The Creation Controversy & the Science Classroom

Modern Science and the Book of Genesis
James W. Skehan S.J., Ph.D.
Director and Professor Emeritus
Weston Observatory, Department of Geology and Geophysics
Boston College

Effective Strategies for Teaching Evolution and Other Controversial Topics
Craig E. Nelson, Ph.D.
Professor, Department of Biology
Indiana University

Copyright © 2000 NSTA. All rights reserved. For more information, go to www.nsta.org/permissions.
# Contents

**Foreword** ................................................................. viii

**Modern Science and the Book of Genesis** ............................. 1

- Creationism and Teachers ........................................... 2
- How Knowledge Has Evolved Through Time ..................... 4
- Fundamentalism and Fundamentalist Religion .................... 5
- What the Bible Teaches ............................................... 6
- The Genesis of Genesis ............................................... 6
  - External Evidence .................................................. 7
  - Internal Evidence .................................................. 8
  - About Documentary Hypothesis ............................... 9
- The Age of Earth as Interpreted from the Bible .................. 10
- New Data: Evidence from the Earth ............................... 11
- Evidence from the Creatures ........................................ 13
- Creationism versus Science ....................................... 14
  - Creationism: The Appeal to Authority ....................... 14
  - Science: The Appeal to Evidence ............................. 15
- Two Kinds of Knowledge ............................................. 16
- Notes ........................................................................... 17
- References .................................................................... 17

**Effective Strategies for Teaching Evolution and Other Controversial Topics** ........................................ 19

- Problems That Arise from Traditional Pedagogy in Science 20
  - Didactic pedagogy and passive learning lead to limited and temporary understanding of science ... 22
Problems That Arise from Traditional Content and Curricula in Science ........ 23

We often appear to present all topics in science as equally well supported ................................................................. 23

In “covering the material,” we often present just the conclusions, leaving out the underlying critical thinking ................................................. 25

Often, we do not help students learn to compare the strengths of disparate scientific ideas ......................................................... 26

We often use words in ways that are contradictory to common usage .................................................................................... 30

Two Problems That Arise from Outside Traditional Pedagogy and Content ................................................................................................. 30

Public controversies usually rest on disagreements about consequences .............................................................................. 31

Students often want us to just tell them what to memorize ............................................................................................ 36

Summary ........................................................................................................................................................................... 37

Notes............................................................................................................................................................................... 47

References....................................................................................................................................................................... 47

An NSTA Position Statement:
The Teaching of Evolution .................................................................................................................................................... 51

Introductory Remarks ..................................................................................................................................................... 51

The Nature of Science and Scientific Theories .................................................................................................................. 52

Evolution as a Unifying Concept .................................................................................................................................... 53

Creationism ..................................................................................................................................................................... 53

Legal Issues ................................................................................................................................................................... 54

References....................................................................................................................................................................... 55

Recommended Readings .................................................................................................................................................. 56
About the Contributors

James W. Skehan S.J., Director and Professor Emeritus, Weston Observatory, Department of Geology and Geophysics, Boston College, received a Ph.D. in Geology from Harvard University, 1953; S.T.B., Bachelor of Sacred Theology; M. Div., Master of Divinity; and S.T.L., Licentiate in Sacred Theology, Weston Jesuit School of Theology, 1954 and 1955. He has been active in research on geological correlations on the North American, European, and African margins of the Atlantic Ocean, and on assembly and dispersal of supercontinents. He is a past president of the International Division of the Geological Society of America.

Craig E. Nelson, Professor of Biology at Indiana University, received a Ph.D. in Zoology from University of Texas in 1966. He has worked extensively with high school biology teachers, especially as co-director of the NSF-sponsored Evolution and Nature of Science Institutes for in-service high school biology teachers (1989–95). He also offers a graduate course, “Alternative Approaches to Teaching College Biology,” and has received awards for distinguished teaching from Indiana University, Vanderbilt University, and Northwestern University. His biological research has addressed several questions in evolution and evolutionary ecology.

Gerald Skoog is a past president of the National Science Teachers Association and Helen DeVitt Jones Professor, Curriculum and Instruction, College of Education at Texas Tech University. Skoog, author of numerous science textbooks, chaired the committee to draft NSTA’s current position paper on the teaching of evolution, and in January 2000 was selected to the Texas Science Hall of Fame.
Acknowledgements

**Dr. Skehan:** I acknowledge Gerald Skoog, past president of the National Science Teachers Association, who, during his service as resident (1985–86), recognized the potential for mischief that the creation science movement represented in the lives of teachers of science. Although unforeseen at the time, the original edition of “Modern Science and the Book of Genesis” was also a fringe benefit for many teachers of religion who had little background in science.

