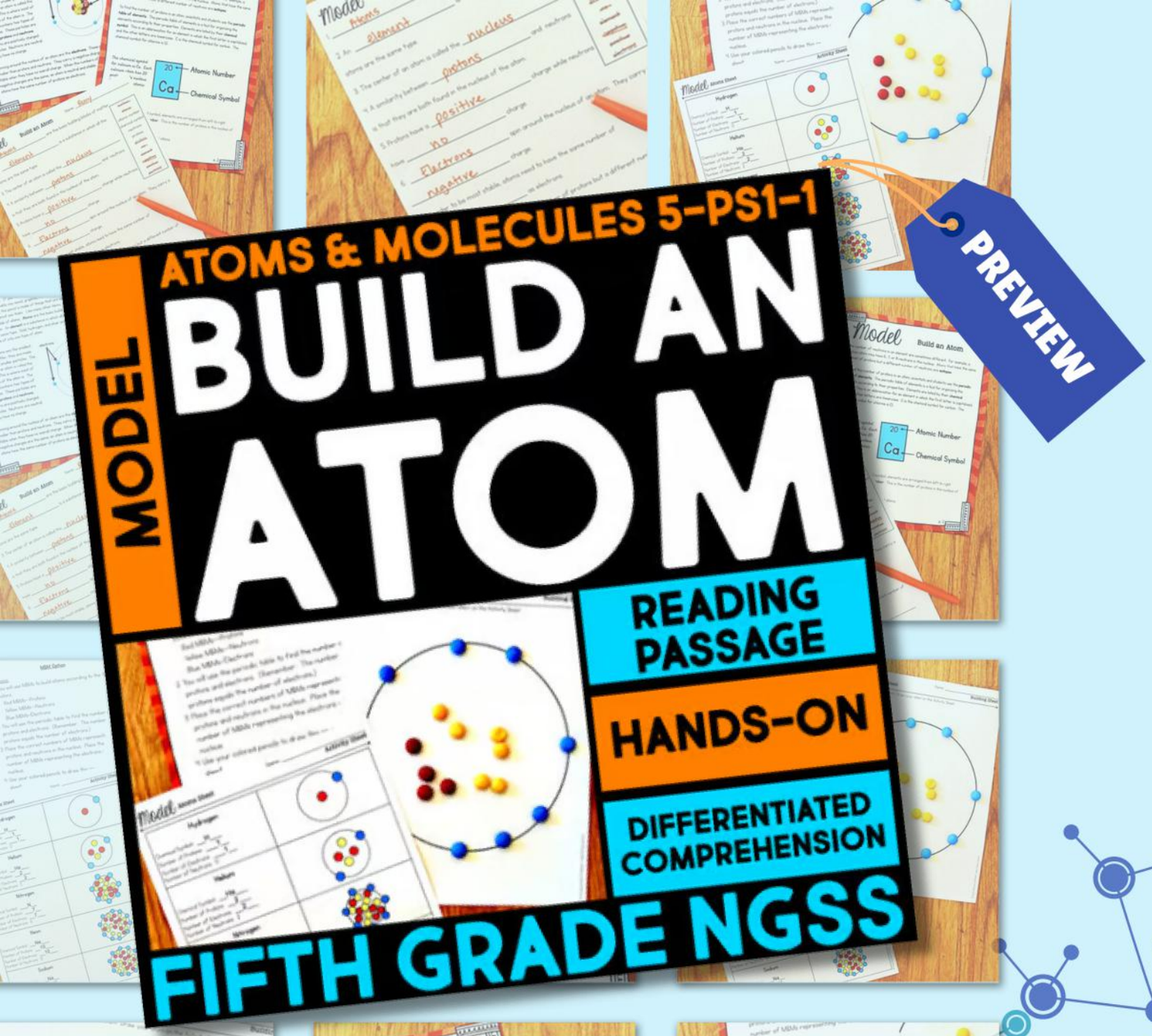


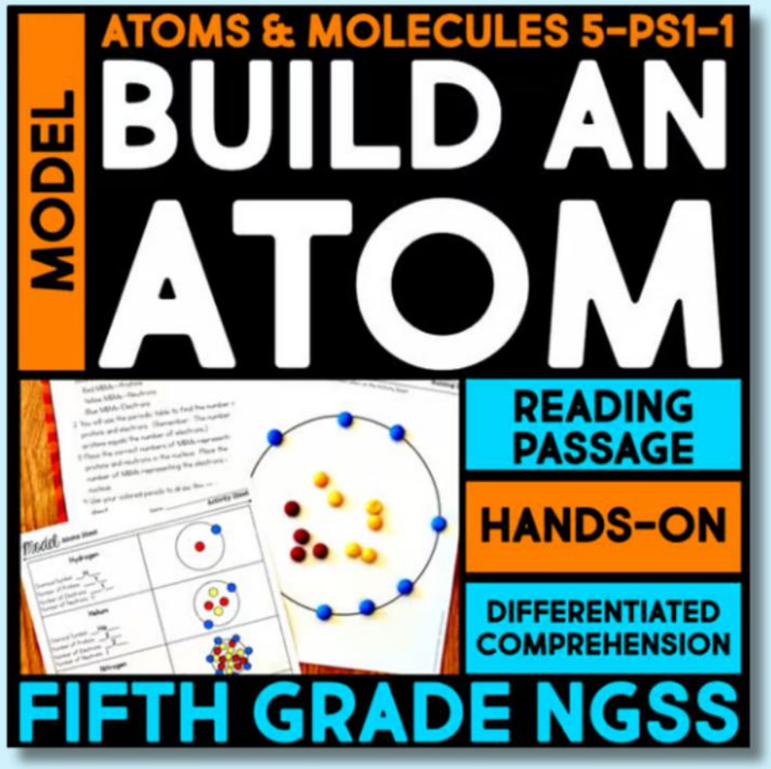
Build Your Own Atom!

5TH GRADE

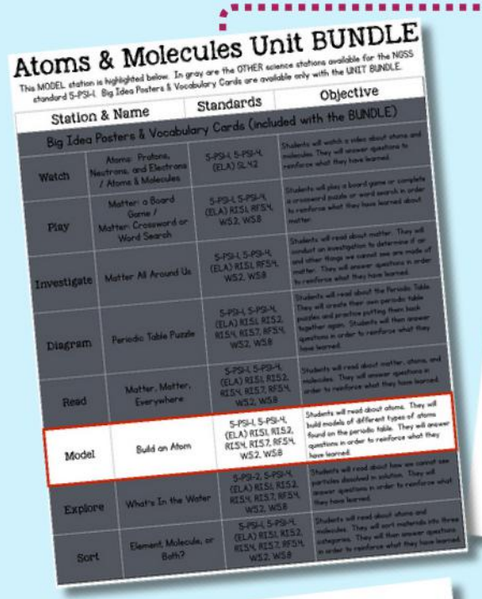
MODEL BUILD AN ATOM

KEEP SCROLLING TO SEE WHAT'S INSIDE!

ACTIVITY OVERVIEW



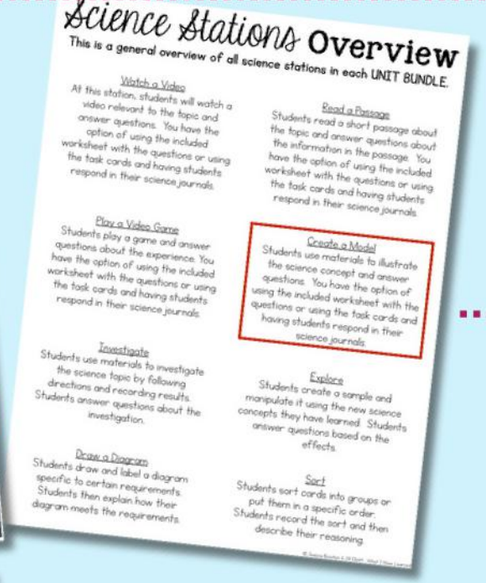
- Your students will read a passage.
- Then your students will create a model.
- Then, lastly, they will answer differentiated questions.



Atoms & Molecules Unit BUNDLE

This MODEL station is highlighted below. In gray are the OTHER science stations available for the NGSS standard 5-PS1-1. Big Idea Posters & Vocabulary Cards are available only with the UNIT BUNDLE.

Station & Name		Standards	Objective
Big Idea Posters & Vocabulary Cards (included with the BUNDLE)			
Watch	Atoms: Protons, Neutrons, and Electrons / Atoms & Molecules	5-PS1-1, 5-PS1-4, (ELA) SL.4.2	Students will watch a video about atoms and molecules. They will answer questions to reinforce what they have learned.
Play	Matter: a Board Game / Matter: Crossword or Word Search	5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RF.5.4, W.5.2, W.5.8	Students will play a board game or complete a crossword puzzle or word search in order to reinforce what they have learned about matter.
Investigate	Matter All Around Us	5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RF.5.4, W.5.2, W.5.8	Students will read about matter. They will conduct an investigation to determine if air and other things we cannot see are made of matter. They will answer questions in order to reinforce what they have learned.
Diagram	Periodic Table Puzzle	5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, W.5.2, W.5.8	Students will read about the Periodic Table. They will create their own periodic table puzzles and practice putting them back together again. Students will then answer questions in order to reinforce what they have learned.
Read	Matter, Matter, Everywhere	5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, W.5.2, W.5.8	Students will read about matter, atoms, and molecules. They will answer questions in order to reinforce what they have learned.
Model	Build an Atom	5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, W.5.2, W.5.8	Students will read about atoms. They will build models of different types of atoms found on the periodic table. They will answer questions in order to reinforce what they have learned.
Explore	What's In the Water	5-PS1-2, 5-PS1-4, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, W.5.2, W.5.8	Students will read about how we cannot see particles dissolved in solution. They will answer questions in order to reinforce what they have learned.
Sort	Element, Molecule, or Both?	5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, W.5.2, W.5.8	Students will read about atoms and molecules. They will sort materials into three categories. They will then answer questions in order to reinforce what they have learned.



