

Teacher's Guide

Relationship Between Atoms and Elements Intro Activity

Students will:

- use models of atoms and elements to illustrate that matter is made of atoms and elements and that they are “distinguished from each other by the types of atoms that compose them”.

There are 8 cards that represent different atoms. There are 8 more cards that represent the elements that the atoms make up. By observation and explorations, students will discover that atoms and elements are distinguish from each other by the type of atoms they are made of.

Setup Tips:

Students can work individually, in partners, or in groups.

1. You can choose to print out the cards for each person/pair/group for students to look through and explore.
2. There is also another option to just print them on a sheet of paper, front and back, if you are looking to save time, ink, and paper.
3. You will also need to make copies of the student sheet. An example answer key is provided!

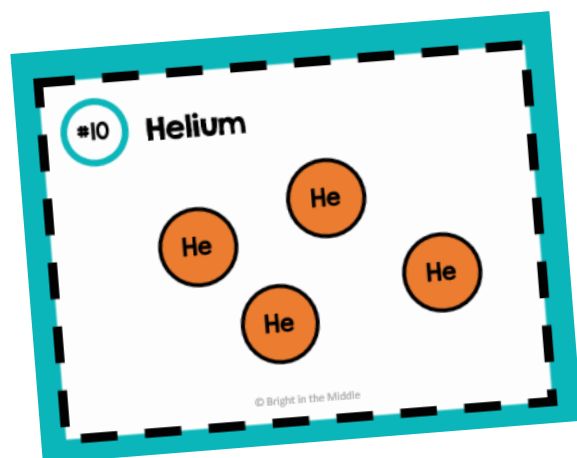
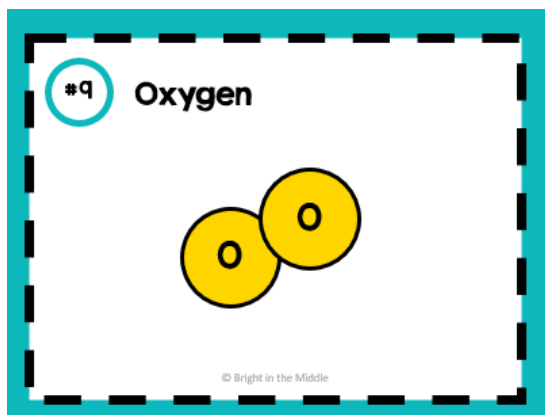
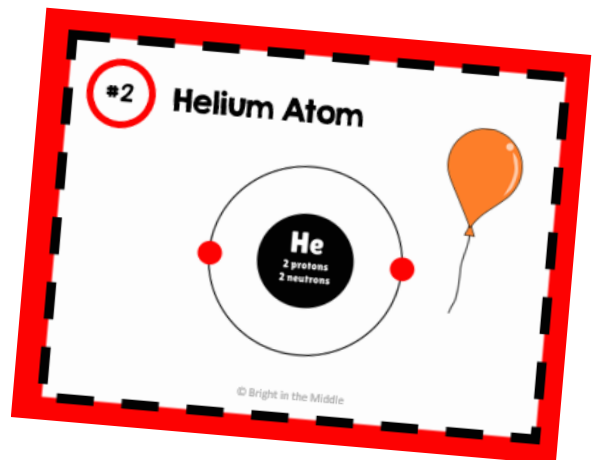
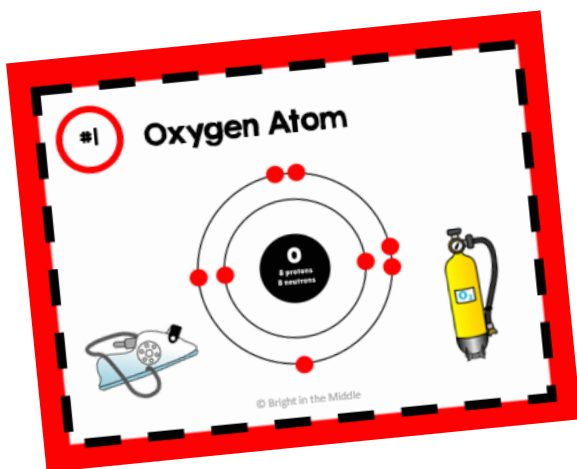
Students can read through the information and questions on the worksheet. Through this, they should determine the similarities and differences between atoms and elements. They will also look at their relationship with matter.

Key Takeaways:

- Atoms are different from each other based on their subatomic particles. If you want to introduce students to protons, neutrons, and electrons, feel free!
- “Matter is made of atoms and elements and are distinguished from each other by the types of atoms that compose them”.
- If you want to make students aware at the end, you can tell them that the number of protons in an atom determines the atom/element.

After, students can explore [atoms](#) or [atoms and elements](#).

There are 8 cards that represent different atoms. There are 8 more cards that represent the elements that the atoms make up.



*** also in black and white**

Name _____

Date _____

Atoms and Elements

Matter is anything that has mass and takes up space. It makes up everything!
Examples of matter include oxygen, a soda can, toothpaste, a spaceship, and more.

Matter is made up of atoms.

Cards #1-#8 represent different atoms. Look at each one, and record your observations below.

What do you notice about the atoms?

What are the similarities between the atoms?

What are the differences between the atoms?

over 100 types of atoms!

uped with other atoms of the
they make up elements.

rent elements. Each circle represents
and record your observations below.

ts?

between the elements?

© Bright in the Middle

© Bright in the Middle

The student sheet will guide students (through observation and exploration) to ultimately learn that “matter is made of atoms and elements and are distinguished from each other by the types of atoms that compose them”.

An example key is included!