Designing
Your Own School Program

What Is Mathematics?

A “True Education” Mathematics Series
“Learn of me; for I am meek and lowly in heart....”
Matthew 11:29
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After the celebrated painter Da Vinci had completed his immortal painting of the “Last Supper,” a friend came in to inspect it. “That goblet is wonderful,” said the friend; “it stands out like solid silver.” The devout artist dashed his brush over the goblet in an instant and exclaimed, “Nothing shall draw the eye of the beholder from my Lord!” O Christian worker, keep Christ in the foreground. Let nothing hide thy Saviour from the sight of men. Your mission is to point out “...Behold the Lamb of God, which taketh away the sin of the world” (John 1:29).
The word “mathematics” comes from a Greek word which means “inclined to learn.” Learn what? Man says: learn the science and laws that explain numbers, quantities, measurements, and the relations between them. This is good to do, but God says, “Learn of me; for I am meek and lowly in heart...” (Matthew 11:29). So you see, it is not enough to just learn facts, we must also learn about God through those facts.

There are many types of studies in mathematics. Arithmetic is concerned with problems and numbers. Algebra works with solving equations where letters represent unknown quantities. Geometry teaches the properties and relationships of figures in space. As in mathematics, God wanted man to learn about
His love so He sent His Son, Jesus, which is an example of that love. Each type of mathematics can teach us more about Him and His love.

Mathematics is important to help people in their practical, daily life. Some examples include simple tasks of telling time and counting our change at the store after a purchase. We can use mathematics for more complex tasks such as household accounting, figuring income tax, cooking, driving, gardening, and sewing. For people to live a practical, spiritual life each day they need an example. Jesus came to be that practical example. Mathematics can teach us how to live each day practically according to His ways and purposes.

Scientists use mathematics in astronomy, chemistry, and physics. Industry uses mathematics to design bridges, buildings, dams, highways, tunnels, and many other projects. In business, mathematics are used in buying and selling, in record keeping, calculating employees’ hours and wages. Even our bodies work by numbers: the heart beats so many times a minute, the lungs have a certain capacity of air they can take in, there are a certain number of bones and muscles in the body. But, all of this knowledge is of no value if we do not have the character of God in our lives.

When adding up the deeds done this day what is the sum?
Jesus, in keeping within the laws of the human body, came in love as a baby!

“'His name shall be called Immanuel,...God with us.' 'The light of the knowledge of the glory of God' is seen 'in the face of Jesus Christ.' From the days of eternity the Lord Jesus Christ was one with the Father; He was 'the image of God,' 'the image of His greatness and majesty, 'the outshining of his glory.' It was to manifest this glory that He came to our world. To this sin-darkened earth He came to reveal the light of God’s love —to be 'God with us.' Therefore it was prophesied of Him, ‘His name shall be called Immanuel.’

“By coming to dwell with us, Jesus was to reveal God both to men and to angels. He was the Word of God—God’s thought made audible. In His prayer for His disciples He says, ‘I have declared unto them thy name,’—‘merciful and gracious, long-suffering, and abundant in goodness and truth,’—‘that the love wherein thou hast loved me may be in them,
and I in them.’ But not alone for His earthborn children was this revelation given. Our little world is the lesson book of the universe. God’s wonderful purpose of grace, the mystery of redeeming love, is the theme into which ‘angels desire to look,’ and it will be their study throughout endless ages. Both the redeemed and the unfallen beings will find in the cross of Christ their science and their song. It will be seen that the glory shining in the face of Jesus is the glory of self-sacrificing love. In the light from Calvary it will be seen that the law of self-renouncing love is the law of life for earth and heaven; that the love which ‘seeketh not her own’ has its source in the heart of God; and that in the meek and lowly One is manifested the character of Him who dwelleth in the light which no man can approach unto.”*

*The Desire of Ages 19-20

**Reflect**

**Love**

“...The law of self-renouncing love is the law of life for earth and heaven; that the love which seeketh not her own’ has its source in the heart of God; and that in the meek and lowly One is manifested the character of Him...”
Jesus Learned Mathematics in Nature And in The Carpenter’s Shop

When Jesus was older He taught parables using Math. What was one of them?

An Example

“And the child grew, and waxed strong in spirit, filled with wisdom; and the grace of God was upon him.”