Science Stations Overview

This is a general overview of all science stations in each UNIT BUNDLE.

Watch a Video
At this station, students will watch a video relevant to the topic and answer questions. You have the option of using the included worksheet with the questions or using the task cards and having students respond in their science journals.

Read a Passage
Students read a short passage about the topic and answer questions about the information in the passage. You have the option of using the included worksheet with the questions or using the task cards and having students respond in their science journals.

Play a Video Game
Students play a game and answer questions about the experience. You have the option of using the included worksheet with the questions or using the task cards and having students respond in their science journals.

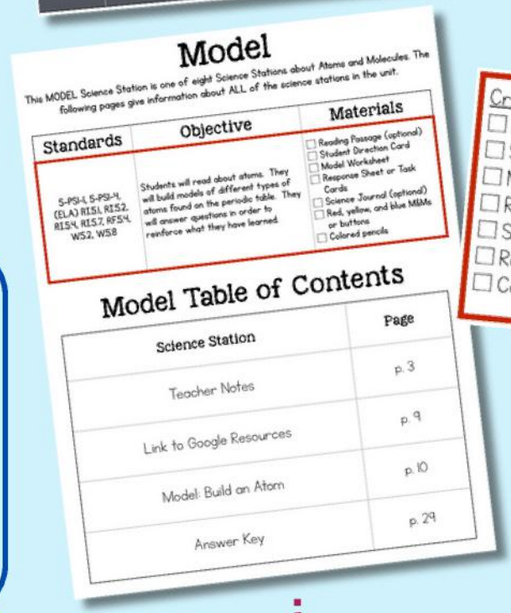
Create a Model
Students use materials to illustrate the science concept and answer questions. You have the option of using the included worksheet with the questions or using the task cards and having students respond in their science journals.

Investigate
Students use materials to investigate the science topic by following directions and recording results. Students answer questions about the investigation.

Explore
Students create a sample and manipulate it using the new science concepts they have learned. Students answer questions based on the effects.

Draw a Diagram
Students draw and label a diagram specific to certain requirements. Students then explain how their diagram meets the requirements.

Sort
Students sort cards into groups or put them in a specific order. Students record the sort and then describe their reasoning.



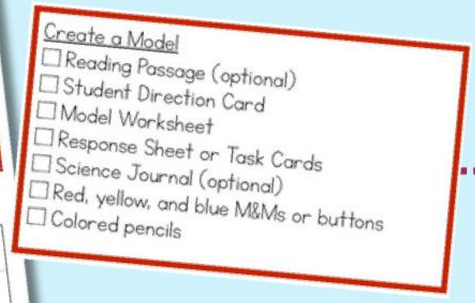
Model

This MODEL Science Station is one of eight Science Stations about Atoms and Molecules. The following pages give information about ALL of the science stations in the unit.

Standards	Objective	Materials
5-PS1-1, 5-PS1-4, (ELA) RI.5.1, RI.5.2, RI.5.4, RI.5.7, RF.5.4, W.5.2, W.5.8	Students will read about atoms. They will build models of different types of atoms found on the periodic table. They will answer questions in order to reinforce what they have learned.	☐ Reading Passage (optional) ☐ Student Direction Card ☐ Model Worksheet ☐ Response Sheet or Task Cards ☐ Science Journal (optional) ☐ Red, yellow, and blue M&Ms or buttons ☐ Colored pencils

Model Table of Contents

Science Station	Page
Teacher Notes	p. 3
Link to Google Resources	p. 9
Model: Build an Atom	p. 10
Answer Key	p. 29



Create a Model

- ☐ Reading Passage (optional)
- ☐ Student Direction Card
- ☐ Model Worksheet
- ☐ Response Sheet or Task Cards
- ☐ Science Journal (optional)
- ☐ Red, yellow, and blue M&Ms or buttons
- ☐ Colored pencils