In particular I acknowledge the continued encouragement that I have received from Albert W. Bally, Professor Emeritus, Department of Geology and Geophysics of Rice University, to answer “scientific creationists” who have succeeded in holding up the teaching of some major advances in geological science. I also acknowledge input from Henry Carthers Wiess, Professor of Geology, and past president of the Geological Society of America, who wrote the introduction to the 1986 edition. I am also very grateful to Frederick L. Moriarty S.J., Professor Emeritus, Weston Jesuit School of Theology, and Department of Theology, Boston College, for reviewing this manuscript as well as the 1986 edition. I wish to acknowledge Erin Miller of the NSTA staff for her generous and congenial assistance during the production of the present book.

**Dr. Nelson:** My deepest debt is to my students who have been willing to tell me what they understood, what they didn’t, and where they were puzzled or bothered. I also have received immense help in thinking about these issues from Martin Nickels and Jean Beard, who co-directed the Evolution and Nature of Science Institutes with me, and from the many high school teachers who participated in those institutes. Extensive comments on the manuscript from John Labov of the National Research Council, several anonymous reviewers, Erin Miller at NSTA, and several of my colleagues at Indiana University (especially comments from Nancy Beecher and Eric Osnas) led to substantial improvements. Any remaining lapses and misjudgments are, of course, mine.

**NSTA** would like to thank the many people who contributed to the development of this book, including Gerald Skoog, John R. Staver, John Labov, Jeffrey D. Weld, Brad Williamson, Mary Liston Liepold, Lawrence Bellipanni, Margaret McIntyre, Mary Beavis, Dorothy Gabel, Frederick L. Moriarty S.J., Charles L. Drake, Preston Cloud, and William D. Sullivan S.J. *The Creation Controversy & The Science Classroom* is produced by NSTA Press: Shirley Watt Ireton, director; Beth Daniels, managing editor; Erin Miller, associate editor; Jessica Green, assistant editor; Anne Early, editorial assistant. Erin Miller is the project editor for *The Creation Controversy & The Science Classroom*. Copyediting by Cara Young; cover design by Linda Olliver.
Foreword

In using science to explain natural events, Copernicus, Galileo, and Darwin opened some doors that led many of their contemporaries to view the world in a different manner. Today, scientists open these doors at a faster pace, and the new knowledge that emerges often challenges traditional thought and poses ethical questions. For a variety of reasons, citizens may challenge the process and products of science in an uninformed manner. Because of the multifaceted consequences of the wrongful use of the conclusions and products of science, it is important that citizens have a voice in determining how science is used. However, this voice should be informed.

Despite its centrality to understanding the natural world and much of today’s research, evolution’s rightful place in the science curriculum has not been attained because of the persistent opposition of antievolutionists and their enablers. The opposition and enablement have been fueled by a lack of understanding of the methods of science and, too often, by an uninformed view of the purpose and context of Genesis and how it was written. Dr. Skehan, in this revision of his earlier important work, skillfully clarifies the differences in the basis of the claims of religion and science. In detailing the history and theological meaning of the book of Genesis, Skehan shows why Genesis is not the literal explanation for the nature and history of the natural world.

Students who repeatedly experience the strategies described by Dr. Nelson in this volume should gain a solid understanding of the nature of science. They will learn how to test claims and ideas in an informed manner, regardless of their origin. They will learn how to consider alternatives to various claims and the benefits and consequences of accepting or rejecting them. Also, Nelson shows the differences in how basic science and creationism answer important questions about the origin and evolution of the universe and life.

I am confident that this small volume will provide readers with additional understanding of the nature of science and the relationship between science and religion. Hopefully, this understanding and the use of the strategies will facilitate the professional practice of science teachers. These teachers have the immense task of preparing students for life and work in a century where advances in our understanding of the natural world continue to open doors that will challenge long-held views and pose difficult ethical questions.

Gerald Skoog
Helen DeVitt Jones Professor of Education
Texas Tech University
NSTA President, 1985–86
Modern Science and the Book of Genesis

James W. Skehan, S.J.

