



WISDOM QUIZ

Matthew 6:27

"Which of you by taking thought can add one cubit unto his stature?"



How well do you understand the concept of God's design?

1 A child's height is determined by the genes of his parents.

(Read Psalm 139:13-17.)

- God formed Adam out of the dust of the ground and made him a certain height. The same Hebrew word for *formed* is used in Isaiah 44:2: "Thus saith the Lord that . . . *formed* thee from the womb. . . ." David explained that what God formed was "fearfully and wonderfully made."

It is normal and harmless to question our height.

(See Romans 9:20 and Psalm 100:3.)

2 God has given scientists the ability to develop synthetic steroids which can increase height.

(Read I Corinthians 1:25.)

- While some hormones may be taken for legitimate reasons, improper use of hormones can have serious consequences. Certain hormones may even stunt growth if taken in one's youth. To achieve the addition of a cubit, science would have to make a six-foot man seven feet, six inches tall.

One sign of self-rejection is over-attention to clothes.

(See Matthew 6:27-28.)

True/False

3 Genetic engineering is clearly a misuse of science.

(Read Genesis 9:1-11.)

- The stated purpose of genetic engineering is to create a child to the specifications of the parents. This would certainly involve the removal of defects. Yet, God said to Moses, ". . . *Who maketh the dumb, or deaf, or the seeing, or the blind? Have not I the Lord?*" (Exodus 4:11).

God wants us to thank Him for our height and weight.

(See Deuteronomy 21:20-21.)

4 A person who accepts his height has self-acceptance.

(Read I Thessalonians 5:18.)

- Having thoughts about changing our birth order, gender, race, and other unchangeable features, is just as fruitless as worrying about our height.

God assumes ultimate responsibility for birth defects.

(See Exodus 4:11.)

5 A person with a physical defect is never to be excluded from a ministry.

(Read Leviticus 21:21.)

- Physical defects are not intended by God to hinder our ministries but rather to direct our ministries into areas which He designed for us.

In Israel, height made no difference in the way a man could serve God.

(See Leviticus 21:17-20.)

Total Correct _____

God Will Take Care of You



1. Be not dis-mayed what-e'er be-tide, God will take care of you;



Be-neath His wings of love a-bide, God will take care of you.

Chorus



God will take care of you, Thro' ev-'ry day, O'er all the way;



He will take care of you, God will take care of you. . .

WISDOM WORKSHEET ON MATTHEW 6:27



**“WHICH OF YOU
BY TAKING THOUGHT
CAN ADD ONE CUBIT
UNTO HIS STATURE?”**



Esther Bubley's World of Children in Photographs

Comparison with peers often leads to discontentment with unchangeables and brings self-rejection. Thus, the warning in II Corinthians 10:12: “... But they measuring themselves by themselves, and comparing themselves among themselves, are not wise.”

God designed ten unchangeables in all of us.

1. My physical features
2. My mental capabilities
3. My parents
4. My gender
5. My brothers and sisters
6. My birth order
7. My nationality
8. My race
9. My time in history
10. My aging and life span

God's ultimate purpose in each of these unchangeables is to conform us to the image of Christ. By rejecting His design in any unchangeable, we not only reject the Designer, but we also reject part of His purpose for us.

Linguistics

Languages,
Grammar, Vocabulary,
Communication



TAKING THOUGHT

Greek: μεριμνάω
(meh-rih-MNAH-oh)

DEFINITION: From the word μερίζω, meaning “to divide.” Thus, “to have divided thoughts, where one thought distracts from the other; to be anxious, full of care, worried.” This word is different from the objective of the word *consider*, which is what we are to do with the lilies.

Do Resource A.

ADD

Greek: προστίθμι
(pros-TITH-ay-mee)

DEFINITION: προσ means “toward,” and τίθμι means “to place”; thus, “to place something to the side of another; to increase.”

INSIGHT: From this Greek word we get our word *prosthesis*, which is an addition to the body, such as an artificial arm or leg.

CUBIT

Greek: πῆχυς (PAY-kooce)

DEFINITION: The forearm. As a means of measurement, it is the distance from the elbow to the tip of the middle finger—approximately eighteen inches.

STATURE

Greek: ἡλικία (hay-lih-KEE-ah)

DEFINITION: Age, length of life, size, or maturity.

INSIGHT: Related to ἡλικός (hay-LEE-kos), which means “a peer; one of the same age.” Comparison with others usually prompts wishful thinking and thoughts of self-rejection.

Do Resource B.

History

Archaeology,
Geography, Prophecy,
Music, Art, Literature



What “giants” in history were motivated to achievement by their shortness of stature?

John Wesley was only five feet, three inches tall; yet, historians agree that he was the most dynamic influence in both England and America in the eighteenth century. His influence continues today.



John Wesley
1703–1791

James Madison is known as “The Father of the Constitution”; yet, he was the smallest American President, at five feet, four inches, weighing only one hundred pounds.



Painting by Gilbert Stuart

James Madison
1751–1836

Napoléon Bonaparte's short stature earned him the nickname “Little Corporal”; yet, he conquered much of Europe and is remembered for his achievements, not his height.



National Gallery of Art, Washington D.C.
Samuel H. Kress Collection

Napoléon
1769–1821



Joseph Merrick

How did a short and grotesquely deformed man turn the screams of onlookers into the smiles of royalty?

Do Resource C.

Science

Chemistry, Biology,
Astronomy, Geology,
Physics, Mathematics



How have attempts to “add to the stature” of animals produced death in men?

In 1959 farmers were told they could increase the weight of their cattle by giving them the synthetic hormone *diethylstilbestrol* (die-eth-ul-stil-BES-trall), abbreviated *DES*. The farmers began to give this hormone to their steers, and the cattle gained 10 percent more than they would have without the drug.

However, in 1979, twenty years later, *DES* was banned. It was discovered that the drug once hailed as a “miracle” of modern agriculture was, in fact, a cause of cancer. Not only did *DES* cause cancer in the animals which received it, *DES* also caused cancer in those who ate the contaminated meat.

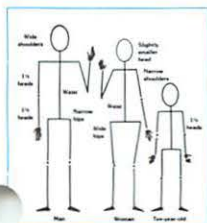


With the use of *DES*, beef cattle could gain up to ninety extra pounds in three months, but their meat produced cancer.

How does understanding the turkey vulture remove the need to worry about our statures?



Do Resource D.



How do the proportions of our statures illustrate the wisdom of God's forethought?

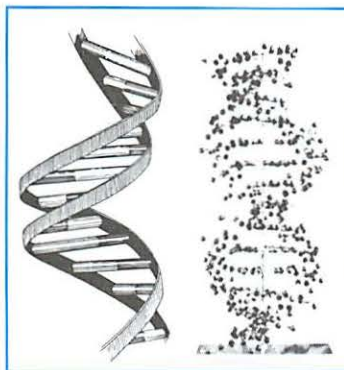
Do Resource E.

Law

Government,
Economics, Logic



How are law enforcement officers assisted by God's control of stature?