Table of Contents

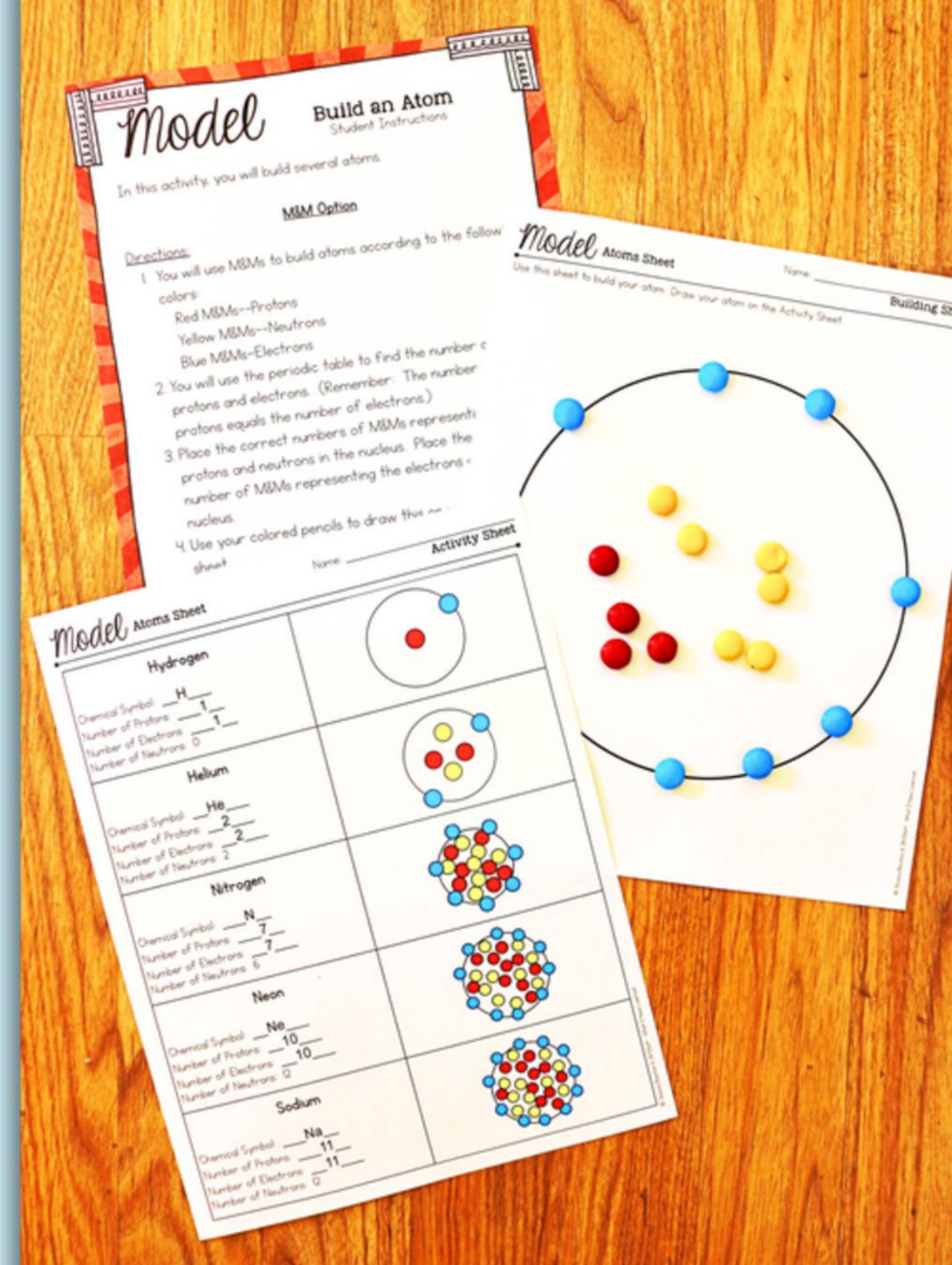
Science Station Overview

Materials Checklist

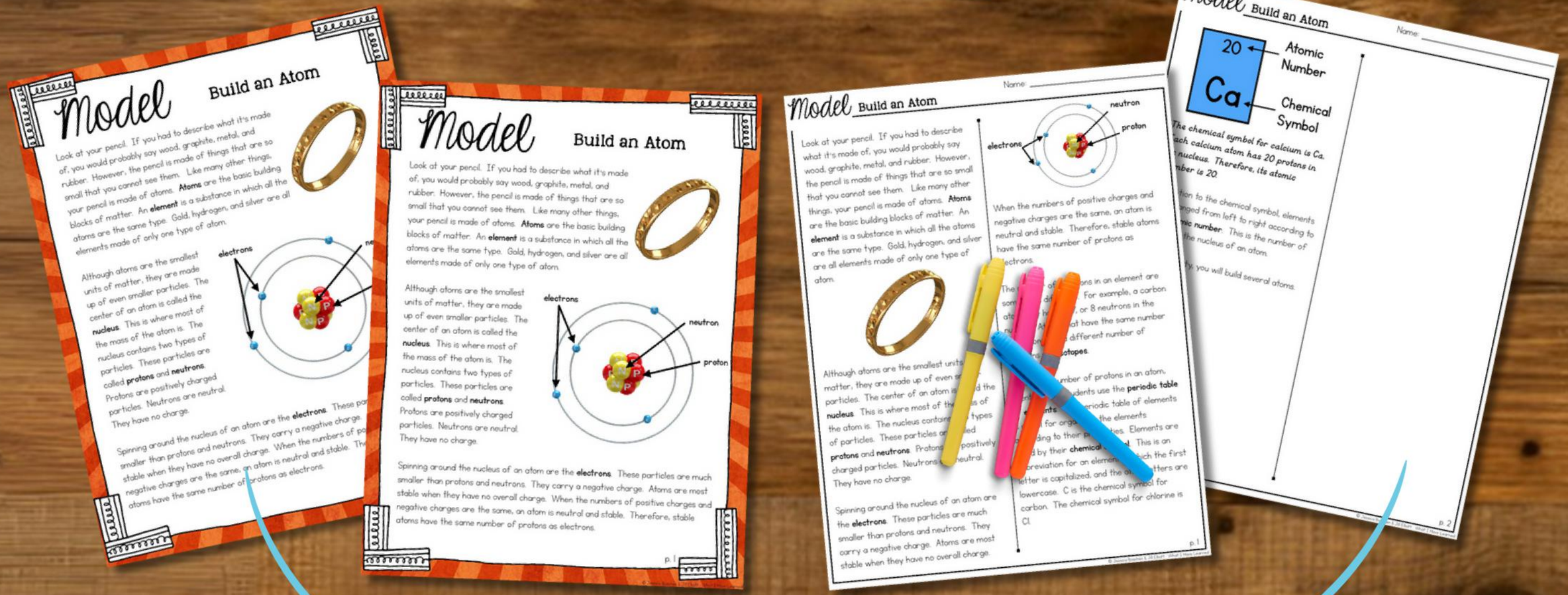
Table of Contents / Teacher's Notes

WHAT'S INCLUDED MODEL SCIENCE STATION

- Teacher Notes
- **Student Text** in two formats
- Student **Instructions**
- **Activity Sheets** for observation
- Differentiated **Questions**
- Answer Key
- Google Form™
- Google Slides™

