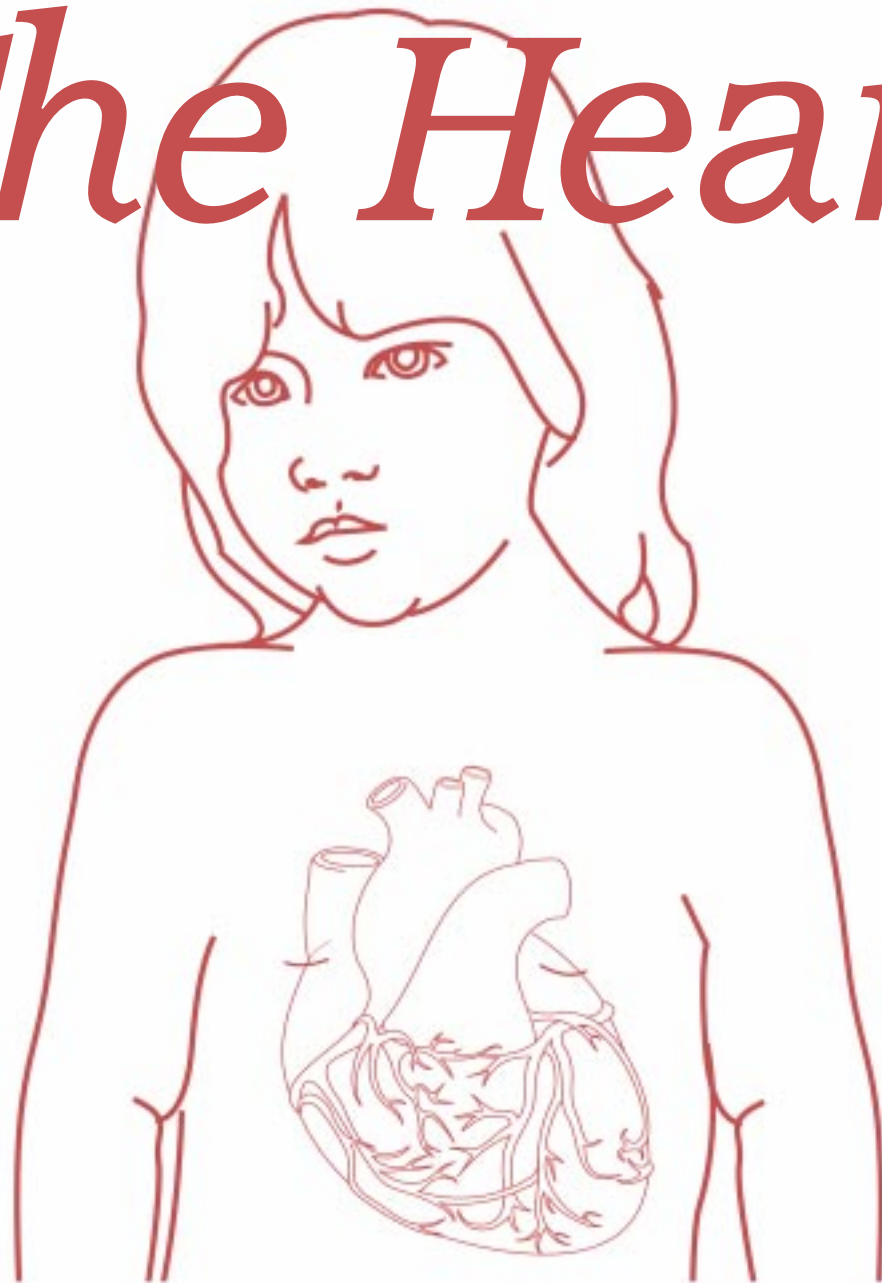


*Designing Your
Own School Program*

3

The Heart



A "True Education" Health Series

“A sound heart is the life of the flesh.”
Proverbs 14:30



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Teacher Section



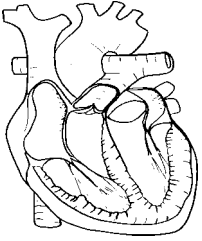


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Introduction for Teacher

In the 139th Psalm, 14th verse, David says, *"I will praise thee, for I am fearfully and wonderfully made."*

These wonderful bodies are the creation of which God has so marvelously displayed His infinite wisdom.

I suppose you have all been either near or inside of a factory. You have heard the noise of the shafts and the pulleys and machinery. A factory is quite wonderful, but do you know that in your bodies are found the elements of almost all the kinds of machinery that are used in the world?