Every cell in the body has the same DNA pattern. Thus, a DNA “fingerprint” can be made from blood, hair, skin, or any other part of the body.

God designed DNA to control the growth and ultimate stature of each person. DNA (deoxyribonucleic acid) is a complex molecule found in all the cells of the body. It carries a genetic code which is unique to each person.

Scientists have learned how to use these codes as “fingerprints” in apprehending criminals.

In 1986, a man was arrested for a vicious attack upon a young girl, but his DNA “fingerprint” proved he was innocent. The police then checked the DNA prints of several thousand men in that same town and discovered the real criminal.

How is the “dream” of “adding a cubit to our statures” becoming a legal nightmare?

The “miracle” of test-tube babies adulterates family lines and creates many unimaginable legal problems. One consequence relates to inheritance laws, another to the potential for incestuous marriages.



Do Resource F.

Medicine

Health,
Nutrition, Behavior,
Counseling



How does the use of steroids to “add to a man's stature” destroy his manliness?

Hormones used by athletes to increase muscle size are called *anabolic steroids*. Those who use them accomplish their goals, but at a tremendous cost.

Steroids alter the body's internal controls. Steroids damage liver cells and decrease the liver's ability to eliminate toxins.

Steroids reduce or destroy the potential of having children, elevate cholesterol, promote hardening of the arteries, restrict potential for physical growth, and increase the risk of disabling injuries.

Finally, steroids and other hormones distort the physical features of those who take them.



The shocking features of this man illustrate the consequences of excessive amounts of hormones in the body.

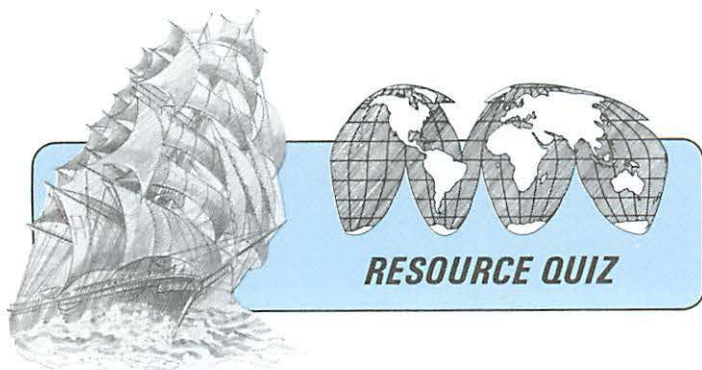
How do steroids hinder a man from conquering anger?

One of the most dramatic consequences of steroid abuse is a violent rage which overcomes the users. Many athletes testify that while on steroids they at times lost control of themselves and attacked others without cause.

How can you counsel a person who has rejected his stature?

One of the best means of helping a person see his stature from God's perspective is by using the insights from the booklet *Self-Acceptance*.

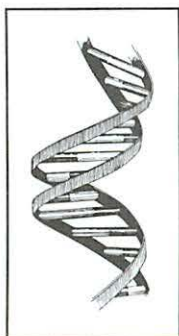
Do Resource G.



RESOURCE QUIZ

How many of these questions can you answer before studying the resources?

HOW WAS MAN'S STATURE "FEARFULLY AND WONDERFULLY" DESIGNED?



- What causes a cell to become bone or muscle? . . . 2167
- What does DNA do in your body? 2167
- How does Psalm 139 help us understand DNA "ladders"? 2167
- How are weaving and DNA "ladders" similar? . . 2168
- How can we be sure that God prescribed our features before birth? 2169

HOW DO PAINTINGS EXPLAIN WORTH?



- How does a painting illustrate our redemption? . 2171
- How does a locket illuminate our identification? . . 2173
- How does a frame amplify our transformation? . . 2175
- How does a furnace explain our glorification? . . 2176
- How does a violin demonstrate self-worth? 2176

HOW DID JOSEPH MERRICK TURN SCREAMS OF SHOCK INTO SMILES?



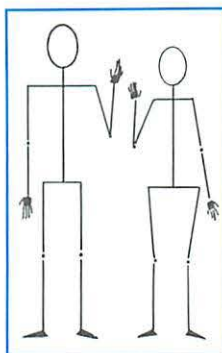
- Why did women scream when they saw the "Elephant Man"? 2177
- How did the "Elephant Man" learn to accept himself? 2178
- How did the "Elephant Man" respond to mocking? 2180
- Why did Joseph Merrick join a freak show? 2183
- How did God honor Mr. Merrick's humility? 2192

HOW DOES THE TURKEY VULTURE TEACH US TO ACCEPT OUR STATURES?



- What makes a turkey vulture repulsive? 2195
- How are vultures superior to eagles? 2197
- Why don't vultures catch the diseases they eat? . . 2198
- Why are we indebted to turkey vultures? 2198
- How has God made us like turkey vultures? 2199

HOW DID GOD PROPORTION STATURE?



- How do the proportions of our bodies change as we mature? 2200
- How many heads tall is the average adult? 2201
- What are the proportions of a face? 2202
- How can eggs help you draw people accurately? . 2202
- How does God's forethought bring self-acceptance? 2204

WHY IS GENETIC ENGINEERING WRONG?



- How does artificial insemination violate God's law? 2205
- What has caused six million American women to become sterile? 2207
- Why is artificial insemination adultery? 2208
- How can AID cause incest? 2209

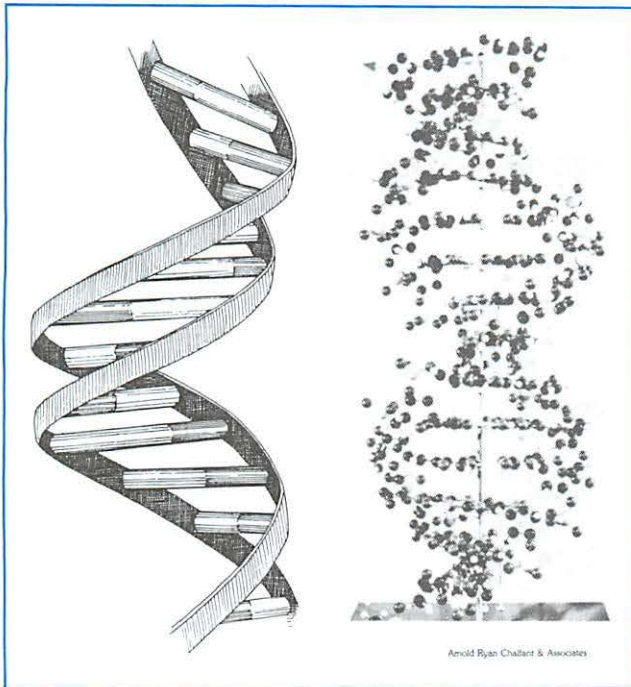
HOW DO STEROIDS DAMAGE STATURE?



- What do steroids do for athletes? 2211
- How do steroids affect cells? 2212
- How do steroids destroy a man's virility? 2213
- How do steroid users become "moon faced"? . . 2214
- How do steroids cause atherosclerosis? 2215
- How do steroids distort and stunt growth? 2215

INSIGHTS THROUGH INVESTIGATION

HOW DO TEN HEBREW WORDS EXPLAIN THE FOLLY OF TAKING THOUGHT FOR ONE'S STATURE?