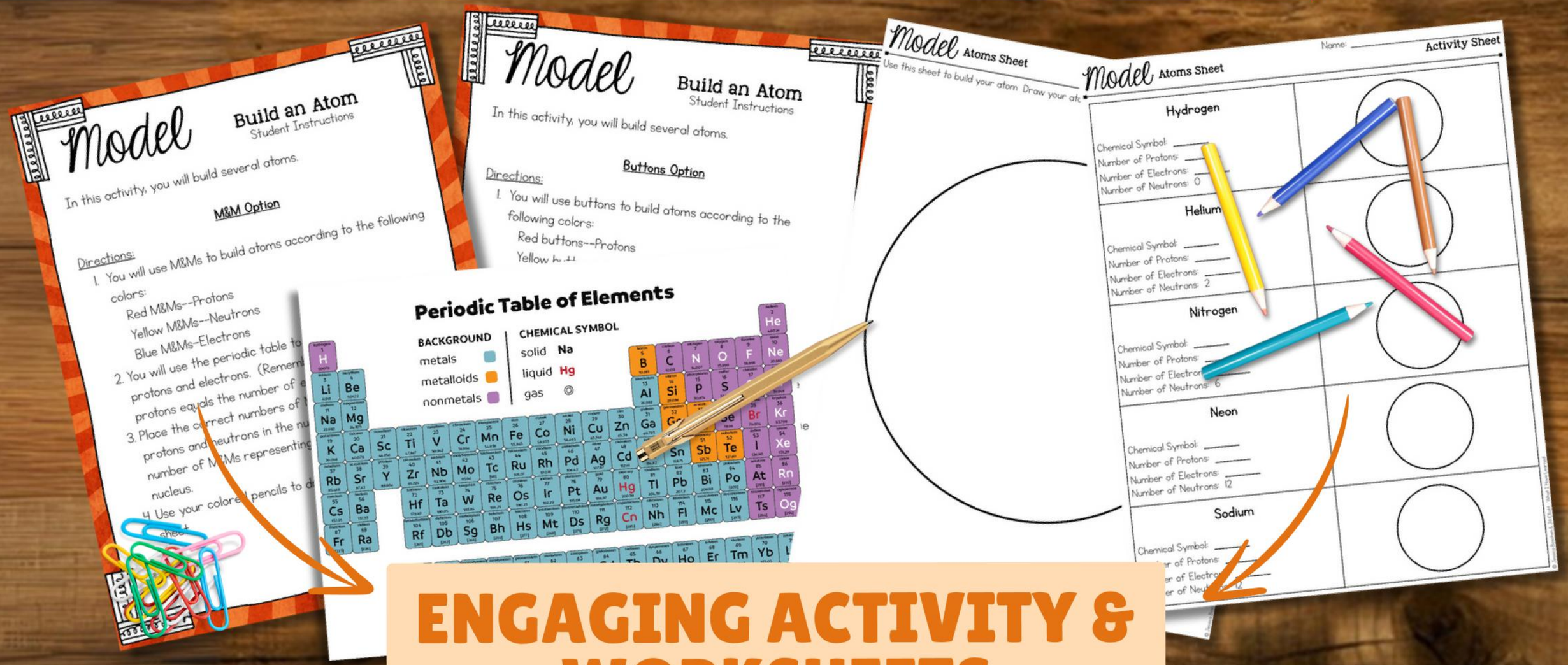


MODEL: READING PASSAGE



READING PASSAGE IN TWO FORMATS

ENGAGING ACTIVITY & WORKSHEETS



ENGAGING ACTIVITY & WORKSHEETS

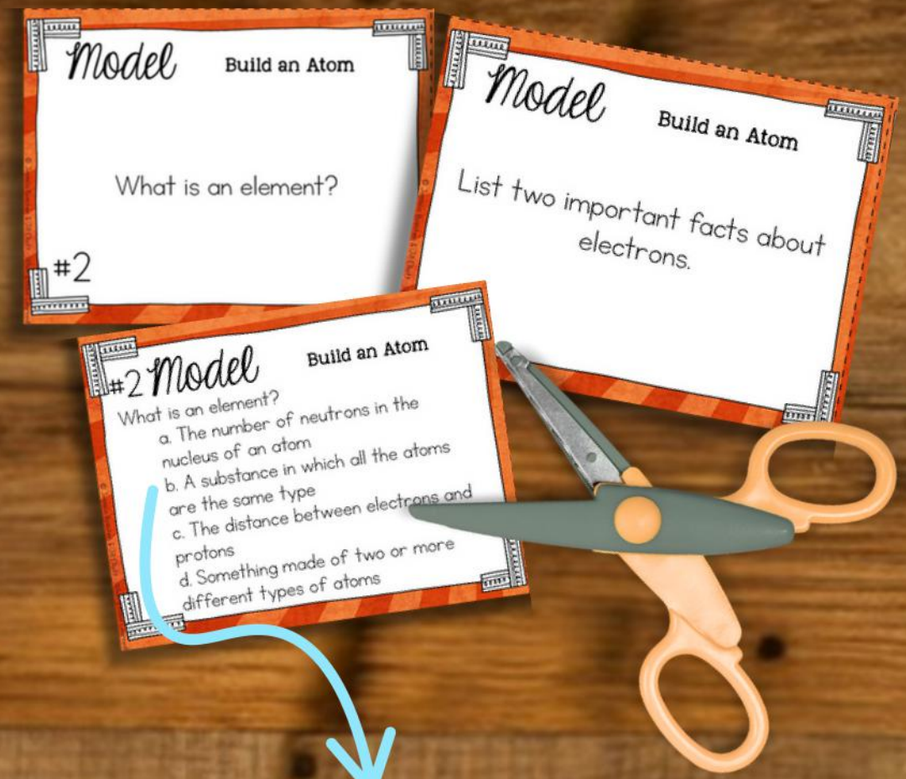
DIFFERENTIATED QUESTIONS



SHORT ANSWER



FILL-IN-THE BLANK

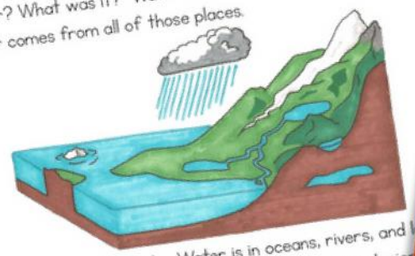


TASK CARDS: SHORT ANSWER & MULTIPLE CHOICE

Model

Precipitation

Did you drink water today? Where did you get it? You might say it came from your sink. But where was it before? A lake or river? What was it? Water or snow? The answer is...yes. Water comes from all of those places.



Water is part of a cycle. Water is in oceans, rivers, and l
It is also frozen in snow. Some frozen water is in glacier



Model

Precipitation

Water in ice melts. It makes streams. Streams join together to make rivers. A **river** is a body of water that moves from one place to another. Rivers move downhill. They empty into lakes and oceans.