God has so created us that we do not hear the noise of the machinery of our bodies, but if you will place your fingers gently in your ears you will hear a peculiar rumbling sound. That sound which you hear is the noise of the machinery of your body, which is in constant motion.

Now, the heart, which pumps the blood into all portions of the body, makes the largest portion of this noise. If the heart were to pump different blood with each pulsation, instead of pumping the same blood over and over again, in twenty-four hours the heart of a man of ordinary size would pump 150 barrels of blood.

The Bible says that the days of our years are threescore years and ten, or in other words, the allotted period of an ordinary life is 70 years. Now, in 70 years the heart would pump 164,389,786 gallons; or, to give

it to you in barrels, it would make 4,566,382 barrels. If you were to place six barrels on a wagon, which would make a good load for two horses, you would have 761,063 loads of these barrels. If you were to place these teams with the wagons containing six barrels apiece, with 36 gallons each, at a distance of 25 feet apart, it would make a string of teams stretching 1,778 miles, or as far as from New York City to Des Moines, in the State of Iowa, or from New York City down to the Gulf of Mexico.

I think you will now be able to understand what a wonderful pump each of us has within our own breast. And it may surprise some of you when I tell you that the heart, at each throb, beats with a power equal to 100,000 pounds.

An ordinary engine or pump would soon wear out, but this little engine of the heart goes on beating day and night from the time we are born until we are 70 years of age or older.

One more wonderful thing about the heart is that just as our natural hearts are hidden away in these bodies of ours, so are our spiritual hearts tucked away in our minds. It is this moral character and spiritual life to which the Bible refers when it says, *"Keep thine heart with all diligence, for out of it are the issues of life."*

—Adapted from *S. Stall*



INSTRUCTIONS

For the Teacher

Step 1

Study the Bible lesson and begin to memorize the memory verses. Familiarize yourself with the character quality.

The student can answer the Bible review questions. See page 6. Use the steps in Bible study.

Bible Lesson

“The Fullness of Time” – Ecclesiastes 3:1-15; Luke 1:26-35; Galatians 4:4, 5

Memory Verses

Galatians 4:4-5; *The Desire of Ages* 32; Acts 3:22; Isaiah 61:1-3; 60:1-3; Genesis 49:10; John 3:16-17

Character Quality

Alertness – quick to understand and watching very carefully: vigilance; watchfulness; moving with celerity briskness; nimbleness; sprightliness

antonyms – carelessness; indifference; unawareness; levity

Character Quality Verse

Mark 14:38 – “Watch ye and pray, lest ye enter into temptation. The spirit truly is ready, but the flesh is weak.”

Step 2

Understand How To/And

- A. Do the spelling cards so the student can begin to build his own spiritual dictionary.
- B. Mark the Bible.
- C. Evaluate your student’s character in relation to the character quality of **alertness**.
- D. Familiarize yourself with the heart. Notice the projects.
- E. Review the Scripture references for the “Heart.”
- F. Notice the Answer Key.

A. Spelling Cards

Spelling Lists

Health Words

Place I

beat
blood
heart
pump
valve
veins
vessel

Place II - III

atrium
beat
blood
chamber
cholesterol
coronary
heart
pump
valve
veins
ventricle
vessel

Bible Words

adoption
alertness
blessed
conceive
David

Bible Words continued

end
espoused
faileth
favour (favor)
favoured
forever
fullness
Galilee
Israel
Jesus
Joseph
kingdom
law
made
Mary
Nazareth
prolonged
proverb
redeem
reign
sent
sons (Son)
stand
throne
time
troubled
under
virgin
vision

See a diagram of the heart on pages 2-3 in the Student Section for a more complete listing of spelling words.

B. How to Mark the Bible

1. Copy the list of Bible texts in the back of the Bible on an empty page as a guide.
2. Go to the first text in the Bible and copy the next text beside it. Go to the next one and repeat the process until they are all chain referenced.
3. Have the student present the study to family and/or friends.
4. In each student lesson there is one or more sections that have a Bible marking study on the subject studied. (See the student's section, page 67.)

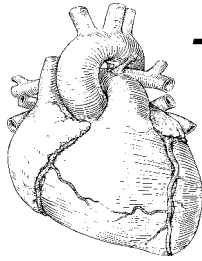
C. Evaluate Your Student's Character

This section is for the purpose of helping the teacher know how to encourage the students to become more **alert**.

See page 7.

See *Spelling in the Scriptures* for instructions about the spelling cards.

