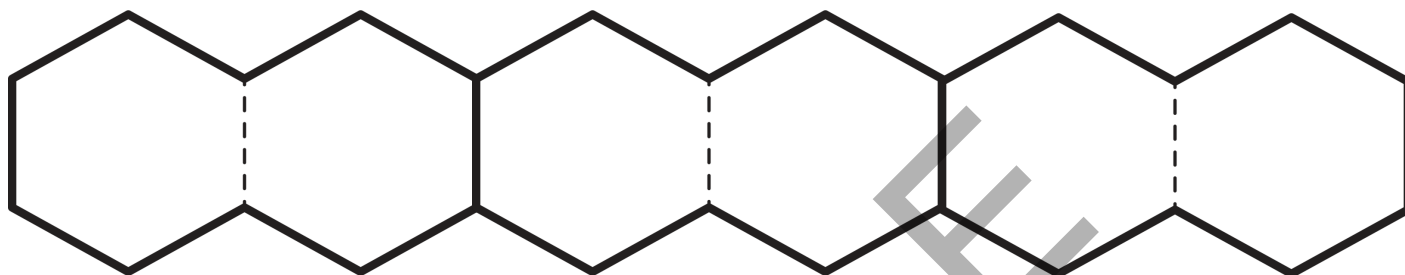


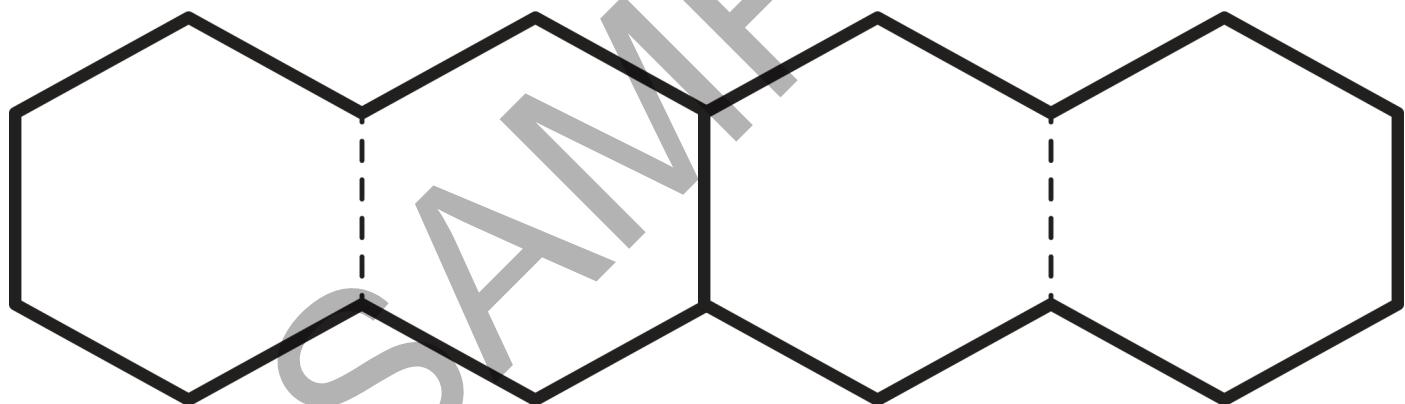
Elements, Compounds, and the Periodic Table Notebook

A single hair is more than how many times thicker than a single atom? _____

What are the three main subatomic particles called, and what kind of charge does each one have?



What are the names of two other additional types of subatomic particles, and what smaller particles do they include?



What is in the nucleus of an atom? _____

What do electrons do? _____

What keeps them spinning around it? _____

Illustrate an atom and label the protons, neutrons, electrons, and nucleus.



What are the layers electrons revolve in called? _____

The shell closest to the nucleus can never hold more than how many electrons?

How many electrons can the second, third, and fourth shell hold? _____

Do the shells have to be filled? _____

What is an atomic number? _____

Most naturally-occurring atoms do not have more than how many protons? _____

What is a mass number? _____

Illustrate a calcium atom with a mass number of 40.

How many kinds of atoms make an element? _____

Some element symbols, such as Pb for lead and Na for sodium, come from what kind of names?

What are variations to elements called? _____

How do scientists determine the relative atomic mass of an element? _____

On the following pages, draw a picture of the first twenty elements on the periodic table. Be sure to include the element's name, symbol, atomic number, and mass number. Include an illustration of something the element is used in. It can be what is shown in the unit or another idea if you'd like. In the box to the right of each picture, summarize what you learned about it including what it is used for, etc.

A worksheet template consisting of four rows of rounded rectangular boxes. Each row contains two boxes, one on the left and one on the right, separated by a vertical dashed line. A large, light gray watermark reading "SAMPLE" is oriented diagonally across the center of the page.