Luke 2:40

As a child, Jesus lived within the laws of mankind. “And the child grew, and waxed strong in spirit, filled with wisdom; and the grace of God was upon him.” He learned as children need to learn today. His mathematics study was taught through the practical duties of life. He learned mathematics through the things His own hands had in the beginning created in nature and the work he did in the carpenter’s shop. As He recreated things of wood (from trees He had created) with mathematical calculations, so He would recreate men who would cooperate with Him.

Reflect

Trees represent man in Scripture.

A building reminds us of building a character.

A house is often built using trees.

Finish this statement by writing several sentences. Jesus working in the carpenter’s shop demonstrates how He builds character. He does this by__________________.
Read Judges 9:8-9 and Psalm 1:3

Sinned (tree is cut down)

Jesus came into the carpenter shop and recreated that piece of dead wood into a beautiful thing with a purpose. He did it by:

1. **Measuring** (need)
   (Revelation 11:1)

2. **Cutting** (trials)
   (7 Testimonies 264; I Peter 4:12)

3. **Building** (construction takes place)
   (Ephesians 2:21; Read Messages to Young People 15-18)

Review
Place I

1. Mathematics means “inclined to ___ ___ ___ ___ ___.”

2. What can we learn about God? Ch ___ ___ ___ ___ ___ er

3. Mathematics teaches us about the character of ___ ___ ___ .

4. Read and color the picture below.

One special character quality of God is:

![Image of flowers and butterflies with word LOVE]
Review
Place II - III

Answer these questions:

1. What does the word Mathematics mean?

2. What is man to learn about God?

3. Describe how Jesus recreates a man.

4. Can mathematics be a teacher of God’s character?

5. Mathematics shows how laws work. Give an example.

6. Did Jesus follow the laws that govern our bodies when He lived on Earth?

7. What did Jesus come to reveal to people on this earth?

Reflect

From the word LOVE we can make the word VOLE. One meaning of this word is, “to risk everything in the hope of great profit.” Jesus risked everything in the hope of redeeming you.

What other words can you make from the word Mathematics?

Examples: mat Him (Jesus)
Learning Mathematics

The hand and the soul working together in love!
The Greek way of learning commits facts to memory in a classroom but usually does not apply them in a practical or spiritual way. It does not touch our daily lives or experience. An example is memorizing the multiplication or “times” tables but not using them that day or week in a practical way.

An example of applying your mathematics and using the times tables is to build a bird house by following these steps:

1. Draw a pattern
2. Figure what materials you will need
3. Buy the wood
4. Measure and mark out the pieces
5. Cut out the pieces
6. Find a spiritual lesson

Reflect – Nature

“What hath measured the waters in the hollow of his hand, and meted out heaven with the span, and comprehended the dust of the earth in a measure, and weighed the mountains in scales, and the hills in a balance?”

Isaiah 40:12

Reinforce

Read the story, “The Lent Half-Dollar” on page 16.
When you were young, you learned many things about mathematics through nature. You may not even have realized it. You might have helped your parents plant a row of corn and watched those seeds multiply into thousands of seeds. In this way you were learning mathematics. God wanted to teach you through this experience how His blessings multiply from small seeds of love planted here and there.

Bible

The Bible is full of numbers and the laws that govern them. Each letter, word, or sentence in the Bible was written at the right time in the right place, in the right order, and in the right number. God is the “Wonderful Numberer.”

“He telleth the number of the stars; he calleth them all by their names” (Psalm 147:4). “Lift up your eyes on high, and behold who hath created these things, that bringeth out their host by number: he calleth them all by names by the greatness of his might, for that he is strong in power; not one faileth” (Isaiah 40:26). “To make the weight for the winds; and he weigheth the waters by measure” (Job 28:25).

Each number in the Bible has a particular meaning and in the next lessons we will learn more about those meanings. We will learn God’s use of numbers to teach spiritual lessons rather than man’s use of them.
The next 10 lessons in mathematics will teach you what the numbers 1-12 mean in the Bible.

Read the story, “Greater Than This Hath No Man” to help you understand the meaning of love found on page 20.

Purchase and study the book, *Mathematics in the Bible*.
Remind
Place I - II - III

Two Ways

1. GREEK
   Mathematics
   A. Brain—Fact only
   B. Hands—Some practical

2. HEBREW
   Mathematics
   A. Bible—Spiritual
   B. Brain—Facts
   C. Hands—Practical

Reinforce
Find an example of mathematics in nature.
Draw what you find below.
Where to Learn Mathematics

Have you noticed how Jesus almost always used an outdoor or country setting for most of His teachings when He lived on earth? In the very beginning He chose to have man till the soil which offered experience in using mathematics, such as:

1. the increase of one seed to many,
2. the size of space needed to plant,
3. when to plant,
4. calculating straight rows,
5. the amount of space growing plants will need.
6. to know what is the best way to use the produce of the garden in glorifying God.