The sun heats th
oceans. It cause
gas. Liquid water
into the air.



Periodic Table of Elements

BACKGROUND
- metals
- metalloids
- nonmetals

CHEMICAL SYMBOL
- solid Na
- liquid Hg
- gas ◎

Model

Build an Atom

Student Instructions

In this activity, you will build several atoms.

M&M Option

Directions:

1. You will use M&Ms to build atoms according to the follow
colors:
Red M&Ms--Protons
Yellow M&Ms--Neutrons
Blue M&Ms-Electrons
2. You will use the periodic table to find the number c
protons and electrons. (Remember: The number
protons equals the number of electrons.)
3. Place the correct numbers of M&Ms represent
protons and neutrons in the nucleus. Place the
number of M&Ms representing the electrons
nucleus.
4. Use your colored pencils to draw this
sheet.

Name _____ Activity Sheet

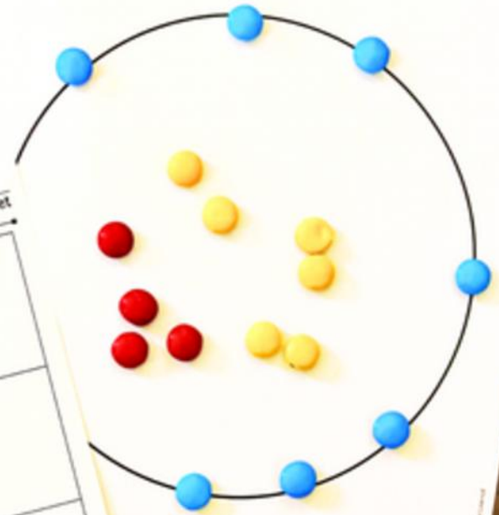
Model Atoms Sheet

Hydrogen Chemical Symbol: H Number of Protons: 1 Number of Electrons: 1 Number of Neutrons: 0	
Helium Chemical Symbol: He Number of Protons: 2 Number of Electrons: 2 Number of Neutrons: 2	
Nitrogen Chemical Symbol: N Number of Protons: 7 Number of Electrons: 7 Number of Neutrons: 6	
Neon Chemical Symbol: Ne Number of Protons: 10 Number of Electrons: 10 Number of Neutrons: 12	
Sodium Chemical Symbol: Na Number of Protons: 11 Number of Electrons: 11 Number of Neutrons: 12	