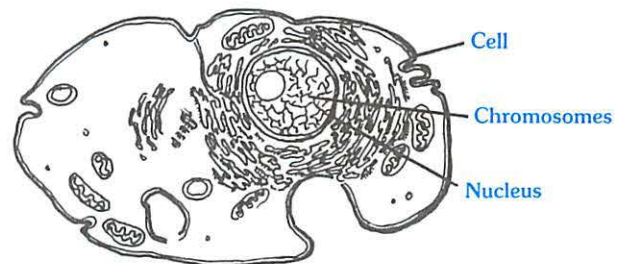
Only in recent years have scientists discovered the DNA “ladders” which contain “the master plan of all life.” Was this spiraling wonder of embroidery described by the Creator of life in Psalm 139?

At the moment of conception a marvelous multiplication begins which eventually forms all of our physical members. Each member is composed of millions of individual cells. But how does one cell become part of a bone, another cell become a part of a follicle of hair, and yet another, a part of a fingernail?

The answer lies in the amazingly complex function of DNA. DNA stands for *deoxyribonucleic acid*. It controls the life of every cell and, therefore, the life of every organism.

This control functions in at least two ways. First, DNA controls all hereditary information from one generation of cells to the next. Second, DNA determines the form and function of the cell by regulating the kinds of proteins it produces.

DNA “ladders” are large molecules which lie tightly coiled in the chromosomes of each cell. Each chromosome is thought to contain one DNA molecule, which, if stretched out, would be approximately sixteen inches long. When these DNA ladders divide, each new ladder is an exact duplicate of the first one, thus, the code continues to dictate cell growth from generation to generation.



Pictured above is one of the billions of cells that make up our statures. The DNA ladders are contained in the chromosomes of the cell.

The message contained within the DNA ladders determines stature and every other physical feature of our bodies. It is like God’s codebook which every cell obeys in forming our members. Having this background in mind, let us examine the words of Psalm 139:16.

Great theologians in past centuries have wondered at this verse. Charles Spurgeon wrote, “This verse is an exceedingly difficult one to translate . . . The large number of words in italics will warn the English reader that the sense is hard to come at, and difficult to express . . .” (*The Treasury of David*, Volume 3b, page 263).

During the time of Charles Spurgeon, there was no understanding of DNA or of its wondrous structure and control of human growth. Notice the words and structure of Psalm 139:15–16.

“My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest parts of the earth.

Thine eyes did see my substance, yet being unperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them.”

How does each of these ten significant words relate to the wise and loving thought God has given to our statures?

- | | |
|-----------------------------|-----------------------|
| 1. substance | 6. book |
| 2. made | 7. members |
| 3. secret | 8. written |
| 4. curiously wrought | 9. continuance |
| 5. substance | 10. fashioned |

1 Substance עֵצָם

The concept of strength, power, and might are contained in the word עֵצָם (OH-tsem). Its root word, עָצַם (aw-TSAM), means “to bind fast, to make powerful, to be increased, to wax mighty.”

The Psalmist relates his earliest development to the working of God’s power within him. The verb עָצַם (mighty) combined with רָבָה (raw-BAW) (multiplied) in Exodus 1:7 describes the multiplication of the nation of Israel.

“And the children of Israel were fruitful, and increased abundantly, and **multiplied**, and waxed exceeding **mighty**; and the land was filled with them.”

2 Made עָשָׂה

The word עָשָׂה (aw-SAW) is a primary root and has a wide range of meanings. It is used in Genesis 1:31 to summarize the creative work of God: “And God saw everything that He had **made**, and, behold, it was very good. . . .”

The word is also used in Genesis 5:1: “. . . In the day that God created man, in the likeness of God **made** he him; Male and female created he them; and blessed them, and called their name Adam, in the day when they were created.”

The name Adam means “from the earth.” God reveals to us in Psalm 139:15 that just as He created Adam from the dust of the ground, so He creates every person from the elements of the earth. This fact is affirmed by scientists who can actually identify the elements of the earth which make up the human body.

Job emphasized this point when he said, “Thine hands have made me and fashioned me together round about. . . . Remember, I beseech thee, that thou hast **made** me as the clay; and wilt Thou bring me into dust again?” (Job 10:8–9).

3 Secret סֵתֵר

The general sense of the word סֵתֵר (SAY-ther) is “to conceal,” yet, not in the sense of hiding something as much as protecting it. Its derivatives are “hiding place” and “place of shelter.” The womb is, thus, designed as a place of protection.

4 Curiously Wrought רָקַם

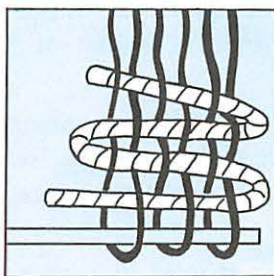
Both these English words come from one Hebrew word, the word רָקַם (raw-KAM). This word describes the intricate weaving together of the substance of a person. Its definition is “to variegate color; to weave together; to embroider; to do needlework.” This word is used only in Psalm 139.

In the book of Exodus the Hebrew word מַעֲשֵׂה (mah-ahs-EH) is used for the work of expert weavers. “And thou shalt make an hanging for the door of the tent, of blue, and purple, and scarlet, and fine twined linen, **wrought** with needlework” (Exodus 26:36). This Hebrew word is derived from עָשָׂה, which relates to creation as was explained in section two.



Ernest Galloway

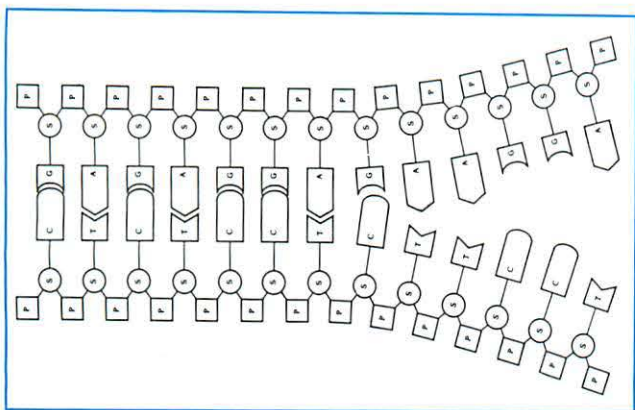
The process of weaving is strikingly similar to the procedure God uses in creating our physical features with DNA.