Object of Learning Mathematics

The object of learning mathematics is not pleasure, gain, or comfort. These things may result, but the true object is to give us a deeper understanding of God's character and law and prepare us to do “good works” (Epheisans 2:10).
The Bible: The Mathematics Book

The Bible lessons and illustrations become the focus of the Mathematics lesson rather than just learning “numbers.” Each mathematics lesson should teach us something about God’s character and the laws within which He works, and how we can apply them to our daily lives. Remember, He says, “learn of me.”

—Sir J. Stevens

“Every man has in himself a continent of undiscovered character. Happy is he who acts the Columbus to his own soul.”

—Sir J. Stevens

Write the Bible references below.

1. ______________
2. ______________
3. ______________
4. ______________
5. ______________

Reinforce

Find a Bible Verse for:

1. Place Value
2. Addition
3. Subtraction
4. Multiplication
5. Division

Use a Strong’s Concordance

1. Teacher, dictate the spelling words!
2. Do the Bible Mark on page 21.
“What are you crying for?” said Arthur to a little ragged boy that he overtook on his way home from the village school. There was something in the kind of crying that led Arthur to think that there was some serious cause for it.

“I’m hungry,” said the boy, “and can’t get nothing to eat.”

“He don’t go to our school, or he would have said ‘can’t get anything to eat.’” But Arthur did not stop to criticize his language.

“Why doesn’t your Mother give you something to eat?”

“She hasn’t anything for herself, and she is sick and can’t get up.”

“Where is your Father?”

“I haven’t any. He was drowned at sea.”

“What is Mathematics? – Student – Page 16

“Where do you live?”

“Down there” pointing to a miserable hut in the distance.

“Come with me and I will get you something,” Arthur turned back and the boy followed him. He had a few cents in his pocket, just enough, as it proved, to buy a loaf of bread. He gave it to the boy and told him he would go home with him. The boy took the loaf, and though he did not break it, he looked at it so wishfully, that Arthur took his knife and cut off a piece and gave it to him to eat. He ate it in a manner that showed he had not deceived Arthur when he told him that he was hungry. The tears came into Arthur’s eyes as he saw him swallow the dry bread with such eagerness. He remembered, with some self-reproach, that he had sometimes complained when he had nothing better than bread and butter for dinner. On their way to the boy’s home, Arthur learned that the family had moved into the place about a week before and that his mother became sick the day after they came, and was unable to leave her bed—that there
were children younger than him-
self—that their last food was eaten
the day before—that his mother
had sent him out to beg for the first
time in his life—that the first man
he asked, told him beggars would
be put in jail; so he was afraid to
ask anybody else, but was return-
ing home when Arthur overtook
him and asked him what he was
crying for.

Arthur went in and saw a
kind-looking woman on the bed
with two small children crying by
her side. As he opened the door, he
heard the oldest say, “Do, Mama,
give me something to eat.” They
stopped crying when Arthur and
the boy came in. The boy ran to the
bed and gave his mother the loaf,
and pointing to Arthur, said, “He
bought it for me.”

“Thank you,” said the woman,
“may God bless you, and give you
the bread of eternal life.”

The oldest little girl jumped
up and down in her joy, and the
youngest tried to grab the loaf, and
struggled hard to do so, but did not
speak. Seeing that the widow’s
hands were weak, Arthur took the
loaf and cut off a piece for the
youngest first, and then for the girl
and the boy. He then gave the loaf
to the widow. She ate a small piece,
then closed her eyes, and seemed to
be engaged in silent prayer.

“She must be one of the Lord’s
poor,” thought Arthur. “I’ll go and
get something for you as soon as I
can,” said he, and left.

He went to Mrs. Burton, who
lived near, and told her the story,
and she immediately sent some
milk, and bread, and butter, and
sent word that she would come her-
self, as soon as she could get the
baby to sleep.

Arthur had a half-dollar at
home, which he wished to give to
the poor woman. His father gave it
to him for watching sheep, and told
him he must not spend it, but put it
out at interest, or trade with it so as
to make something. He knew his
father would not let him give it
away, for he was not a Christian,
and thought of little else than mak-
ing and saving money. Arthur’s
mother had died when he was an
infant. But with her last breath, she
gave him to God.