D. Familiarize Yourself With the Heart – Notice the Projects



Projects

1. As a family discuss how the heart beats. God wants our spiritual hearts (our minds) to be **alert** and beat in harmony with Heaven.
2. What happens right after you eat? Is your mind **alert**? Why or why not?
3. Use an empty paper towel roll as a stethoscope and listen to each other's heart beat.
4. Find things in nature that have substances like blood in them. (Example: tree/sap, insect/blood, etc.)
5. Draw and label a picture of the heart.
6. Purchase a heart model to put together.
7. Compare Bible verses about the heart and the mind.
8. Find Bible verses about the heart and the blood.
9. Learn how to prevent some diseases of the heart and blood. Read about the diseases and their cures using natural remedies.
10. Volunteer to help with a blood pressure screening.
11. Interview a person who has had some type of heart surgery.
12. Study more about what foods make strong muscles (the heart being a muscle).
13. Find a video about the heart.
14. Notice someone's chest after they have been running or exerting themselves.

Place I = Grades 2-3-4
Place II = Grades 4-5-6
Place III = Grades 6-7-8

E. Review the Scripture References for “The Heart”

Teacher, read through this section before working on the lesson with the student.

See page 8.

F. Notice the Answer Key

The answer key for the student book is found on page 11.

Step 3

Read the Lesson Aim.

Lesson Aim

This lesson is to help teach your child how his heart works.

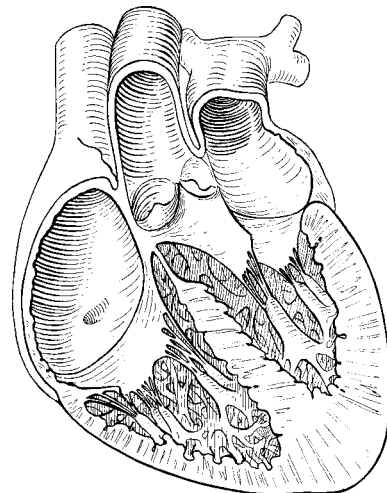
It is to help him understand and be **alert** to the fact that it is through the heart, or mind, that God speaks to him. The spiritual heart, or mind, as it responds to God, helps the

spiritual life to flourish, as the physical heart and blood sustain the physical life.

The heart is the great pump that **circulates** the blood throughout the body. It shows the great law of **giving** and **receiving** that should operate in the spiritual heart too. The Jews refused to **give** the light they had been given to the world, therefore they did not **receive** Jesus when He came. They had cut themselves off from God’s **circle** of love.

Heart disease causes trouble for the whole body. Most of God’s chosen people, especially the leaders, had spiritual “heart disease” at the time of Christ’s first advent.

A bad diet leads to clogged arteries and a lack of **alertness**. The Jews had an unbalanced spiritual diet and this made them unprepared when “*the fullness of the time was come*” (Galatians 4:4).



Step 4

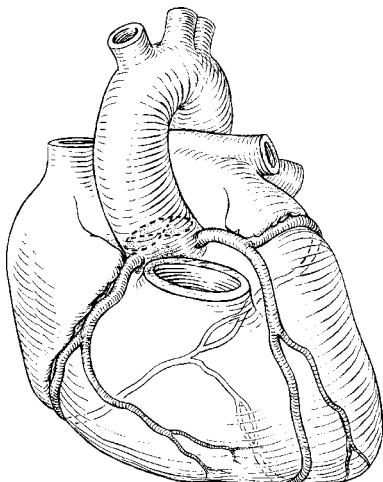
Prepare to begin the Heart Lesson.

To Begin the Heart Lesson

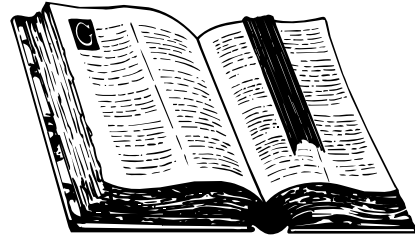
As an introduction to the lesson, it will be helpful if the teacher will have the student place his hand on his heart and feel it beat, or take his pulse and respiration.

Step 5

Begin the Heart lesson. Cover only what can be understood by your student. Make the lesson a family project by all being involved in part or all of the lesson. These lessons are designed for the whole family.



