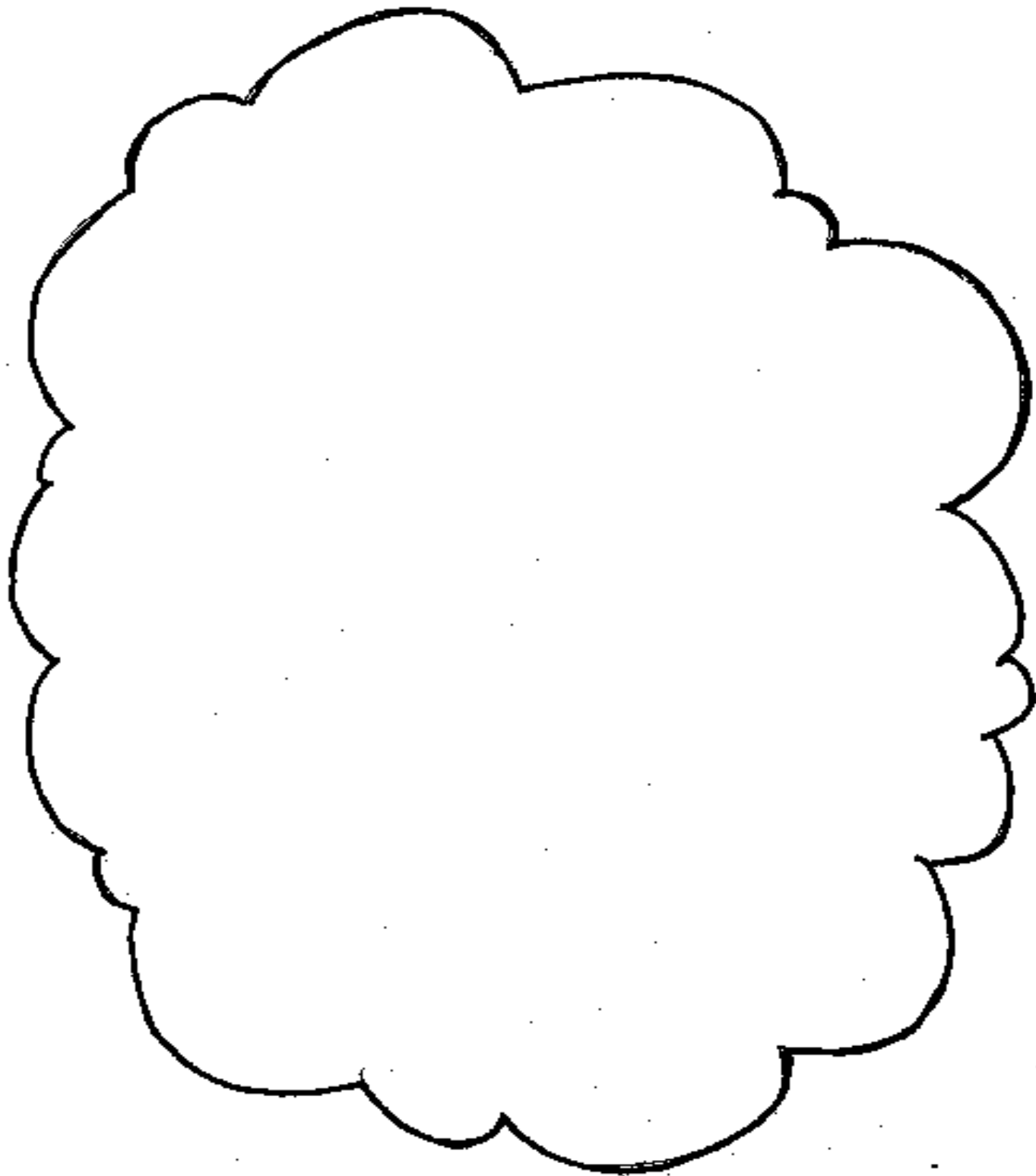


Electron Cloud



Name of Element	Number of protons	Number of electrons	Number of neutrons

Periodic Table Trends and Patterns in Atomic Configuration

ENGAGE: If you were building an atom with the following supplies which items would you choose to build the atom. For example, if I were building an atom out of types of houses: mansions (6 bedrooms or more), 3 bedroom house, apartment (2 bedrooms), studio apartment (1 room), which would be best to represent the protons, neutrons, and electrons.

Example: Protons would be _____ Drawing:
Neutrons would be _____
Electrons would be _____

Now choose and label which objects you would use from the following lists to represent the sub-atomic particles.

FRUITS: apples, oranges, lemons, pineapples, limes, cherries



AUTOMOBILES: four-door car, two-door car, tractor trailer, motorcycle, station wagon, Cooper Mini



* or Grandfathered Semitrailer Length



Which fruits did you choose to represent each subatomic particle? Why? Which autos did you choose? Why?

EXPLORE/EXPLAIN

Draw the first three elements' atoms from Period 2:

Element Name: Element Symbol:	Element Name: Element Symbol:	Element Name: Element Symbol:
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Analysis Question:

1) What are the trend(s) or pattern(s) you notice with the atoms in the same period? _____

Draw the first three elements' atoms from Group 1:

Element Name: Element Symbol:	Element Name: Element Symbol:	Element Name: Element Symbol:
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Analysis Question:

2) What are the trend(s) or pattern(s) you notice with the atoms in Group 1? _____

ELABORATE:

3) How would you compare/contrast elements in the same group? Are they more or less similar to each other compared to elements in other groups? How do their properties compare? Explain your answer.