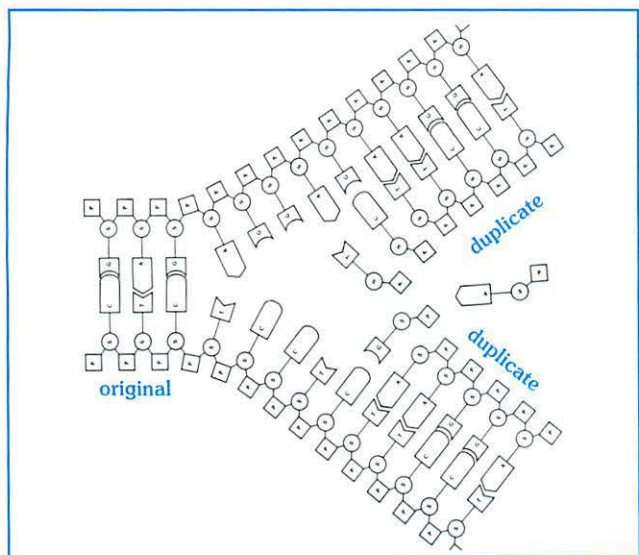
Just as the threads are tightly brought together, so are the DNA strands in the cells.

The intricate work of the weaver or the embroiderer gives us a beautiful picture of what God does with the strands of DNA. Whereas the weaver brings in additional strands of thread from an outside source, God creates new strands of DNA for multiplying cells within the chromosomes of those cells.

To *variegate* means “to give variety and diversity to the creative work.” This is certainly what God has done when He **curiously wrought** us in the womb.



Just as the weaver unwinds thread from a spindle, so, in the process of cell multiplication, one side of the DNA ladder is separated from the other side. As this process takes place, the genetic code of the DNA strand is exposed on both sides. Each letter in the code is quickly filled in and, thus, the one strand becomes two complete strands.



5 Substance גֶּלֶם

The word גֶּלֶם (GO-lem) and the word עֶצֶם in the previous verse are both translated *substance* in the English; however, they are two totally different words in the Hebrew.

גֶּלֶם is used in only this one place. It means “wrapped” in the sense of folding together. The root of this word, גָּלַם (gaw-LAHM), is also used only once, but in its usage we see a clearer picture of the meaning of both words.

“And Elijah took his mantle, and **wrapped it together**, and smote the waters, and they were divided . . .” (II Kings 2:8).

Once again we have the picture of weaving, but in a larger sense, it is bringing cloth together and intertwining it so as to give it increased substance, force, and strength.

6 Book סֵפֶר

The word *book* in this verse is סֵפֶר (SAY-fer), which is derived from סָפַר (saw-FAR), meaning “to record, to inscribe, and to enumerate.” The translation of *book* is thus by implication, since the recording is actually done in the DNA molecules.

These molecules have an incredible capacity to store knowledge and then to pass that knowledge on to the next generation of cells. Our present understanding of God’s inscription in the DNA is explained as follows:

Because a cell may divide as many as twenty times in its lifetime, it must produce as many as twenty copies of its genetic code without any “typographical” errors. Considering that each complete set of genes is equivalent to the letters printed on 500,000 pages, a cell must faithfully copy up to 10,000,000 pages of chemical ‘printing’ during its lifetime.

7 Members יָצַר

This word (pronounced yaw-TSOOR) does not appear in the original Hebrew text in Psalm 139:16. However, it is implied, and the context clearly confirms that it should be translated *members*.

The Psalmist has just spoken of God’s seeing his substance and writing all in His book. The word is followed by the statement that his physical substance continues to be fashioned.

8 Written כָּתַב



Based on the wisdom of God as written in our DNA, we are all “prescription babies.”

The careful thought and wise planning of each of our members, including our statures, is all written

out by God. The word God used to describe this process is כָּתַב (kaw-THAB). It is a primary root word meaning “to prescribe; to record.”

God does not simply describe what takes place in our development, He *prescribes* each part of our being.

9 Continuance יוֹם

This word (pronounced YOME) is from an unused root, meaning “to be warm,” as in the warm hours of the day. More specifically, however, it defines a period of time. The time described usually follows a phenomenon such as sunrise to sunset or, in the case of our development, conception to birth.

The word can denote a period of light as contrasted with a period of darkness. It can also refer to the events in the life span of a man.

Implied in the word is God’s control of the events which take place within the time period described.



This is an ear of a six-week-old baby. Every day in the protective warmth of the womb new cells are being fashioned according to the design which God has prescribed.

10 Fashioned יָצַר

The molding and shaping of our members is defined in the Hebrew word יָצַר (yaw-TSAR). It means “to squeeze into shape; to mold into form (especially as a potter shapes clay).” Just as a potter predetermines the form of the vessel he is making, so God pre-designs each of our physical features.

In Psalm 139:16 this word could also be translated *ordained*. In II Kings 19:25 and Isaiah 37:26, it is translated *formed*. It is significant that

God uses this word to describe something which he is framing in His mind. The word also refers to pre-ordained purposes of God which He then works out according to the counsel of His will.

Thus, our members were fashioned by the all-wise planning of God “. . . when as yet there was none of them.”

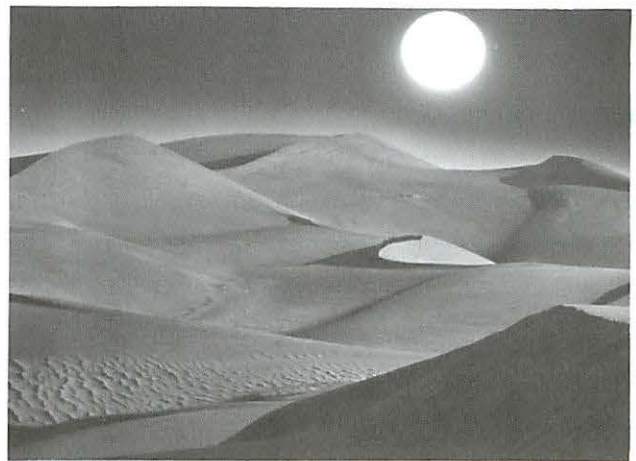
God uses the analogy of a potter forming a vessel to describe His creation of us in the womb. As the potter controls the final form of the vessel, so God predetermines our stature and every other physical feature by the instructions which He has written in each individual strand of DNA.



PROJECT

Memorize Psalm 139. Notice verses 17 and 18.

“How precious also are thy thoughts unto me, O God! how great is the sum of them! If I should count them, they are more in number than the sand. . . .”



It is inappropriate for us to take thought about our statures until we first learn what God thinks about the subject. Because His thoughts are more than the sands of all the deserts and all the beaches, dwelling on His wisdom would take more than a lifetime and would leave no room for worry.

Date completed _____ Evaluation _____



POWER THROUGH PRECISION

HOW CAN UNDERSTANDING FOUR WORDS FREE US FROM TAKING THOUGHT ABOUT OUR STATURES?



Courtesy of the Trustees, The National Gallery, London

The artist John Constable put a great deal of time and effort into the above painting. Other artists do the same. What makes this painting more valuable than other landscape paintings?

Why is it that two paintings by two different artists will vary dramatically in their value even though both paintings appear equally beautiful to the average viewer?

The answer can be found in four factors that establish the value of a painting.

- The price someone is willing to pay
- The name of the artist
- The frame in which the painting is set
- The exposure the painting receives

These four factors can also be used to establish the value of our lives. In fact, there are four Biblical words which describe how these functions apply to a Christian. The more we understand these four words, the better we will grasp the basis of true self-worth.

