web Quest

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#### **Section 3: Finding the Mass of the Atom**

- Site: <https://drive.google.com/file/d/1Ut8r5N0ICkvZKnSjzwmiMNH8g8kV-qIK/view?usp=sharing>

- 8) What was the name of Rutherford's most famous experiment?
- 9) Describe and/or illustrate what Rutherford's experiments looked like.
- 10) What did Rutherford conclude was in the middle of the atom?
- 11) Use what you know about matter to explain why Rutherford concluded that it was a positive charge in the center of the atom.
- 12) Why did most of the alpha particle go through the gold foil?
- 13) J.J. Thomson said the atom is filled with "positive sea" with small, negative particles called electrons. Would Rutherford agree or disagree with this statement? Why?

#### **Section 4: Bohr Atom**

- Site: <https://drive.google.com/file/d/1Uiz8gmqcqvotXwZzwvi4PdLJeHlZL3zz/view?usp=sharing>
  - Site: <https://drive.google.com/file/d/1Ueu8N5L9-oIweh-0vT1ugCLjYrXL3r3/view?usp=sharing>
- 14) What happens to an electron's location when it absorbs energy? What happens when it radiates energy?  
(3<sup>rd</sup> paragraph)
  - 15) What problems are found with the Bohr model?
  - 16) Draw and label the parts of the atom for a Bohr Model atom