Steps in Bible Study



1. Prayer
2. Read the verses/meditate/memorize.
3. Look up key words in *Strong's Concordance* and find their meanings in the Hebrew or Greek dictionary in the back of that book.
4. Cross reference (marginal reference) with other Bible texts. An excellent study tool is *The Treasury of Scripture Knowledge*.
5. Use Bible custom books for more information on the times.
6. Write a summary of what you have learned from those verses.
7. Mark key thoughts in the margin of your Bible.
8. Share your study with others to reinforce the lessons you have learned.

Review Questions

1. Does God have a time table?
(Ecclesiastes 3:1-15)

2. To whom was the angel Gabriel sent? (Luke 1:26-27)

3. In what town did Mary live?
(Luke 1:26)

4. Who was to be Mary's husband?
(Luke 1:27)

5. How did the angel greet Mary?
(Luke 1:28)

6. What did the angel say to remove her fear? (Luke 1:29-30)

7. Who did the angel say should be born to her? (Luke 1:31-33)

8. What does "Jesus" mean? (See a concordance.)

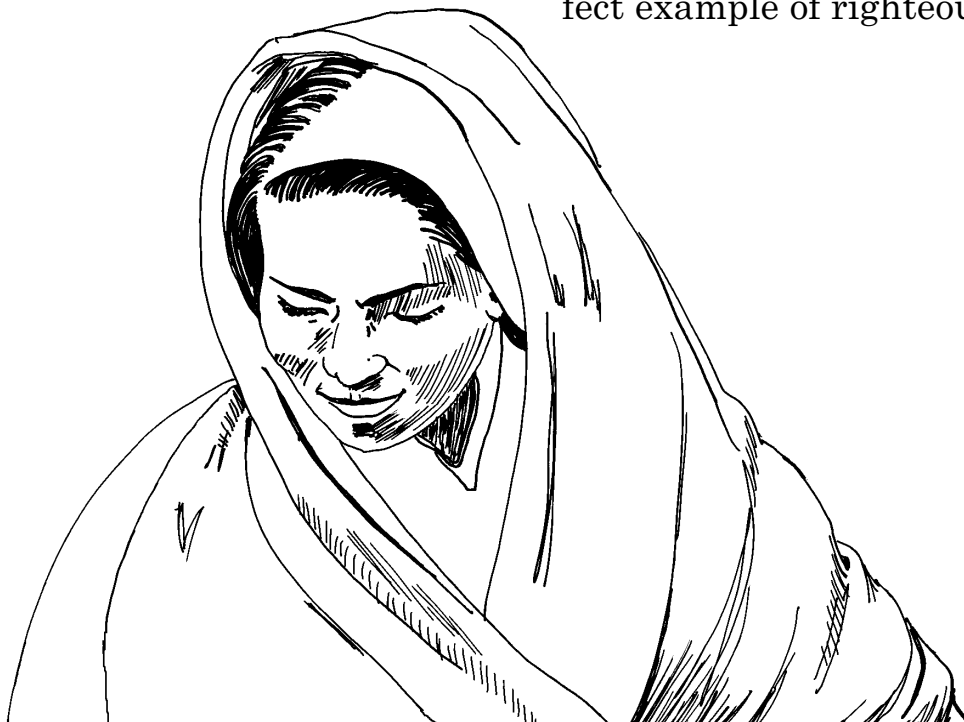
9. What did the angel say of Jesus' throne and kingdom? (Luke 1:32-33)

10. What would He be called? (Luke 1:31)

11. When did God send His Son to this earth? (Galatians 4:4)

12. What does "*the fullness of time had come*" mean? In God's reckoning or man's?

Thought Question: Why was it necessary for Christ to come to earth as a man to save man? (He came to fulfil what Adam failed to do in the flesh, and He lived a perfect example of righteousness.)



Evaluating Your Child's Character

Check the appropriate box for your student's level of development, or your own, as the case may be.

Maturing Nicely (MN), Needs Improvement (NI), Poorly Developed (PD), Absent (A)

Alertness

1. Does the child show **alertness** and recognize opportunities and dangers on his own?

MN NI PD A

2. Is the child able to visualize the consequences of subtle dangers and act according to the wisdom of Scripture? "*A prudent man foreseeeth the evil, and hideth himself*" (Proverbs 22:3).