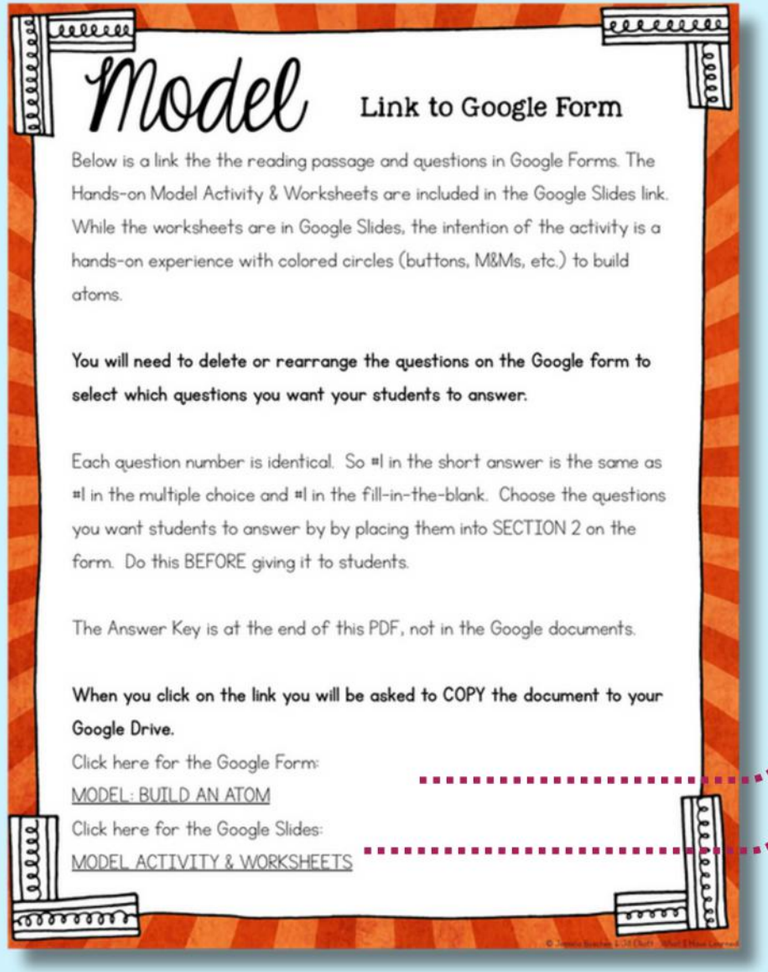
Model Atoms Sheet

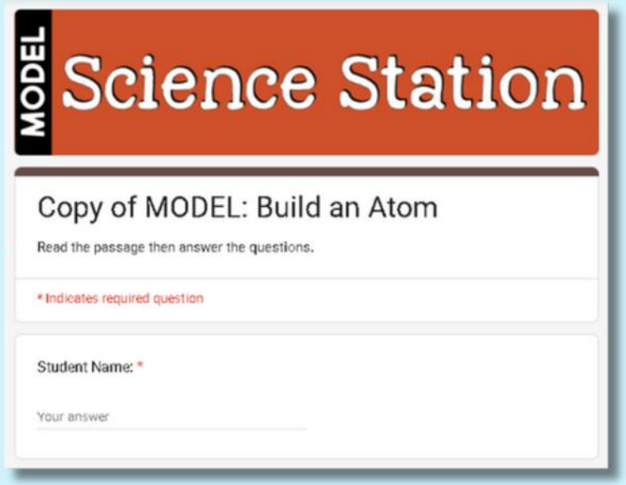
Name _____ Building Shee

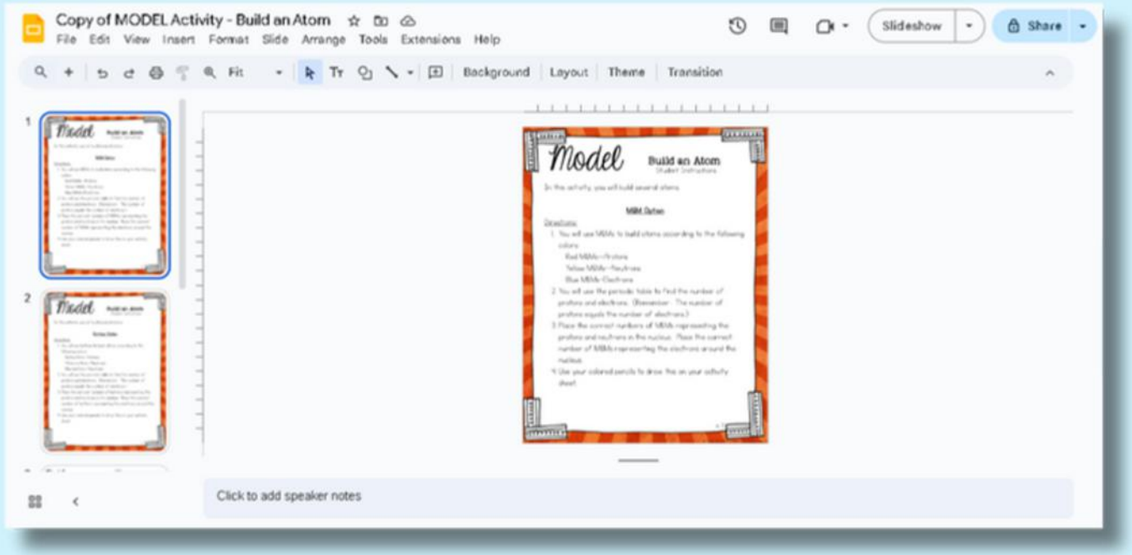
Use this sheet to build your atom. Draw your atom on the Activity Sheet



DIGITAL VERSIONS







DIGITAL VERSIONS

- ✔ Google Sheet with Activity & Directions
- ✔ Google Form with Reading & Questions

Answer keys provided

YOU WILL LOVE THIS BECAUSE



Hands-On Learning

Students actively build atom models, making abstract science concepts concrete, memorable, and meaningful through hands-on exploration and practice.



Differentiated Options

Multiple question formats, worksheets, and digital activities provide support for all learners, while challenging students who are ready for more.



Teacher-Friendly Design

Includes notes, answer keys, and ready-to-use activities that reduce prep time while ensuring standards-based, engaging science instruction.

TEACHERS LOVE IT!

★★★★★

I used this resource with my 5th grade STEAM classes. I was a very helpful addition to our unit. I will be using it again.

Tina H.



★★★★★

I loved using this resource with my self-contained LLD class. It helped the students understand the model of an atom tremendously, and even with middle school students - they loved playing with play-doh for it! Thank you!

Shana C.



My passion is making learning accessible to all students.
I love scaffolding learning, breaking down the concepts and building them up so that students can see the connections.
I love figuring out the small components that build up to the big ideas and helping students see it all.



teach MATH | teach SCIENCE | teach READING | teach WRITING

What I have LEARNED