Many religious people, including scientists, hold that God created the universe and the various processes driving physical and biological evolution and that these processes then resulted in the creation of galaxies, our solar system, and life on Earth. This belief, sometimes termed theistic evolution, is not in disagreement with scientific explanations of evolution. Indeed, it reflects the remarkable and inspiring character of the physical universe revealed by cosmology, paleontology, molecular biology, and many other scientific disciplines.

The advocates of “creation science,” a proactive kind of Christian religion that purports to be scientific, hold a variety of viewpoints about the age of Earth. Some creationists claim that Earth and the universe are relatively young, perhaps only 6,000 to 10,000 years old. Some creationists believe that the present physical form of Earth can be explained by “catastrophism,” with a worldwide flood as one of the catastrophes, and that all living things (including humans) were created miraculously, essentially in the forms we see them today.

Other advocates of creation science are willing to accept that Earth, the planets, and the stars may have existed for millions of years. But they argue that the various types of organisms, and especially humans, could only have come about through supernatural intervention, because they show “intelligent design.”

There are no valid scientific data or calculations to substantiate the belief that Earth was created just a few thousand years ago. Independent scientific methods consistently give an age for Earth and the solar system of about five billion years, and an age for our galaxy and the universe that is two to three times greater. The conclusions derived from these methods make the origin of the universe as a whole intelligible, lend coherence to many different branches of science, and form the core of a remarkable body of knowledge about the origins and behavior of the physical world.¹
Creationism and Teachers

Creationism is a problem for teachers partly because a number of state and local school boards have taken an anti-evolution stance. The National Academy of Sciences, the National Science Teachers Association, and many other respected organizations have published responses to this misguided political activity.

Vocal and influential proponents of “creation science” are disseminating scientific misinformation. They compound the problem by mingling defective science with a fundamentalist reading of the first five books of the Hebrew Bible, the Pentateuch or Torah, to support a young Earth interpretation. Creationists establish a false dichotomy, denying that there can be any accommodation between creation and evolution for believing scientists.

Teachers of science must be prepared to deal with scientific and religious questions concerning the origins of the universe, of Earth, and of life. The old-style (young Earth) creation science claims that the creation stories in the book of Genesis should be understood literally in both their religious elements and their primitive world view, and they adopt the position that both should be taught in the public schools as modern science. A number of proponents of “intelligent-design” and “theistic-science” have emerged in the creation debate. One dominant new-style creationist position appears to misunderstand the nature of relevant scientific issues, and although the fundamentalist premises are vaguely stated, appears to be an outgrowth of the old-style creation science. Other proponents of “intelligent design” clearly are at pains to distance themselves from the young Earth and anti-evolution position of the old-style creation science.

Both scientific education and religious education are important in a civilized society. Today’s teachers must be able to make a clear distinction between science and religion in a manner that does justice to both. Teachers must be able to help students from varied backgrounds, first to recognize the difference between scientific and religious language and approaches, and second, to realize that there is no necessary conflict between interpretations of data from scientific studies and religious beliefs based on the Bible. Scientific discourse is fundamentally different from religious discourse, as I will attempt to make clear.

Today many sincere young people face the same apparent conflict that I faced as a high school and university student in the 1940s. At that time we Catholics were encouraged to interpret Genesis in a rather fundamentalist way because Church leaders feared that we might be led astray by discussions of evolution. Thanks to a number of excellent teachers, I learned to rely on scientific methods to explain how Earth originated and evolved, as well as how human life and other life forms originated. I also learned that the creation story presented in Genesis describes the initial origin of the universe and that, once in existence, the universe evolved and became the proper object for scientific study. I learned about the divine and human authorship of the Bible, both its historically conditioned character and its divine inspiration.
The reconciliation of faith and reason delivers the student from a state of confusion about important areas of life portrayed as contradictions by some fundamentalists. Instead of having to choose between science and religion, between the book of God’s revelation and the “book of nature,” as our ancestors called the natural world, the student can appreciate and learn from both, or at least understand the position of those who accept both.

**Religious Science? Scientific Religion?**

Science and religion are very different from each other. Although most people seem to understand this fact, many have difficulty explaining how they differ. Creation science is an oxymoron because it involves contradictory claims. Religion cannot be both religion and science.