MN NI PD A

3. Does the child act quickly upon command?

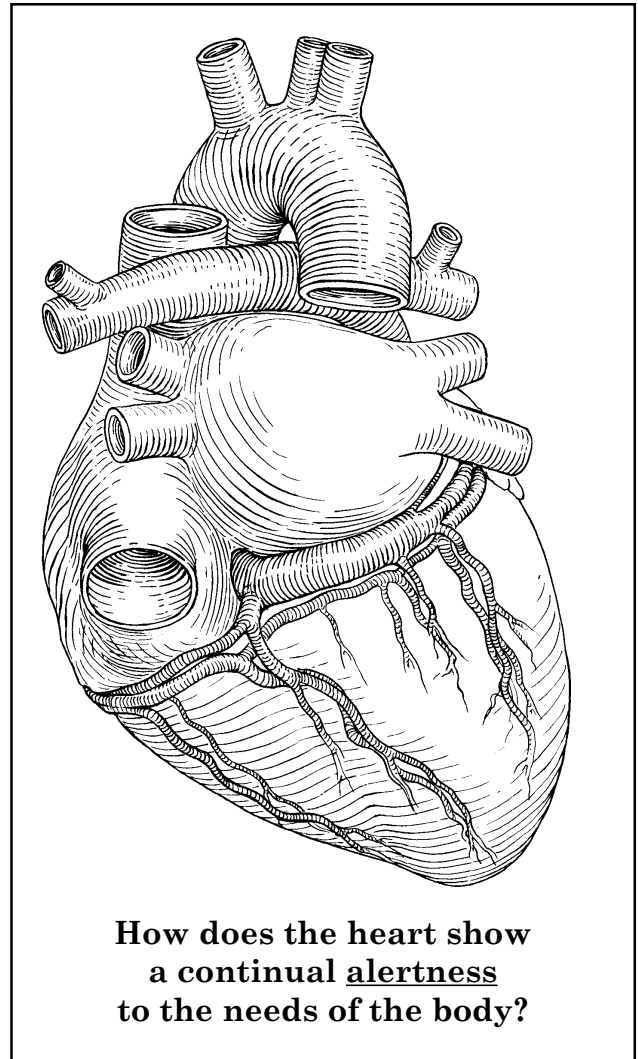
MN NI PD A

4. Is the child sluggish in the morning?

Yes No

5. Is the child **alert** to the special needs of others about him?

MN NI PD A



Scripture References

“The Heart”

Physical Heart

Proverbs 14:30 – “A sound *heart* is the life of the flesh.”

Psalm 73:26 – “My flesh and my *heart* faileth: but God is the strength of my *heart*, and my portion for ever.”

Psalm 104:15 – “And wine that maketh glad the *heart* of man, and oil to make his face to shine, and bread which strengtheneth man’s *heart*.”

Heart Problems

Ecclesiastes 12:6-7 – “Or ever the silver cord [spinal cord] be loosed, or the golden bowl broken [brain], or the pitcher be broken at the fountain [*heart*], or the wheel [extremities] be broken at the cistern. Then shall the dust return to the earth as it was: and the spirit shall return to God who gave it.”

Jeremiah 4:19 – “My bowels, my bowels! I am pained at my very

heart; my *heart* maketh a noise in me.”

Psalm 119:70 – “Their *heart* is as fat as grease.”

Luke 21:26 – “Men’s *hearts* failing them for fear, and for looking after those things which are coming on the earth: for the powers of heaven shall be shaken.”

I Samuel 25:37 – “But it came to pass in the morning, when the wine was gone out of Nabal, and his wife had told him these things, that his *heart* died within him, and he became as a stone.”

Proverbs 13:12 – “Hope deferred maketh the *heart* sick.”

Psalm 38:10 – “My *heart* panteth, my strength faileth me.”

Psalm 69:20 – “Reproach hath broken my *heart*; and I am full of heaviness: and I looked for some to take pity, but there was none; and for comforters, but I found none.”

Spiritual Heart

Psalm 112:7 – *“He shall not be afraid of evil tidings: his **heart** is fixed, trusting in the Lord.”*

Psalm 57:7 – *“My **heart** is fixed, O God, my **heart** is fixed: I will sing and give praise.”*

Proverbs 23:26 – *“My son, give me thine **heart**...”*

Deuteronomy 6:5 – *“And thou shalt love the Lord thy God with all thine **heart**, and with all thy soul, and with all thy might.”*

I Samuel 16:7 – *“...The Lord seeth not as man seeth; for man looketh on the outward appearance, but the Lord looketh on the **heart**.”*

I Chronicles 28:9 – *“And thou, Solomon, my son, know thou the God of thy father, and serve him with a perfect **heart** and with a willing mind: for the Lord searcheth all **hearts**, and understandeth all the imaginations of the thoughts.”*

II Chronicles 12:14 – *“And he did evil, because he prepared not his **heart** to seek the Lord.”*

