Assessment Date:____/____/_____ Student:_____ Examiner:_____

Words Read Correctly (WRC): _____ Errors: _____ Notes: _____

Solids, Liquids and Gases

We have begun to learn in Science that matter is made up of atoms and 15
molecules. Millions and millions of these tiny objects fit together to form larger 28
things like animals and planets and cars. Matter includes the water we drink, 41
the air we breathe, and the chair we are sitting on. 52

States or Phases 55

Matter usually exists in one of three states or phases: solid, liquid, or gas. The 70
chair you are sitting on is a solid, the water you drink is liquid, and the air you 88
breathe is a gas. 92

Changing State 94

The atoms and molecules don't change, but the way they move about does. 107
Water, for example, is always made up of two hydrogen atoms and one oxygen 121
atom. However, it can take the state of liquid, solid (ice), and gas (steam). 135
Matter changes state when more energy gets added to it. Energy is often 148
added in the form of heat or pressure. 156

Water 157

Solid water is called ice. This is water with the lowest energy and temperature. 171
When solid, the molecules in water are held tightly together and don't move 184
easily. 185
Liquid water is just called water. As ice heats up it will change phases to liquid 201
water. Liquid molecules are looser and can move about easily. 211

Gas water is called steam or vapor. When water boils it will turn to vapor. 226
These molecules are hotter, looser, and moving faster than the liquid 237
molecules. They are more spread apart and can be compressed or squished. 249

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States or Phases

Matter usually exists in one of three states or phases: solid, liquid, or gas. The chair you are sitting on is a solid, the water you drink is liquid, and the air you breathe is a gas.

Changing State

The atoms and molecules don't change, but the way they move about does. Water, for example, is always made up of two hydrogen atoms and one oxygen atom. However, it can take the state of liquid, solid (ice), and gas (steam). Matter changes state when more energy gets added to it. Energy is often added in the form of heat or pressure.

Water

Solid water is called ice. This is water with the lowest energy and temperature. When solid, the molecules in water are held tightly together and don't move easily.

Liquid water is just called water. As ice heats up it will change phases to liquid water. Liquid molecules are looser and can move about easily.

Gas water is called steam or vapor. When water boils it will turn to vapor. These molecules are hotter, looser, and moving faster than the liquid molecules. They are more spread apart and can be compressed or squished.