Religion is concerned with God. Langdon Gilkey, Professor Emeritus in the Divinity School of the University of Chicago, made this clear in *Creationism on Trial: Evolution and God at Little Rock*: “Religious discourse in western religions refers to God, a transcendent being, one who is the source and ground of creaturely beings, and, therefore, not part of the creaturely system.” Gilkey continues:

> Discourse about God, such as ‘God intended such a result,’ or ‘God’s intent is shown by his design of the universe,’ is language that refers to a personal and purposive God, language that makes use of symbols or analogy. Creation is a religious term, which indicates that God is the subject responsible for the universe coming into existence. Because God is referred to as the origin of the system of nature, he cannot be part of nature. Science is concerned with the study of some aspect of nature.5

In *McLean v. Arkansas*, a 1981 court case that overturned a state law mandating the teaching of creation science as science in the public school system, Gilkey clearly explained why the act of creation cannot be part of science:

> Creation is a divine act….In our religious tradition—in both Scripture and creed—the first important thing said about God: God creates. It is the first foundation of Jewish and Christian religion … [T]he divine act of creation cannot be a part of science, for science inquires only within the system of nature and cannot go beyond it, as religion, monotheistic religion, essentially does. Unlike scientific investigation, creation as a religious symbol does not reveal matters of factual information, but does reveal that, in whatever way it may have originated, the universe is of God, and has meaning and purpose…

Religion cannot provide us with answers as to when the universe arose, or the processes by which the universe has changed through time. These are scientific questions. Scientific discourse, by contrast, can speak only about creaturely objects, that is those that have come into being in time, and which are, therefore, not transcendent.6

Because science is concerned with the study of non-transcendent parts of the universe, science became possible only after the creation of the universe had taken
place. So-called creation science misinterprets science and scientific methods as well as theology and theological methods. It interprets the Genesis stories as telling us how and when creation took place, rather than telling us why God created the universe or what that statement means. When we say that science excludes God methodologically, we mean only that the methods of science are in and of themselves incapable of discovering God as the author of the universe. We are saying that scientific investigation is limited in a way analogous to, but different from, the way in which science is limited. This does not mean that scientists as human beings are incapable of finding God by faith; it means merely that the methods of science are limited to discovering information of a scientific character. On the other hand, religion cannot reveal the age of Earth and the universe or other items of factual information.

**How Knowledge Has Evolved Through Time**

Throughout the ages both Christians and Jews have looked to the Bible first and foremost as a guide and support for their religious lives. Some, going further, wanted to find out the age of Earth and the universe. Lacking modern scientific tools and current biblical perspectives, they looked to the book of Genesis, which tells the story of God creating the world and Adam and Eve. Accordingly, many respected early biblical scholars turned to Genesis to calculate the antiquity of Earth and of humankind. Before science began to produce reliable data about the age and history of Earth, its life forms, and other aspects of the natural history of the universe, reasonable people used the sources of information they had available.

Over the past 150 years, however, advances in scientific research have brought to light evidence that Earth is nearly five billion years old and the universe is considerably older at about 12 billion years. During the first billion years of its formation, Earth was evolving physically and chemically. The earliest life forms yet discovered are about 3,500 million years old, and the record in the rocks tells us that the human genus *Homo* evolved sometime between 2.5 and 2 million years ago.7

As a result of these advances in scientific knowledge, the evolution of life forms is widely accepted as a reasonable explanation for the progressively more complex fossils preserved through geological time in the rocks, and as an explanation for the diversity of modern organisms. As ideas concerning evolution have developed from the study of geology and biology, those who believe in the Bible as the word of God have taken up positions along a spectrum of beliefs.

At one end are the creation science proponents, who maintain a literal interpretation of the Genesis creation narrative despite the evidence from science and other fields of study. These individuals interpret the results of scholarly research as diametrically opposed to their religious beliefs, and maintain that no reconciliation is possible between belief in the Bible and belief in theories of biological evolution. On the other end are those in mainstream Christianity and mainstream Judaism who find no conflict between biblical teachings and scientific theories regarding evolution

---

4 National Science Teachers Association

Copyright © 2000 NSTA. All rights reserved. For more information, go to www.nsta.org/permissions.
and the great age of Earth. In between are a significant number of fundamentalists and evangelicals who hold a modified literal interpretation of Genesis and accept the standard geological data on the age of Earth.

**Fundamentalism and Fundamentalist Religion**

The term *fundamentalism* is used in at least two related but clearly distinguishable senses. It may designate a conservative type of Christian thought that became influential in the second half of the nineteenth and first half of the twentieth centuries. Some of the people to whom this name is applied today, such as creation science proponents, perceive it as a hostile term implying narrowness or bigotry.