1. *Redemption*
2. *Identification*
3. *Transformation*
4. *Glorification*

1 Our worth is determined by REDEMPTION.



Mauritshuis Museum, The Hague, Netherlands.
© The Frick Collection

Rembrandt in 1629



Mauritshuis Museum, The Hague, Netherlands.
© The Frick Collection

Rembrandt in 1659

The name Rembrandt is recognized immediately by most people as one of the most famous painters of all time. He grew up in The Netherlands in the seventeenth century, and during his lifetime he produced about 600 paintings, 300 etchings, and 1,400 drawings.

If any of his paintings or drawings were sold today, they would command a very large price. Yet, ironically Rembrandt was forced in his later years to declare bankruptcy and to have most of his remaining works auctioned.

During his early years Rembrandt was recognized as a great artist. However, the value of his work was not determined. Thus, in his later years the public was attracted by the paintings of lesser artists, and interest in Rembrandt's paintings dwindled. It was only after enormous prices were offered for Rembrandt's paintings that their worth was determined.

In a similar sequence, God, the great Creator, fashioned each of our lives; yet, our worth was not established until a great price was offered. That is the story and meaning of *redemption*.

• *Redemption*

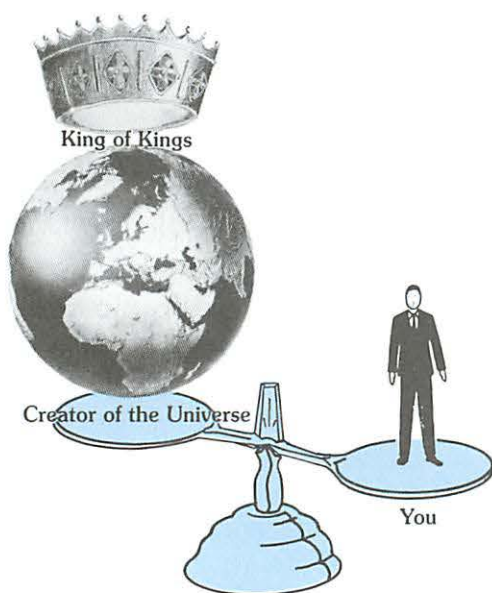
Two words make up the word *redeemer* in Latin: *red*, meaning "back" or "again," and *emere*, communicating the sense of "to take" or "to buy." Thus, to *redeem* is to recover ownership.



National Gallery of Art, Washington, D.C., Widener Collection

Rembrandt's "Descent from the Cross" depicts the awesome price God paid for our redemption: the blood of Jesus Christ.

"Forasmuch as ye know that ye were not redeemed with corruptible things, as silver and gold, from your vain conversation received by tradition from your fathers; But with the precious blood of Christ, as of a lamb without blemish and without spot" (I Peter 1:18–19).



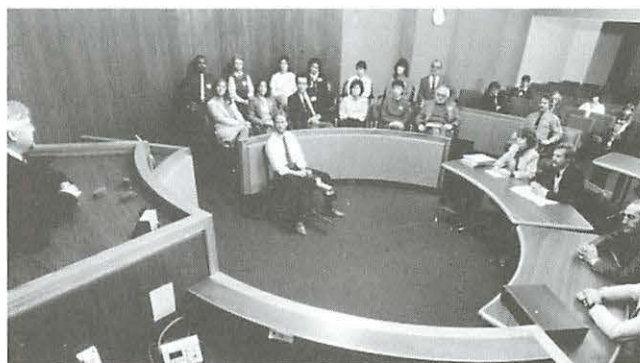
From God's perspective, man is the most valuable part of His creation. If you were the only person in the whole world, God would have exchanged His Son, the Lord Jesus Christ, as the payment for your redemption.

• Justification

This is a legal term which denotes the act of pronouncing a guilty person righteous by providing a proper reason or basis for that declaration. It could result in acquittal of crimes which have been committed, brought to trial, and sentenced.

God had a legal claim on our lives because He created us in His image. However, we sold ourselves into Satan's domain through sin and while under his authority committed crimes for which restitution had to be made.

The question God had to reconcile was not only whether we were worth purchasing back, but also whether it was worth paying for all the sins we would commit while we were away from Him. God's answer was a resounding **yes**.



H. Armstrong Roberts

The Law brought us to trial in God's courtroom, and our own record condemned us. The sentence was death, a price which had to be paid. The value God placed upon us, however, was so high that He chose to put His own Son in our place so He would pay the penalty and we could be set free.

"Know ye not that the unrighteous shall not inherit the kingdom of God? Be not deceived: neither fornicators, nor idolaters, nor adulterers, nor effeminate, nor abusers of themselves with mankind, Nor thieves, nor covetous, nor drunkards, nor revilers, nor extortioners, shall inherit the kingdom of God.

"And such were some of you: but ye are washed, but ye are sanctified, but ye are justified in the name of the Lord Jesus, and by the Spirit of our God" (I Corinthians 6:9–11).

• Ransom

A ransom is the money or price that is paid for the redemption of a prisoner or a slave. Once the ransom is paid, the prisoner is released from captivity or the slave is freed from bondage. It is significant

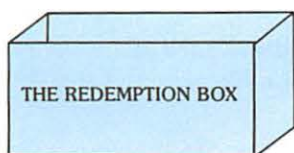
that Jesus referred to Himself as the ransom which was to be paid for our release from the hand of the enemy.

"Even as the Son of man came not to be ministered unto, but to minister, and to give his life a ransom for many" (Matthew 20:28).



Bettman Newsphotos

In 1981 this masked gunman took a man hostage after robbing a French jewelry store. In the Garden of Eden, Satan took us hostage. He did not have to point a gun at us. He simply used the temptation that appealed to our lusts and appetites.



PROJECT

Have family members all agree that anytime a personal item is not returned to the place it belongs in your home, Mother has the freedom to put it in the "Redemption Box." She can then establish a redemption price in money, work, attitudes, or a combination of all three.

Describe your feelings about the item which needs to be redeemed before and after you redeem it. Picture how God must feel toward you after redeeming you with the priceless treasure of His own Son.

2 Our worth is authenticated by IDENTIFICATION.

Two paintings could look identical in every detail. However, if one is not authentic, it will not have the value of the one that is. Authenticity is based on style and authorship.

Works of an artist will bear similarity of style even though there will be variety in the actual

creations. However, the real mark of authenticity is the signature which is put on the work.

God created each of us in His own image; yet, there is infinite variety in the way He made each of us. This style of similarity with uniqueness is also illustrated in the design of snow.



H. Armstrong Roberts



Photomicrographs by Vincent Schaefer

Every snowflake has six points. However, of the billions and billions of snowflakes that God makes every day around the world, no two are alike. Each one is a masterpiece of His wisdom and creativity.

• Authenticity

The word *authentic* contains profound Biblical truth. It comes from the Greek word αὐθεντίας (ow-THENN-tace), which means "an author or maker who does something by his own right and affirms his authorship by his own life."

