

ATOM MODELS

Chemistry Project - Individual Assignment

What does an atom look like? Since we can't pick one up and observe it directly, we can take what we have learned other ways and make a model to describe It. Models show us what something is like when we can't have the "real" object in front of us (like model airplanes or cars, or an architect's model of a new office building).

PART 1: The Model

In this assignment you are to do just that -- take what you have learned so far about atoms and build your own model to describe what an atom is like. You need to include the following things in your model.

- Your model should represent one of the known elements (sign up for one!)
- Your model must be 3-dimensional: Atoms take up space -- yours should, too!
- Your model should show us everything you know about atoms
 - What are the parts of an atom?
 - How big are the parts of an atom compared to the whole atom?
 - How many of each part are there in your element atom?
 - You may make your model out of anything that you think would best help us "see" what an atom is like. *BE CREATIVE, NEAT, AND CLEAR.*

PART 2: Element Card

The element card is a companion to your model. Use a 3x5 card to organize the information about your atom listed below. *BE CREATIVE AND NEAT.* Use color, drawings, diagrams, etc. to make your card interesting and clear! Appearance will be included in the overall grade.

Front

1. Element symbol
2. Atomic number
3. Average atomic mass
- 4 Common use of your element

Back

1. Element group your element belongs to
2. Electron configuration
3. Electron orbital diagram
4. Lewis dot structure for your neutral atom

RESOURCES:

You may use your text book, your class notes, anything you have learned from past science classes, encyclopedias, Internet, library books, and other references to help you.

GRADING:

Model	Accuracy	15 points
	Creativity and neatness	10 points
Element Card	Content accuracy	15 points
	Creativity and neatness	<u>10 points</u>
TOTAL		50 points