*Fundamentalism* is also the name of a specific conservative movement begun in the United States in 1909, devoted to propagating a definite program of five points of doctrine set forth as fundamental. Its pivotal point is the literal inerrancy and infallibility of the Bible. One of the most famous fundamentalists of this type was William Jennings Bryan, who won *Tennessee v. John Scopes*, a 1925 court case against a public high school teacher charged with teaching evolution.

It is generally conceded, however, that the effect of the Scopes “Monkey Trial” was to discredit fundamentalism in the public mind. Thus, with time, the overt conflict between fundamentalism and science decreased, and the central body of conservative evangelical thought came to accept the validity of evolution—the major focus of the earlier controversy. Many “fundamentalists” today, especially those who accept the results of science, prefer to be called “conservative evangelicals.” This is not the group promoting creation science.

Evangelical Christians hold a wide range of beliefs that relate the interpretation of Genesis to the findings of modern science. Of these, only “fiat creationism,” which adopts the Ussher-Lightfoot chronology described later, rejects evolution entirely. Fiat creationism, the most rigid of evangelical theories, is the specific, programmatic fundamentalism upheld by Henry Morris, Duane Gish, and their followers who have played leadership roles in the creation science movement. They scathingly denounce the more liberal positions that other fundamentalists have developed, including the Gap Theory, which suggests that billions of years may have occurred between events described in Genesis 1:1 and Genesis 1:2, and the Day-Age Theory, which interprets the biblical days of creation as geological epochs. Moreover, fiat creationists object to efforts by liberal fundamentalists to harmonize the Biblical chronology with geological time because they believe that such accommodation is inevitably followed by acceptance of the evolutionary system.

Creation science has long been unalterably opposed to biological evolution, especially macroevolution. Henry Morris, as Director of the Institute for Creation Research, explained one reason for this position: “The theory of evolution has dominated our society, especially the schools, for almost a hundred years, and its influence is largely responsible for our present-day social, political, and moral problems.”
Creation science proponents regard Genesis as the total explanation of the origin of all things. Theistic evolutionists, on the other hand, among whom I number myself, regard Genesis as a religious document composed by inspired authors to present a religious message. Its primitive worldview, or cosmology, is the story line that carries the central religious message, but is not itself the message. Theistic evolutionists, in summary, grant to science its proper role of unraveling the history of the evolution of the universe, Earth, living beings, and other creatures, and understand that its established theories do not, and should not, threaten sound religious beliefs.

What the Bible Teaches

Mainstream biblical scholars focus on the intentions of the authors of Genesis and the other four books that comprise the first section of the Bible. These books were written by deeply religious authors who saw history not merely as events that happened to people, but as the record of God’s dealings with a special people. Genesis was written to tell the Jews who they were, how and why they were chosen as God’s people, what marvelous things God had done for them, and what God expected of them. It was not composed as history for its own sake, but as history whose purpose was to communicate religious truth.

St. Augustine recognized in roughly 400 A.D. that the literal interpretation of the Genesis story of creation taking place over six days involved a theological misunderstanding. He realized that “if at creation God was bringing time and space into being, the act of creation of time could not be in time and of space could not be in space.” Thus he reasoned that the divine creative act must transcend time—that is, be at a “moment” that “precedes” every moment—for it is the act in which all moments come into being.” St. Augustine reasoned that creation ex nihilo, or out of nothing, by a transcendent God was the supernatural act that brought both time and space instantaneously into being along with the universe. After that moment natural processes would be at work.

Early biblical commentators recognized, as we do, that Genesis 1–11 is an imaginative narrative that uses poetic language and contains much imagery and many figures of speech. Still, lacking scientific methods capable of resolving questions about the age of Earth, these commentators followed a reasonable course of interpretation for their times in accepting its chronology at face value.

The Genesis of Genesis

Over the past century reliable information that was not available to earlier scholars became accessible from scientific studies. This knowledge conflicted with interpretations of time intervals calculated from Scripture.

In earlier centuries the Bible was commonly accepted as God’s word in the narrow sense, as though God had dictated every word. If Moses was the author of
Genesis, and if its first chapters describe events that nobody but God could have seen, then, it was concluded, God must have revealed Genesis just as we have it. Today we have more information available to us about how the Bible itself came into being than did our predecessors. Modern biblical scholarship maintains that Genesis was written under divine inspiration, but the human writers assembled their materials and carried out their work in the same way that writers have throughout the ages. Today we have direct evidence to show that the authors of Genesis derived their materials from written and oral sources that were readily at hand, such as the Babylonian creation myth and the Mesopotamian story of a “worldwide” flood.