The word αὐθεντίας is derived from the pronoun αὐτός, meaning "self," and the word ἐντης (HEN-tace), meaning "worker" and related to a word meaning "arms; weapon." The combination of these two Greek words communicates the message of establishing the genuineness of a creative work by one's own life.

This idea adds a whole new dimension to Christ's authorship of man and His willingness to authenticate His authorship by laying down His own life.

From the word *authenticity* we derive the words *author*, *authority*, and *authorization*.

One day a man in Pennsylvania stopped at a pawn shop and noticed a little locket. He was

attracted by the beauty of the locket, but the one selling it explained that he could not pry it open and was, therefore, willing to sell it for \$25.

The man bought it and went his way. When he got home, he set about to open the locket. He finally discovered the latch and carefully pried the sections apart. Inside were the words "To My Joséphine." Because the words were written in French, the man immediately thought of the wife of Napoleon.

He shipped the locket to a collector of French antiques in New York and asked him to evaluate it. The collector sent him a telegram inviting him to fly to his office to discuss the locket.

At the airport the man was met with a limousine and escorted to the plush office of this wealthy collector. As they sat down to talk, the collector said, "The locket you sent me happens to be authentic. It was given by Napoleon to his wife, and that is his handwriting. There are other factors about the locket which make it a very valuable find. Would you be willing to sell it?" Eventually the man sold the locket for a quarter of a million dollars.



Joséphine
(1763–1814)

The locket the man bought at a shop for \$25 had not changed at all when he sold it for \$250,000. Its worth was increased by authenticating its previous ownership.



Napoleon crowned Joséphine French Empress in 1804.

• Likeness

As proof of God's authorship and because of the value He placed upon our fellowship, He said, "... Let us make man in our image, after our likeness..." (Genesis 1:26) and "... in the likeness of God made he him" (Genesis 5:1).

To be in the likeness of something is to resemble it in nature, qualities, or appearance; to be in similitude of substance either inwardly or outwardly. Being in the likeness of one's father is what marks a person as a son or daughter.

As children of God, we are able to enjoy great worth because Christ is in us, conforming us to His image. (See Romans 8:29 and I John 3:2.)



Through discipline and dress, men in the United States Navy take on a common likeness and thereby command immediate respect.

The fact that we are made in the likeness of the sovereign Ruler and Creator of the universe gives us worth that is inestimable. Add to this value the fact that He has also given us His name.

• Identification

This word comes from the Latin term *idemfacio*, which is made up of two words: *idem*, meaning "the same," and *facere*, which means "to make." Identification is the act of establishing origin or the act of confirming a relationship of similarity.

In addition to identifying with us in image and likeness, God has authenticated our relationship with Him and its accompanying worth by calling us His sons and giving us a name with Christ.

There is no better name in all the universe than that of Jesus Christ, and "A good name is rather to be chosen than great riches..." (Proverbs 22:1).

As a young father drove home from work one evening, he happened to notice some items on a front lawn which had been set there for the garbage collectors to haul away. He noticed among the junk an old violin. He thought, "We don't have the money to buy a violin, and my daughter really wants to learn to play one. Maybe this instrument could be used to help her get started."

He knocked on the door of the home and asked the people if he could take the violin which was sitting out with the junk. They smiled and assured him, "You are welcome to it."

When he arrived home and began dusting and polishing the violin, he noticed some writing on the inside. It was hard to discern, so he shined a flashlight in the opening. The letters were then unmistakable: Stradivarius. This father had just come upon one of the 635 violins made by Antonio Stradivari (1644–1737). The name alone made it a priceless treasure.



Harvard Dictionary of Music; Will Apel, © 1950 Harvard University Press

Another example of the value of a name is in the clothing industry. A clothing manufacturer will make a quantity of identical suits and then sell them to different retailers, where they will command widely varying prices based on the name of the retailer.



The British Museum, London, England

If you were going to buy this picture, would you rather have it signed by John Smith or Rembrandt? People would probably ask, "Who is John Smith?" but they would look with wide eyes at the name Rembrandt.

PROJECT

Discover the power and worth of the name God has given you by examining the following Scripture passages.

- I Samuel 12:22
- Philippians 2:9
- Psalm 8:1
- Psalm 20:1, 5
- Psalm 72:17
- Proverbs 18:10
- Isaiah 43:1
- Jeremiah 15:16
- Acts 4:12
- Ephesians 1:21

3 Our worth is demonstrated by TRANSFORMATION.

A painting may be valuable and may be authentic, but to fulfill its purpose, it must be framed and displayed in the right place. Its purpose is to communicate the thoughts and ideals of the artist. The more prominently it is displayed, the more effective will be the communication of the artist.

Just the right frame must be chosen in order to bring out the real message of the artist. The color, width, and style of the frame and matting all have a great impact upon how people view the picture and the message it contains.



The correct frame will draw attention not to itself, but only to the message of the picture.

• Transform

This word means "to be changed in form; to be metamorphosed as from a cocoon to a butterfly." It denotes power, as in the word *transformer*.

A picture that is a true masterpiece is so designated because of the profound effect it produces in the lives of those who view it. In the same way, God has given to every Christian a spiritual gift which when properly used will have an edifying effect upon all those around it.

The benefits God bestows when we exercise our gifts will cause others to raise their esteem for our value. ". . . The manifestation of the Spirit is given to every man to profit withal" (1 Corinthians 12:7).

As a person becomes aware of his or her spiritual gift, self-worth should greatly increase.

PROJECT

Read Romans 12, I Corinthians 12, and the material on spiritual gifts in the *Advanced Seminar Textbook*, pages 47–85. Discuss how your spiritual gift adds even more worth to your life.

4 Our worth is acclaimed by GLORIFICATION.

When a masterpiece is properly displayed, it will draw praise. It would be foolish for a picture to accept praise for itself instead of acknowledging that people are really praising the one who created it.

When people praise us, it is equally important that we learn how to deflect that praise.

• Glory

One Greek word for *glory* is δόξα (DAWK-zah). From it we get the word *doxology*, which means “to praise, honor, extol, and worship.” The Hebrew word for *glory* is הָלַל (haw-LAHL). It can mean “to be clear” or “to shine.”

Just as a crucible refines silver and a furnace purifies gold, so a man is tested by the way he responds to praise.

“As the fining pot for silver, and the furnace for gold; so is a man to his praise” (Proverbs 27:21).



A furnace refines gold to 99.99 percent purity.

“For ye are bought with a price: therefore glorify God in your body, and in your spirit, which are God’s” (I Corinthians 6:20).

PROJECT

Learn how to deflect praise when someone compliments you. Do this by realizing that God and others are actually responsible for what the person is praising. Graciously point out this fact to the one who praises you.

If someone praises you for musical talent, you can deflect it by saying, “I had good teachers, my parents motivated me to persevere in it, and God receives the credit for my talent.”

Write five compliments which you would like to receive. Then write statements after each one which would deflect the praise to God and others.



SUMMARY PROJECT

Discuss how the following narrative beautifully portrays the four words in this resource. Then memorize it and recite it with feeling.

