[INSERT SCHOOL LOGO]

*The mission of Redeemer Christian School is to assist parents in the process of educating mature Christian young people whose character and conduct reflect Jesus Christ and bring glory to God.*

**CURRICULUM SCOPE AND SEQUENCE**

**Curricular Area:** Science

**Application of School Mission Statement:** Learning science from a biblical worldview fulfills the RCS mission statement in several ways. True science is comprehension and explanation of God’s creation in order to fulfill the dominion mandate. True science submits to the authority of the 66 books of the Christians Scriptures so that any conclusions which contradict a regular reading of the Bible must be deemed false and revisited until it does not contradict the Bible. True science is only accomplished to its proper end under the Lordship of Jesus Christ. True science results obedience to the great commission and the ten commandments as the ultimate expression of loving one’s neighbor as one’s self because all people are made in the image of God. True science results in ethical implications for human sexuality, gender roles and distinctions, and the value of human life as all people transcend the animal world as image bearers.

**Application of School Vision Statement:** Learning science from a biblical worldview accomplishes the RCS vision statement because it is established upon a redeeming faith, redeems time by providing Christian education, and redeems culture by providing productive Christian members of society.

**Purpose of science at Redeemer Christian School:** is to assist parents in the process of educating mature Christian young people whose character and conduct reflect Jesus Christ and bring glory to God.

**Biblical Truths Related to math:**

* God’s Lordship over science is the basis for fulfilling the dominion mandates: “*Then God said, “Let Us make man in Our image, according to Our likeness; and let them rule over the fish of the sea and over the birds of the sky and over the cattle and over all the earth, and over every creeping thing that creeps on the earth.” God created man in His own image, in the image of God He created him; male and female He created them. God blessed them; and God said to them, “Be fruitful and multiply, and fill the earth, and subdue it; and rule over the fish of the sea and over the birds of the sky and over every living thing that moves on the earth.” Then God said, “Behold, I have given you every plant yielding seed that is on the surface of all the earth, and every tree which has fruit yielding seed; it shall be food for you; and to every beast of the earth and to every bird of the sky and to every thing that moves on the earth which has life, I have given every green plant for food”; and it was so*” (Gen. 1:26–30).
* God’s Lordship over science means that mankind can accomplish great scientific feats when in submission to God’s word: *“There shall be no one miscarrying or barren in your land; I will fulfill the number of your days*” (Exod. 23:26). “*‘Indeed, your threshing will last for you until grape gathering, and grape gathering will last until sowing time. You will thus eat your food to the full and live securely in your land*” (Lev. 26:5).
* God’s Lordship over science means that the Christian can be effective in evangelism through learning: “*but sanctify Christ as Lord in your hearts, always being ready to make a defense to everyone who asks you to give an account for the hope that is in you, yet with gentleness and reverence*” (1 Peter 3:15).
* God’s Lordship over science means that men and women can rejoice in both their genders and gender roles because they have been gifted from God’s himself: “*For this reason a man shall leave his father and his mother, and be joined to his wife; and they shall become one flesh*” (Gen. 2:24 cf. Eph. 5:31).

**Philosophy of Teaching Mathematics at Redeemer Christian School:** as expressed more fully in the RCS Philosophy Statement, *the earth is the Lord’s,* which also means that creation, including the bodies of people themselves belong to God. God created all thing in six literal days of twenty four hours each. Any view of science outside of literal creationism devolves into atheism when consistently carried out, and destroys the Christian faith. Thus, a Christian philosophy of Science is necessary for fulfilling the great commission, the dominion mandate, and recognizing the intrinsic value of human life above all other life within the created order.