Chapters 1–11 of Genesis use fragments of myth, legend, and folklore, whereas the patriarchal stories in chapters 12–50 are reminiscent of family sagas. Israel’s historians made use of materials of all kinds, often modified from those of their pagan neighbors or captors. These include ancient creation stories, genealogical lists, songs, proverbs, legends, records of customs, institutions, and idioms. All contributed to the authors’ purposes and were refashioned accordingly.

**External Evidence**

In many cases the biblical authors used a traditional source. Unfortunately, these writers did not usually inform us when they were using or adapting parallel writings, as was done in Genesis 1:1–2:4a, the creation narrative. By comparing the Genesis text with the Babylonian creation myth Enuma Elish (“When on High”), we can see parallels as well as pronounced differences.

Archaeological discoveries of tablets recording the Babylonian creation story have shed light on that story and its relation to Genesis. Enuma Elish is an epic poem of approximately a thousand lines recorded on seven clay tablets. The first fragments were discovered by Austen H. Layard, Hormuzd Rassam, and George Smith during expeditions between the years 1848 and 1876 among the ruins of the great library of King Ashurbanipal (c. 668–630 B.C.) at Niniveh. Subsequent explorations through 1929 led to the discovery of all the remaining tablets except for a large portion of Tablet V.

George Smith of the British Museum, the first to publish an account of the epic, translated and discussed all of the pieces identified prior to 1876. The resemblance of their contents to the initial chapters of the Bible immediately appealed to a very wide circle of students. Since then, this story has been copied and translated by many Assyriologists, especially as new, related tablets have been found.

The left column of the table on the next page outlines the story of the origin of the gods as presented in the Enuma Elish. Marduk was the creator of Earth in this account. The authors of Genesis offered a new theology of creation, with the one God of Israel being the Creator. The well-known topics and sequence of Genesis are presented in the right-hand column. The authors of Genesis borrowed many of the topics of the older Babylonian story, but rejected those which involved a contrary theological perspective.

In the language of drama, we might say that the props are the same in these two
creation narratives, but the characters are very different. The authors of Genesis present a primitive cosmology of their time to teach the origin of all things in God, emphasizing God’s power as transcendent Supreme Being. Whereas the earlier Babylonian creation epic, which is generally dated from at least 2000 B.C., depicted creation as the result of a struggle between the gods and the forces of chaos, the biblical account stresses the effortless activity of the one God. The imagery borrowed from Enuma Elish and other accounts serves the authors’ polemic against the error of polytheism, the idea that there are many gods. The table below highlights the similarities of sequence, as well as the contrasts in religious points of view.

### Internal Evidence

We may discover what kind of document Genesis is from a study of the text itself. Some stories, such as the creation narrative of Chapters 1 and 2, consist of two parallel accounts woven together by the biblical authors. Differences between these accounts in style, in detail, and even in the name for God permit us to distinguish

<table>
<thead>
<tr>
<th>Enuma Elish</th>
<th>Genesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>An account of the birth of the gods and various conflicts between them</td>
<td>Divine word creates cosmic matter and exists independently of it</td>
</tr>
<tr>
<td>Divine spirit and cosmic matter are coexistent and coeternal</td>
<td>The Earth is a desolate waste, with darkness covering the deep (tehom)</td>
</tr>
<tr>
<td>Primeval chaos; Ti’amat, enveloped in darkness</td>
<td>The creation of light and the separation of light and darkness</td>
</tr>
<tr>
<td>Light emanating from the gods</td>
<td></td>
</tr>
</tbody>
</table>
| Marduk’s work of creation  
(a) The creation of the firmament | The creation of the firmament and the dividing of the waters |
| (b) The creation of dry land | The creation of dry land, the sea, and plant life |
| (c) The creation of the luminaries | The creation of the luminaries, the creatures of the sea, and the birds |
| (d) The creation of humans; the building and dedication of Esagila, the temple complex | The creation of land animals and humans; God instructs Adam and Eve and blesses them |
| The gods rest and celebrate; the hymn to the creator, Marduk | God rests from all his work and sanctifies the seventh day |
| Epilogue |  |