Psalm 51:10, 17 – *“Create in me a clean **heart**, O God; and renew a right spirit within me. The sacrifices of God are a broken spirit: a broken and a contrite **heart**, O God, thou wilt not despise.”*

Proverbs 4:23 – *“Keep thy **heart** with all diligence; for out of it are the issues of life.”*

Proverbs 15:13 – *“A merry **heart** maketh a cheerful countenance: but by sorrow of the **heart** the spirit is broken.”*

Jeremiah 17:9 – *“The **heart** is deceitful above all things, and desperately wicked: who can know it?”*

Romans 2:5 – *“But after thy hardness and impenitent **heart** treasurest up unto thyself wrath against the day of wrath and revelation of the righteous judgment of God.”*

II Corinthians 3:15 – *“But even unto this day, when Moses is read, the veil is upon their **heart**.”*

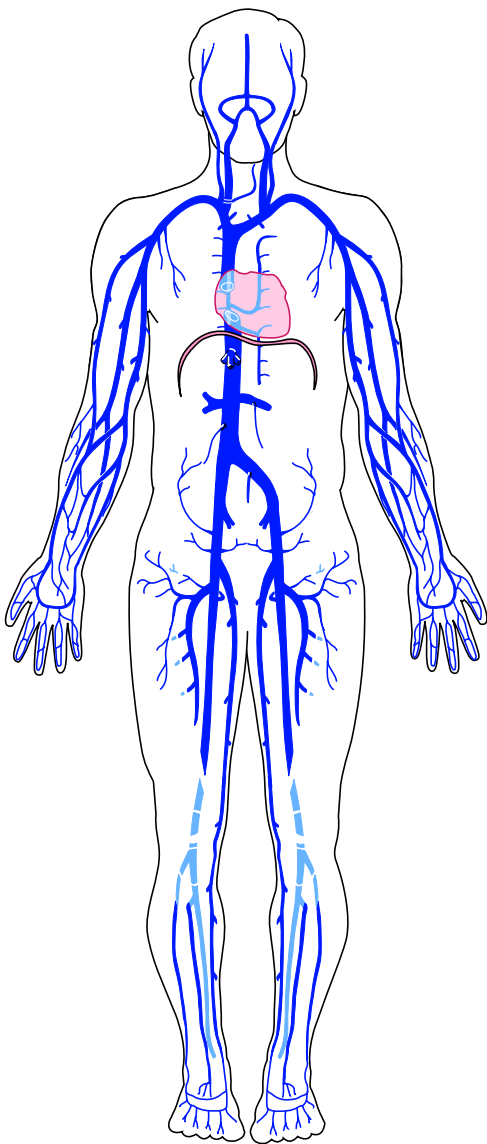
Jeremiah 4:14 – *“O Jerusalem, wash thine **heart** from wickedness, that thou mayest be saved. How long shall thy vain thoughts lodge within thee?”*

Romans 5:5 – “And hope maketh not ashamed; because the love of God is shed abroad in our **hearts** by the Holy Ghost which is given unto us.”

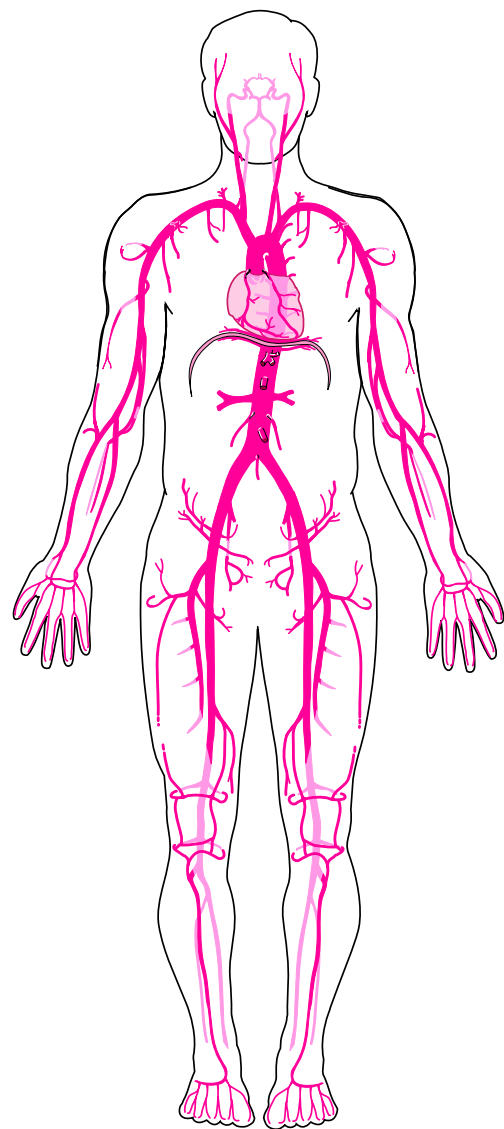
Matthew 11:29 – “I am meek and lowly in **heart**.”