THE TOUCH OF THE MASTER’S HAND

’Twas battered and scarred, and the auctioneer
Thought it scarcely worth his while
To waste much time on the old violin,
But he held it up with a smile;
“What am I bidden, good folk?” he cried,
“Who’ll start the bidding for me?
A dollar—one dollar—two, only two—
Two dollars, and who’ll make it three?
Going for three”—but no—
From the room far back, a grayhaired man
Came forward and picked up the bow;
Then wiping the dust from the old violin,
And tightening the loosened strings,
He played a melody pure and sweet
As a caroling angel sings.

The music ceased and the auctioneer,
With a voice that was quiet and low,
Said, “Now what am I bid for the old violin?”
And he held it up with the bow;
“A thousand dollars—and who’ll make it two?
Two thousand and who’ll make it three?
Three thousand once—three thousand twice—
And going—and gone,” cried he;
The people cheered, but some of them cried,
“We do not quite understand;
What changed its worth?” Quick came the reply,
“The touch of the master’s hand.”

And many a man with life out of tune,
And battered and scarred with sin,
Is auctioned cheap to a thoughtless crowd,
Much like the old violin;
A mess of pottage—a glass of wine,
A game—and he travels on;
He’s going once—and going twice—
He’s going—and almost gone!
But the Master comes, and the foolish crowd
Never can quite understand
The worth of a soul, and the change that’s wrought
By the touch of the Master’s hand.

Myra Brooks Welch

Out of My Treasury, Willie White, Standard Publishing Company

Date completed _____ Evaluation _____



HISTORY RESOURCE

HOW DID A SEVERELY DEFORMED MAN TURN SCREAMS OF SHOCK INTO SMILES OF ACCEPTANCE?



Toby Gowing

Why is this man wearing a face covering and a long cloak? Does this clothing indicate that he has a problem with self-acceptance?

In the grey light of early morning, the vast Liverpool Street Station echoed with the sounds of thousands of Londoners hurrying to work. The air was filled with clouds of smoke and steam from the locomotives, but one arriving passenger that June morning in 1886 was too exhausted to pay any attention to these sights and sounds.

He attracted a great deal of attention himself, however, as he limped slowly across the platform. His whole body was concealed in a long, cape-like cloak. He supported himself with a walking stick held in his left hand. His other arm and hand were hidden

by the black cloak. On his feet were huge slippers that looked more like canvas bags than shoes.

On his head was a huge, peaked cap with a short bill. In front of his face and around the back of his head hung a kind of veil. The only way he could see where he was going was through a narrow slit in the front.

His progress through the station was slow, not only because of his limp but also because he did not know where he was going. Besides that, a crowd of curious onlookers was beginning to form. The man realized what was happening. He stopped and stood still, hoping the people would go away.

He was tired and hungry. He just wanted everyone to leave him alone, but they would not. In a voice loud enough for the crowd to hear, a boy said, "Hey, what are you hiding under there?" Someone else replied, "Whatever it is, it sure does stink!" The people laughed. Others shouted similar rude comments.

The man wanted to ask them to leave, but he knew they would not understand him, so he just stood there silently. He turned around to go, but he could not because the crowd was pressing in on all sides as those further back pushed forward trying to get a look at him.

He could sense a familiar feeling of panic beginning to rise up inside him. Then through the slit in the veil he saw someone pushing through the noisy crowd toward him. Realizing it was a policeman, he was not sure whether to feel relieved or to be further alarmed. He did not know what the police would do with him. He had nowhere to go, no money, and no friends or family to help him.

The man heard the policeman telling the people to move along. Holding his breath because of the awful smell, the officer said to him, "Come with me." Then he felt himself being pulled by his left arm. The officer was taking him somewhere. Other policemen had arrived and were trying to disperse the mob.

The man tried to move as fast as he could, but his hip joint hurt terribly unless he walked very slowly. The policeman was determined to get him away from the crowd, however, and he half dragged him into a waiting room and closed the door. The man hobbled into the nearest corner and collapsed into a heap on the floor.

The officer repeatedly asked his name and where he lived, but he could not understand the high-pitched sounds in which the man replied.

His name was Joseph Merrick, but he was known as “the Elephant Man.” The long cloak hid a right arm and legs that were severely deformed. The swollen limbs and the rough, grayish skin which covered most of his body made him look more like an animal than a man. The face behind the veil was so severely contorted by masses of bone and huge tumors that women often shrieked in terror or even fainted when they first saw it.

One writer described Mr. Merrick’s plight in the strongest terms: “Hideously deformed, malodorous, for the most part maltreated, constantly in pain, lame, fed the merest scraps, exhibited as a grotesque monster at circuses . . . the object of constant expressions of horror and disgust, it might have been expected that ‘the Elephant Man’ would have grown into a creature detesting all human beings, bitter, awkward, difficult in his relations with others, ungentle, unfeeling, aggressive, and unlovable.”

Yet, less than a year after that humiliating morning in the Liverpool Street Station, the Elephant Man was hosting the future king and queen of England!

What can account for this remarkable change? A clue to the answer is in this little poem that the Elephant Man wrote a few months later:

“’Tis true my form is something odd,
But blaming me is blaming God;
Could I create myself anew
I would not fail in pleasing you.”

Joseph Merrick had by God’s grace learned to apply the principles of self-acceptance. He had the special challenge of accepting severe limitations in three categories of “unchangeables”: appearance, physical abilities, and parentage.

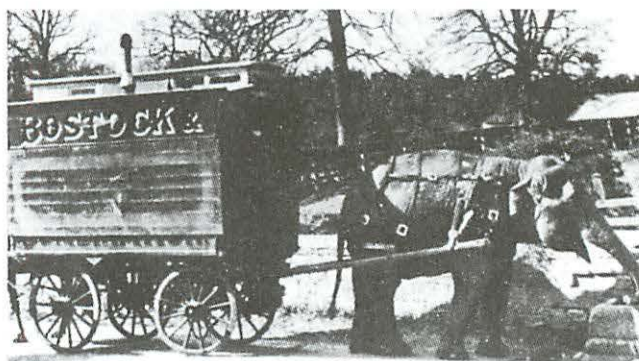
1 HE LEARNED TO SEE HIS DEFORMITIES NOT AS MISTAKES BUT AS MARKS OF OWNERSHIP.

As a little boy growing up in the town of Leicester (LES-ter) in central England, Joseph sometimes asked his mother, “Why is my face like this?” She would always pull him up onto her lap and hold him tight as she repeated the story of what happened before he was born.

First, she would tell about the fair. It was held each spring in the Humberstonegate, a wide avenue that ran through the older part of town not far from their little house in the slums. People would come from all the neighboring towns and countryside to buy and sell sheep, cows, and chickens.

Along with stalls for the livestock, there were all kinds of other things to see. For a couple of pennies a fairgoer could watch acrobats performing or gawk at a dwarf or bearded lady or some other human oddity.

One of the biggest attractions at the fair was the menagerie. It had elephants, lions, tigers, camels, baboons, and many other strange creatures that Englishmen of that time seldom saw except in pictures. The elephants were especially popular, and every day at noon they were paraded through the streets of the fair, drawing quite a crowd.