When Arthur was five years
old, he was sent to a school with a
pious teacher, who cared for his
soul; and knowing that he had no
teacher at home, she took unusual
pains to instruct him in the prin-
ciples of religious truth. The Holy
Spirit helped her efforts, and before he was eight years of age, there was reason to hope that he had been converted.

Arthur was now in his tenth year. He considered how he should help the poor widow, and at last he hit upon the plan which proved successful.

His father wanted him to begin to act for himself in business matters, such as making bargains. He did not wish him to ask his advice in doing so, but to go by his own judgment. After the business was done, he would show him whether it was wise or not; but never criticized him, lest he should discourage him from acting on his own responsibility.

In view of these facts, Arthur formed his plan.

“Father, may I lend my half-dollar?”

“To some spendthrift boy?”

“I won’t lend it without good security.”

The father was pleased that his son had the idea of good security in his head; he would not ask what it was, for he wished Arthur to decide for himself. He told him to lend it, but be careful not to lose it.

“I’ll be sure about that,” said Arthur.

So he took the half-dollar, and ran to the poor widow, and gave it to her, and left before she had time to thank him.

At night, his father asked him if he had put out his money.

“Yes, sir.”

“Who did you lend it to?”

“I gave it to a poor starving widow in Mr. Harvey’s house.”

There was a frown gathering on his father’s brow as he said, “Do you call that lending? Did you not ask my permission to lend it? Have I a son that will deceive me?” “No, sir,” said Arthur, “I did lend it.” He opened his Bible, that he had ready, with his finger in the place, and read, “He that giveth to the poor, lendeth to the Lord.” “I lent it to the Lord, Father, and I call that written promise good security.”

“Lent it to the Lord! He will never pay you.”

“Yes, He will; He says that He will repay again.”
“I thought you had more sense,” said his father, but this was not said in an angry tone. The truth was, the old man was pleased with the ingenuity, as he called it, of his son. He did not wish to discourage that. So he took out his purse and handed Arthur half a dollar. “Here, the Lord will never repay you; I must, or you will never see your money again.”

“Thank you, sir,” said Arthur.

“In my way of thinking, “ said Arthur to himself, “the Lord has paid me, and much sooner than I expected, too; I didn’t expect that He would pay me in money. The hearts of all men are in His hands, and the gold and silver are His; He has put it in my father’s heart to pay it to me. I’ll lend it again.”

Arthur kept up the habit of lending his spare money to the Lord all his days, and he was always satisfied that he was paid back fourfold, and often several times over. God loves to see such kind-hearted boys and girls.

“Mortify therefore your members which are upon the earth; fornication, uncleanness, inordinate affection, evil concupiscence, and covetousness, which is idolatry” (Colossians 3:5).

Reflect – Consider This:
A lighted piece of paper laid flat on a piece of metal will go out, for the metal absorbs the heat and starves the flame: so does gold laid close to the soul cause the holy flame of love to God to shrink and die. The heart cannot embrace God and money; and, therefore, if it give its affection and solicitude to the latter, it is guilty of idolatry. “Mortify therefore your members which are upon the earth; fornication, uncleanness, inordinate affection, evil concupiscence, and covetousness, which is idolatry” (Colossians 3:5).

Simple Arithmetic
If you add, my dear, to someone’s joys,
Pray, tell me what you do.
Do not look puzzled, the answer is plain—
The joys are doubled for you!

—Adelbert F. Caldwell
On one of the bridges of Ghent in Flanders are two bronze statues. They represent a father and son and are memorials of their mutual affection. On account of some grave political offence both were condemned to die by the headsman’s axe. Such was the popular esteem in which they were held that an executioner could not be found. A strange proposition was made them, that one should have his life by becoming the executioner of the other. The proposal was hailed with a melancholy pleasure by both, because each saw how one life at least could be saved. The son urged the father to accept the terms as he could die happy, since in that way his father’s life would be spared. The father urged the son to accept the terms. He spoke of his own life as soon to end at any rate, but the son had youth on his side and long life before him.

By earnest entreaties the father prevailed; the son consented. The day of execution came: a vast multitude had assembled to witness the strange sight. There was the horrid scaffold with its block and broad axe. Father and son are there, the one to be beheaded by the other. The father kneels, places his neck on the wood and awaits the fatal stroke which shall sever the grey head from the body. The son with pale face and wild look seize the axe and lifts it with trembling hand. He strikes—No! he flings the deadly weapon from his hand and falls on the bare neck of his father bathing it with filial tears and examining, “No, no, my father, we die together!”