Matthew 5:8 – “Blessed are the pure in **heart**: for they shall see God.”

Psalm 147:3 – “He healeth the broken in **heart**, and bindeth up their wounds.”



Veins



Arteries

Answer Sheet

Page 5

1. character
2. Student answer.

Page 6

Heart keeping is like caring for a flower garden because you need to prepare the flower bed before planting—ask the Holy Spirit to soften your heart.

Page 18

1. It is securely nestled between the lungs and a little to the left side of the chest. It is also surrounded with a shield composed of the breastbone and ribs.
2. about the size of their fist
3. septum
4. atria, ventricles
5. choice and emotion
6. The spiritual heart can be kept by guarding the thoughts and imagination and bringing them

Page 18 continued

into captivity to the obedience of Christ.

7. love

8. entrance, renewed, poison, fountain, error

Page 23

1. To pump enough blood at a high enough pressure to constantly circulate the blood to all parts of the body.
2. See pages 12 and 24.
3. It gets rid of its gaseous waste product of carbon dioxide and picks up a rich supply of oxygen.
4. When the blood takes on oxygen, it changes color from a tired bluish red to a bright, sparkling scarlet.
5. Teacher, check. See pages 21 and 22 of the student's section.

Answer Sheet

Page 25

backward

Page 26

nutrition, exercise, water, sunshine, temperance, fresh air, rest, and trust in God

Page 27

1. valves
2. to control the direction of blood flow
3. four sets
4. leaks occur
6. the noise leaky heart valves make
7. rheumatic fever
8. Teacher, check. (It could mean not grumbling when mother says it is time to put your things away and get ready for bed, etc.)

Page 34

1. It is made of teams of intertwined muscle layers that weave over each other lending support and strength to one another.
2. Teacher, check.
3. No; it beats by God's supervision.
4. a weak spot in the heart muscle that bulges and pops
5. No; it works without you telling it to while the arms and legs work at your command.
6. Teacher, check.

Page 36

Your heart is stronger than your hand.

Page 42

1. electric clock, heart, toaster, blender, fan
2. the pacemaker cells

Answer Sheet

Page 42 continued

3. electrical charge
4. When the three special fibers, like living wires, carry the signal from the pacemaker cells to the second spark plug
5. God
6. pulse
7. The cells require more oxygen so the brain will **alert** the heart to beat faster.
- 8.-9. See page 38. See page 2 of the Teacher's Section.
10. Teacher, check. (Jesus knocks at our heart's door through the conscience. When we respond and do not resist God's voice speaking to our hearts then we make the choice to let Jesus into our hearts. It is our choice; because it is an act of free will, God requests it.
11. Not many Jews were prepared to receive the Christ Child; because of their spiritual problems, they failed in the mission God had given them.

Page 45

1. "traffic jams" occur in the blood vessels
2. animal products
3. It causes a definite loss in **alertness**.
4. heart attack, stroke

Page 47

1. Teacher, check.

Page 49

4. Water will not flow as quickly through the tube after it was lined by greasy shortening or margarine.

Page 51

1. The brain does not get sufficient blood and so cannot think as well as normal. It is less **alert**.
2. Fresh air
3. Outdoors; the abundant fresh air purifies the blood.

Answer Sheet

Page 51 continued

4. Tight garments about the chest may restrict the free movement of the heart. Other organs may also be compressed by tight clothing, making it harder for the heart to send blood through them. Chilled limbs mean contracted capillaries and tight waistlines interfere with the return of the blood from the extremities.

