Matter. The substances that make up the material universe are spoken of as matter. Matter occurs or may occur, according to present views, in 93 forms known as elements, together with an increasing number of variations of each element. According to chemical theory, matter may be reduced to particles known as molecules, which may contain one or several elements.

The substances around us, desk and chair, pen and paper, rock and tree, are composed of molecules, the smallest particle belonging to the world which we may know directly. Molecules in turn are composed of atoms, of another order of world than the one we live in; and atoms are composed of electrons which are yet farther beyond the reach of man. The reduction of matter to electrons is one of the recent, as well as one of the greatest, conquests of science. It is believed that by a rearrangement of electrons, one element may be transmuted into another. In nature a few elements of the higher molecular weight are being degraded passing through the condition of several elements. Some little progress has been made also in that direction with elements of lower atomic weights. The amount of such change seems, however, to be infinitesimal. No transformation of elements of any consequence is going on in our world.

Slowly, some understanding is being won of the subatomic world, and more and more men are coming to believe that all things, great or small, are but manifestations of the one primordial substance or condition, not yet within the understanding of man. This view has progressed so far that many clear-thinking persons hold that matter in its last state may be converted into energy, and is but a form of energy.

Energy. Energy is also found in the universe. It is in constant association with matter. Just as matter occurs in various forms, so energy appears in many forms, as light, heat, electricity, magnetism, x-rays, cosmic rays, and many others. All appear to be so closely related as to be suspected of being drawn from one source. Especially does the unity of all energy seem reasonable in view of the established fact that the various forms of energy may be converted one into another. Light may be changed to heat, heat to light, mechanical energy to electricity and electricity to mechanical energy, and so forth, throughout the whole range of the manifestations of energy. Those who believe that matter may fade away into energy, also hold that energy may appear as matter-that the two are interchangeable.

Personal Intelligences. The Church accepts the certain facts of science as won by patient seekers after truth, and holds in respect the changing inferences set up in the attempt to explain the increasing accumulation of facts. It does not affirm or deny the correctness of modern views regarding the ultimate nature of matter and energy; though it leans, from glimpses of revealed truth, to the doctrine of one ultimate element from which matter and energy are derived.

The Church does set up, however, the doctrine that there are found in the universe personal individual intelligences. Each of these is characterized by the possession of a will, which may be used by the individual in the attempt to accomplish a definite purpose. These intelligences have the power to operate upon the other contents of the universe-matter or energy-and must be placed by the side of matter and energy as constant ingredients of the universe.

Such personal intelligences are found on earth. Among them are the men and women forming the human family. Personal intelligences are also found in the invisible or spirit world, and constitute the intelligent portion of the "unseen world."

The Church holds therefore that the contents of the universe may be divided into two classes, personal intelligences and the contents of the universe upon which these intelligences act. These
are two universal realities.

The "Force" of Intelligence. Under this conception the innumerable phenomena of the universe are derived from the interplay of personal intelligences and the other contents—matter and energy—of the universe. Personality implies life, and life is characterized by action. The whole story of the universe may be told in the actions of personal intelligences upon matter and energy. The existing condition of the universe is the present net result of such interaction.

This is to say that whatever has happened, does happen or will happen is the effect of intelligent direction. Back of every phenomenon is a personal intelligence. The "force" of intelligence permeates the universe. The forces of nature, thunder and lightning, the rolling sea and the quaking earth, life of plant and beast, are but manifestations of the personal intelligences of the universe. In fact, some thinkers have identified the forces of nature with the universal force of intelligence, making them one and the same. The forces of the universe do not then act blindly. Behind all the happenings of life must lie an intelligent purpose. The force of intelligence is drawn from a personal source.

The distinction between a personal intelligence and the operations of it must be clearly drawn. God, the Supreme Intelligence, is a personal intelligence; His influence which extends throughout the universe is known as the Holy Spirit. (Do not confuse with the Holy Ghost, which is a person.)

The "Reign of Law." There are in the universe also many unchanging relationships, recognized by personal intelligences, as being beyond modification. For example, the simple formula that two and two make four can not be changed by any personal intelligence, however high. It is probable also that the law of cause and effect is of the same eternal nature, that is, no matter where or how often the same conditions are set up, if exactly alike, the result will be the same. Straight human thinking can not endure any other conclusion, though some modern thinkers have tried to cast doubt upon the law of cause and effect.

Certainly, there are some relationships that seem unchanging to human experience, yet may be subject to change by a person of higher intelligence. The earth revolves upon its axis in twenty-four hours, and has done so during recorded time. If present conditions are changed, the time of rotation may be modified. Conceivably the intrusion of the will of a sufficiently powerful personal intelligence might at any time affect a change in the earth's time of revolution. Such an action would not, however, affect the validity of universal law.

Man lives under law; it is supreme; he cannot change or escape it. The best that he or any other personal intelligence can do is to use it to his own ends. Happiness is conditioned upon the recognition of law and obedience to law. Failure to do this leads to destruction.

The Ultimate Elements. The preceding paragraphs may be summarized by saying that the ultimate elements of the universe are: 1. Matter-Energy; 2. Personal Intelligences; 3. Unchanging Relationships. Personal intelligences are forever acting upon the matter-energy, but the results cannot go beyond the eternal relationships among the things of the universe. Thus, the personal intelligences of the universe are free to combine and recombine the matter-energy of space but in their work are limited by the inherent possibilities of the materials with which they work.

This does not really limit the power of intelligent beings; it rather directs their procedure toward a desired end. Were there no such restrictions placed upon intelligent action, chaos would rule the universe. Hence, Latter-day Saints seek out the laws of nature and by obeying them are aided in their onward journey.

The Indestructible Universe. The contents of the universe are indestructible. Changed they may be by a personal intelligence, as a mason lays brick upon brick to make a house or a bridge, but no further control has intelligence over matter or energy. As already said, some believe that matter may disappear into energy, and that energy may appear as matter, but, though they may be so, an equivalence remains, so that the same quantity of matter will produce the same quantity of energy or vice versa. As far as our daily life upon earth is concerned, the laws of the conservation of mass and energy, modified to meet recent knowledge, are in full operation.

The personal intelligences of the universe are also indestructible. They are also eternal "elements" of existence. That implies that man, one of these personal intelligences, is eternal, everlasting. He
"was also in the beginning with God" (D.& C. 29:31, 32; 76:12, 13; 49:17; Moses 3:5-7), therefore of eternal duration, into the ages backward as forward from life on earth.

As a necessary deduction from this doctrine, man lived before he came upon earth. He had a preexistent life. Preexistence is a settled doctrine of the Church, which helps to explain many things connected with earth life, which otherwise would seem difficult to comprehend.

Supplementary Readings

Questions and Problems
1. In what sense does man control the laws of nature?
2. In what sense are moral and mental laws as definite and binding as physical laws?
3. What is meant by matter, element, molecules, atoms, electrons? What are their relationships?
4. What is the attitude of the Church with respect to scientific investigation?
5. In what manner may the validity of a theological doctrine be supported by scientific proof?
6. How does the statement that "the forces of the universe do not then act blindly" (p.191) imply design and purpose in the universe?
7. What is your reason for believing that happiness and wellbeing result from obedience to law, and that sin and sorrow result from violation of law?
8. In the light of your study of this chapter, why do you agree with the pronouncement of the Prophet Joseph Smith, that "Man is saved no faster than he gains knowledge"?
9. How does belief in the indestructible nature of the contents of the universe imply the eternal nature of human personality?
10. Justify belief in the doctrine of preexistence.