The vast crowd whose feelings were strung to the highest pitch, gave vent to their admiration in the wildest applause and demanded their pardon, a demand which was not only granted, but which was followed up by the artist’s genius in the rearing of a memorial of the noble act of mutual affection. “Greater love hath no man than this, that a man lay down his life for his friends.” “But God commendeth his love toward us, in that, while we were yet sinners [enemies], Christ died for us” (John 15:13; Romans 5:8).

Reflect

A poor man in an asylum wrote these words upon a pane of glass in his cell:

Could we with ink the ocean fill,  
And were the skies of parchment made;  
Was every stem on earth a quill,  
And every man a scribe by trade;  
To write the love of God,  
Would drain the ocean dry,  
Nor could the scroll contain the whole,  
Though stretched from sky to sky.

What is Mathematics? – Student – Page 20
1. What does mathematics mean?

Matthew 11:29 – “Learn of me; for I am meek and lowly in heart....”

Note: Mathematics means “inclined to learn.” Through it we will not only learn about addition, subtraction, multiplication, division, and other processes but we will receive a deeper understanding of the spiritual things of God as visualized through mathematics.

2. How did boy Jesus learn mathematics?

Mark 6:3 – “Is not this the carpenter...?”

Matthew 13:34-35 – “All these things spake Jesus unto the multitude in parables; and without a parable spake he not unto them.

“That it might be fulfilled which was spoken by the prophet, saying, I will open my mouth in parables; I will utter things which have been kept secret from the foundation of the world.”

See Psalm 78:2.

Note: “He learned a trade, and with His own hands worked in the carpenter’s shop with Joseph.” The Desire of Ages 72 “...His intimate acquaintance with the Scriptures shows how diligently His early years were given to the study of God’s word. And spread out before Him was the great library of God’s created works.” The Desire of Ages 70

And because of all this it is said:

Luke 2:40 – “And the child grew, and waxed strong in spirit, filled with wisdom; and the grace of God was upon him.”

3. Mathematics in the carpenter shop included measuring, cutting, and building.

Revelation 11:1 – “And there was given me a reed like unto a rod: and the angel stood, saying, Rise, and measure the temple of God, and the altar, and them that worship therein.”

I Peter 4:12 – “Beloved, think it not strange concerning the fiery trial which is to try you, as though some strange thing happened unto you.”
**Ephesians 2:21** – “In whom all the building fitly framed together groweth unto an holy temple in the Lord.”

**Job 28:25** – “To make the weight for the winds; and he weigheth the waters by measure.”

4. Mathematics can teach us about giving.

**Luke 6:38** – “Give, and it shall be given unto you; good measure, pressed down, and shaken together, and running over....”

5. The Bible talks about measuring, the balance, numbers, weights, and many other things that relate to mathematics.

**Isaiah 40:12** – “Who hath measured the waters in the hollow of his hand, and meted out heaven with the span, and comprehended the dust of the earth in a measure, and weighed the mountains in scales, and the hills in a balance?”

**Psalm 147:4** – “He telleth the number of the stars; he calleth them all by their names.”

**Isaiah 40:26** – “Lift up your eyes on high, and behold who hath created these things, that bringeth out their host by number: he calleth them all by names by the greatness of his might, for that he is strong in power; not one faileth.”

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**Review**

Place I - II - III

1. What is practical daily mathematics?

2. Explain the Greek way of learning mathematics and then the Hebrew way of learning mathematics.

3. Give examples from the Bible of mathematics.

4. Where is one good place to learn mathematics?

5. What is the object of learning mathematics?

6. Who designed mathematics?
“Who hath measured the waters in the hollow of his hand,
and meted out heaven with the span,
and comprehended the dust of the earth in a measure,
and weighed the mountains in scales,
and the hills in a balance?”

Isaiah 40:12
Each booklet in the series, “Designing Your Own School Program,” is planned for a family to study together for their homeschool curriculum; yet versatile enough to be used in the conventional classroom. Learn the principles of the subject matter from the Scriptures; discover more academic information; then apply it to your daily life.

Other booklets in the Mathematics series are available in the following titles:

1 - What Is Mathematics?
2 - A Place
3 - Addition I
4 - Addition II
5 - Subtraction I
6 - Subtraction II
7 - Multiplication I
8 - Multiplication II
9 - Division I
10 - Division II

Mark 4:29