5. It makes it tired and weak. It has to beat faster.

7. weak, flabby, lack, blood

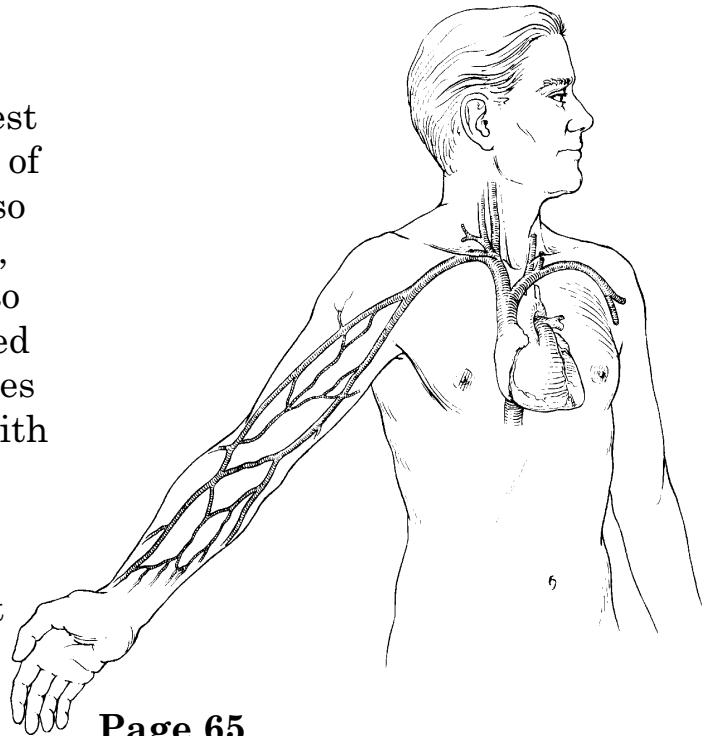
8. in the large organs

9. tea and coffee

10. It makes the heart's muscle fibers become fatty and lose the power of contraction. It also makes the heart valves hard and stiff.

Page 63

1. See page 48.



Page 65

1. Many are the claimants for the heart (“mind”) but the Father calls, “*My son, [not a stranger, enemy, or slave but a son] come to me.*” Then yield your whole heart for He promises, “*Ye shall seek me, and find me, when ye shall search for me with all your heart*” (Jeremiah 29:13). God desires to heal you to set you free from all sin. He demands, not the hands, the feet, the tongue, the ears; but that which is the **moving principle** of all the members—the heart!

2. His Spirit or His mind.

Gardening Sheet

Lesson Three Subject Health

Title "The Heart"

In Season

The heart keeps the body flourishing by sending the blood through the arteries and nourishing the tissues.

Good gardening depends on good soil. It helps feed the plants. If your soil seems to lack what it takes to grow good plants, then the first step is to search out the causes of plant failures.

Ask and answer these questions:

1. Is the topsoil gone?
2. Does it drain poorly?
3. Is there lack of plant food?
4. Does it have bad texture?
5. Is it difficult to work?
6. Can you think of other problems with your soil?

Test your soil. (Kits can be purchased as a local store.)

The heart (mind/soil) needs to be broken up by the Word.

Out of Season

Study more about soils and their needs. Did you know that there is more going on in the soil below your feet than there ever is above the soil? In a single teaspoonful of good garden soil there may be as many as 5 billion living organisms that man has thus far discovered!

What do these organisms do? Tiny and microscopic though these may be individually, by sheer numbers they exert an enormous power (like a drop of blood pumped through the body). They help minerals and chemical compounds in the soil transform the soil from unusable to usable. Night and day, when moisture and temperature conditions are right, these creatures live an active, rapid life cycle. In doing so, they yield by-products which your garden plants need for lush, attractive growth. (Our hearts need to be **alert** and active for the Lord. Was Israel?)

Gardening Sheet

“The Heart,” continued



Really, all a garden does is provide a happy home for bacteria, or these soil organisms. When this is done, the garden flourishes. How can this relate to our spiritual life?

Find soil samples different from your own garden and compare them.

Garden of the Heart

See Matthew 13:3-9; 18-23.

“Such are a few of the many lessons taught by nature’s living parable of the sower and the seed. As parents and teachers try to teach these lessons, the work should be made practical. Let the children themselves prepare the soil and sow the seed. As they work, the parent or teacher can explain the garden of the heart with the good or bad seed sown there, and that as the garden must be prepared for the natural seed, so the heart must be prepared for the seed of truth. As the seed is cast into the ground, they can teach the lesson of Christ’s death; and as the blade springs up, they can teach the lesson of the truth of the resurrection. As the plants grow, the correspondence between the natural and the spiritual sowing may be continued.”

—*Christ’s Object Lessons* 87

*“My son, give me thine heart...”
Proverbs 23:26*



*“And thou shalt love
the Lord thy God
with all thine heart,
and with all thy soul,
and with all thy might.”
Deuteronomy 6:5*

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Mark 4:29