**Grade Levels, Overview, Topics/Units with Key Concepts, Standards, and Materials**

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| **Grade Level** | **Overview** | **Topics/Units with Key Concepts** | **Standards** | **Materials** |
| **K** |  |  |  |  |
| **1** | Alphabet; Animals | This level of Animal Science is a welcome companion to the ABCs with Ace and Christi program. It incorporates pictures to illustrate the animal stories and alphabet sounds. Also included are a variety of activities to develop the small motor muscles, eye-hand coordination, and visual discrimination.  | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets; Counting Block; Abacus |
| **2** | Continued study on animals | In each PACE students study a specific animal. The student learns about sheep, dogs, horses, cats, cattle, rabbits, rodents, poultry, unusual birds, spiders, snakes, toads, and frogs. Each is presented in interesting story form. As appropriate, Scripture reference to these animals is provided.  | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **3** | Solar System; Plant Life; Time; God’s Sovereignty over all | Observes the faithfulness of God while learning about the solar system. Learns about the concept and measurement of time. Learns about animal and plant life cycles. Recalls and continues the study of God’s Creation. Studies Bible topics such as Jesus’ return; sin, death, and the curse; man’s freedom to choose to love and obey God. Read stories using new vocabulary and visual discrimination. Looks at geological changes after the Flood—jungles and hot lands, tundra and cold lands, volcanoes and earthquakes. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **4** | Water Science; Flight | Learns about the water cycle—condensation, evaporation, precipitation, cloud shapes, and the characteristics of air and water. Studies living and nonliving matter, gravity, minerals and their uses, plants’ needs, and plant conservatories. Identifies simple machines. Learns about respiration and blood circulation, the diaphragm and heart, digestion and saliva. Focuses on good hygiene and teeth; bacteria, viruses, and fungi; and the design and function of the skin. Is introduced to early men of science. Studies rockets and airplane flight. Understands the need for exercise, sleep, and proper nutrition for the human body. Is encouraged in character development through examples given in each PACE. Continues to add new vocabulary words. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **5** | Matter; Energy; Human Anatomy; Molecules | Explores living and nonliving matter and active, dormant, and extinct volcanoes. Learns about energy—work, force, kinetic, potential, and radiant energy. Studies oceanography, astronomy, comets, and the aurora borealis and aurora Australis. Studies the outer, inner, and middle ear; hearing difficulties; and vibration, pitch, and frequency of sounds. Studies molecular and atomic theories; friction, heat, and gravity; and expansion and contraction. Views dinosaurs and fossils from a Biblical perspective. Learns the relationship between the Bible and botany, meteorology, and zoology. Discovers the Bible to be the final authority in scientific matters. Learns new vocabulary words in each PACE. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **6** | Magnatism; Elements; Electricy | Expands his vocabulary base with the addition of new vocabulary words. Explores the theories, properties, and laws of magnetism, and the uses of magnets; acids, bases, elements, solvents, solutes, and solutions in chemistry; higher and lower plants, and the process of photosynthesis. Looks at the history, nature, and uses of electricity; chemical, mechanical, and nuclear sources of electricity and measuring electricity. Learns about the central nervous system, the senses, the structure and function of the skeletal and muscular systems, infectious and noninfectious diseases, treatment of and defense against diseases, and digestion and nutrition. Builds knowledge of previously introduced character traits. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **7** |  Continue in human anatomy; animals; ecology | Continues exploring the skeletal and muscular systems, different types of viruses, bacteria, algae, and fungi. Studies characteristics of birds and mammals and botany—the needs, conducting, and reproductive systems of plants. Learns about simple and complex invertebrate animals, the structure and characteristics of vertebrates, embryos, inherited traits, gene functions, and alterations. Studies ecology—balance and cycles of nature, biomes, effects of water and air pollution, and how pollution can be controlled. Increases vocabulary with the introduction of new words in each PACE. Is encouraged in character development through examples given in each PACE and expands his ability to use each of these Godly traits in real-life situations. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **8** | Creationism; atmosphere | Explores the wonders, resources, and cycles of God’s Creation. Searches proofs of Creation and the Flood. Studies astronomy—the stars, familiar and unusual, their purpose and message, and planets of the solar system. Learns about the structure and measurable qualities of Earth’s atmosphere, climates, weather factors and forecasting, and the hydrosphere. Looks at the foundations of the world—Earth’s layers, topography and mapping of the world, soil formation and conservation, and weathering and erosion. Discovers Earth’s buried treasures—understanding, classifying, using, and appreciating our mineral resources. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **9** | Continued human biology, creationism; animal studies  | * Views the wonders of the Creator as he studies the structure and function of man’s skin, skeleton, and muscles; the central nervous system; blood and circulation; nutrition and growth. Observes scientific proof for Creation of fish, amphibians, reptiles, and invertebrates. Examines mammals—their characteristics, migration, and hibernation; groups and body structure of birds; characteristics and classification of plants. Learns the system of scientific classification. Uses character stories to apply Scriptural principles to everyday situations.
 | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **10** | Baconian Science; Newtonian Physics | Learns the scientific method and notation, powers of ten notation, significant figures; homogeneous and heterogeneous substances; air and atmospheric pressure, pressure and density of gases; formation of chemicals, elemental periods and families; metals and metalloids. Studies laws of motion and gravity, light, electricity, and modern physics. Applies Scriptural principles to everyday situations. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **11** | Chemistry | Examines the history and development of chemistry, careers and fields of study, nuclear chemistry and biochemistry, chemical reactions and balancing equations, acids and bases, the four phases of matter, molecular bonding, and the Periodic Table of Elements. Learns about thermodynamics and quantitative and qualitative analysis. Uses “Teen Life Principles” to apply wisdom to everyday situations. | Pass each unit’s exam with a minimum grade of 80% | Twelve PACE booklets |
| **12** | Nuclear Science | Studies radiation and nuclear energy, heat energy and temperature, conduction, and convection. Studies electrochemistry, wave motion and sounds, the Doppler effect, and optics and optical instruments. Investigates states of matter—force, motion, gravity, momentum, and energy. Reinforces learned concepts by review. Learns to apply Scriptural principles to everyday situations. | Pass each unit’s exam with a minimum grade of 80%Prerequisite: Algebra I, & Physics | Twelve PACE booklets |