

Name: \_\_\_\_\_

# Bill Nye: Atoms

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## Vocabulary

atom	electron	element	matter	molecule	neutron	nucleus	proton	quark
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Use the word bank above to fill in the blanks.

1. Anything that has mass and takes up space is \_\_\_\_\_.
2. A positively charged particle in an atom is the \_\_\_\_\_.
3. A(n) \_\_\_\_\_ is the smallest unit of a chemical compound that retains the properties of the compound.
4. A(n) \_\_\_\_\_ is matter that is composed of only one kind of atom.
5. A negatively charged particle in an atom is the \_\_\_\_\_.
6. A(n) \_\_\_\_\_ is the smallest particle of an element that retains the properties of that element; the building blocks of matter.
7. A particle with no charge that is found in an atom is the \_\_\_\_\_.
8. An elementary particle that makes up protons & neutrons is a(n) \_\_\_\_\_.
9. The \_\_\_\_\_ is the core of the atom, made up of protons & neutrons.

## Knew/New

Write down 3 things you already knew about chemical reactions that were confirmed through watching the video:

- 1.
- 2.
- 3.

Write down 3 new things that you learned from watching the video:

- 1.
- 2.
- 3.

## Episode Guide

1. What does the Greek word for atoms mean? \_\_\_\_\_
2. The heavy particles of an atom are located \_\_\_\_\_.
3. Atoms are mostly made up of \_\_\_\_\_.
4. \_\_\_\_\_ & \_\_\_\_\_ are located in the nucleus of an atom.
5. Where are the electrons found? \_\_\_\_\_
6. Atoms are so small that you could fit how many on the head of a pin? \_\_\_\_\_
7. What makes 1 atom different from another? \_\_\_\_\_
8. What does the atomic number tell you about an element? \_\_\_\_\_
9. Anything that is not matter is a form of \_\_\_\_\_.
10. What element is found in every living thing? \_\_\_\_\_

## True or False

- |   |   |    |   |
|---|---|----|---|
| 1. Atoms are mostly empty space.  | T | or | F |
| 2. Each element has a specific number of protons in the nucleus.                  | T | or | F |
| 3. Electrons are the largest particles in an atom.                                | T | or | F |
| 4. A branch of chemistry is named after oxygen.                                   | T | or | F |
| 5. Heat is a form of matter.  | T | or | F |
| 6. Neutrons are negatively charged.   | T | or | F |
| 7. A quark is a small particle that makes up protons & neutrons.                  | T | or | F |
| 8. The atomic number tells you the number of electrons in the nucleus of an atom. | T | or | F |
| 9. Energy is anything that has mass & takes up space.                             | T | or | F |
| 10. Protons & electrons make up most of the mass of an atom.                      | T | or | F |