

Name: _____

Bill Nye: Atoms

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 |