The True History of the Elephant Man, Michael Howell and Peter Ford, Allison and Busby Ltd

Wombwell’s Royal Menagerie was probably Britain’s largest traveling collection of wild animals at that time.

Mrs. Merrick would tell Joseph how she had heard his father and his friends talk about the elephant parade. She had never seen the huge beasts for herself, so one day in May of 1862, she decided to go have a look.

Once she arrived at the fair, she began to feel it was not such a good idea. It was just a few months before Joseph was to be born, and the jostling of the crowd made her quite uncomfortable. As the elephants came closer, the people grew more and more excited. The ones farther back on the sidewalk started pushing forward in an effort to get a better view.

Joseph would always shudder when his mother told what happened next. She was having trouble keeping her balance and felt herself being shoved toward the street. Then she fell. She looked up and was terrified to see the lead elephant coming toward her only a few steps away.



Underwood and Underwood

Many people in Leicester, England, had never seen a real live elephant, so a whole parade of them created much excitement.

In a desperate attempt to save herself, she rolled to the side as the elephant lumbered past. A huge grey foot came down right where her head had been only moments before. Some kind people helped her up and took her home. Little Joseph knew that even though his mother had not been hurt, she still would sometimes awaken in the middle of the night, screaming because of the nightmares she had about this experience.

What Mrs. Merrick did not share with her son was the fact that he had been conceived prior to his parents' marriage and that his very existence was a constant reminder to his father of that sin.

Joseph was born on August 5, 1862. Mrs. Merrick was thrilled when the midwife informed her it was a boy. Joseph was proud to be named after his father. His middle name, Carey, was for the well-known Baptist missionary William Carey.

The little boy had seemed quite healthy during his first couple of years. This was a time when the infant mortality rate was much higher than it is today, and Mrs. Merrick was grateful her son did not catch smallpox when an epidemic swept through Leicester.

Then when Joseph was about two years old, his mother noticed a slight swelling under his upper lip. Soon it became a hard lump. It spread to his cheek and began to turn his upper lip inside out. As the growth became larger, Mrs. Merrick noticed that it somewhat resembled an elephant's trunk. She could not keep from wondering about that horrible incident when the elephant almost crushed her.

In that era it was commonly believed, even by doctors, that if a pregnant woman suffered a shock or fright, her baby would be born with some birthmark or deformity. One woman, for example, was sure that the mouse-shaped birthmark on her baby's cheek was the result of such an experience. Once while she was pregnant, a mouse had run across the floor. She had screamed in terror and clapped her hand to her cheek.

In Mrs. Merrick's mind the connection between Joseph's deformity and the elephant incident was so strong that as he grew up, she often told him what had happened that day in the Humberstonegate. The boy accepted the explanation and frequently repeated the story to others.

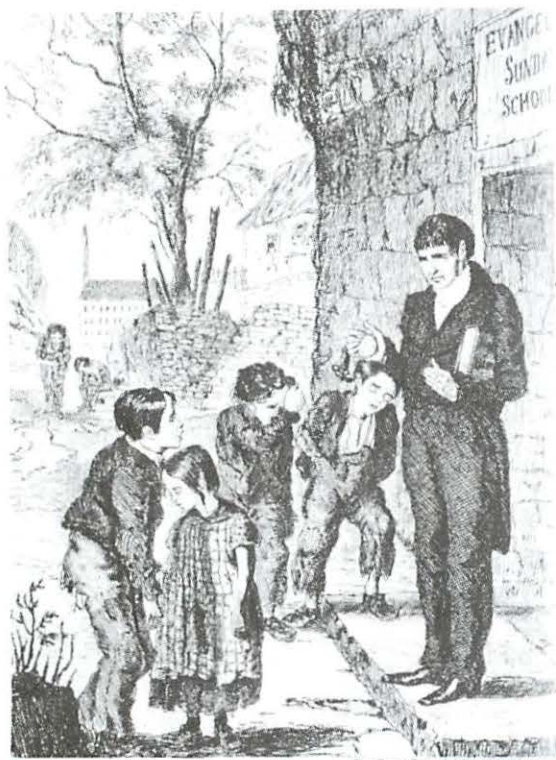
Yet, in seeking to understand and deal with her son's problem, Mrs. Merrick also turned to the Scriptures. To answer little Joseph's question of why, she gently taught him about God's absolute sovereignty and His unfailing love. Her own steadfastness convinced him that God indeed had a purpose for allowing his deformity.

Later, as he read Scripture for himself, Joseph came to understand that his deformity was not just the result of some chance happening. God had carefully planned and precisely dictated all the details of his physical appearance before he was born. As the Psalmist put it: *"My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest parts of the earth. Thine eyes did see my substance, yet being unperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them"* (Psalm 139:15–16).

As Joseph grew bigger his deformity worsened. By the time he was five his right arm and his feet were becoming enlarged. Lumps of bone began to form all over his head. The one on his forehead was especially pronounced. It grew so large that eventually he could hardly see out of one eye. His skin in various places became bumpy and discolored as if it were covered with small warts.

Mrs. Merrick was a good mother and loved her little boy very much. She did everything she could to help him, even consulting doctor after doctor. Sometimes they would give her some lotion to put on his skin, but nothing helped. Joseph's head grew bigger and bigger. One bony mass on the right side became so large that his ear was doubled over on itself. Gradually he came to the point that he could not hear at all with that ear.

All this was not easy for Joseph. He was in pain much of the time, but he knew he could always count on his mother's tender love and care.



From Frances Trollope's *Life of Michael Armstrong*

Mrs. Merrick taught for several years in a Sunday school like this one in Leicester. It is probable that the three Merrick children attended and learned not only Bible stories but arithmetic and reading as well.

One afternoon after school when Joseph was about eight, he came limping into the house crying. "What's the matter? Is your leg hurting you again?" asked his mother. It had not been long since he had injured his hip joint in a fall, but she sensed that something else was wrong because Joseph never complained about pain.

Although it was difficult to make out the words because of his sobs, she gradually understood. He had been playing with the other boys in the street. For years they had called him names and mocked him, but they had reluctantly let him join in their games. Now because of his injury he could not run fast enough to keep up with them. They had angrily chased him away and told him to take his ugly face home.

Joseph never wanted to force himself on anyone or to go where he was not wanted. He began to spend more and more time by himself. Perhaps during these lonely times he began to learn how to fellowship with the Lord.

Then Joseph's brother, who was five, died of scarlet fever. Somehow Joseph felt it was all his fault. His parents were all but overcome with grief. William had been a bright, healthy little boy, and they had cherished very high hopes for him since their older son was a deformed cripple.

As well-meaning relatives and neighbors came to call on the grief-stricken mother and father, some of them must have said things like "What a pity that the good Lord didn't take the cripple and spare poor little William." Even if the words were not spoken, Joseph must have sensed that some folks felt that way about him.

Losing her second son was especially hard on Mrs. Merrick. Her sorrow was so deep that she would go for days without eating. She tried to hide her despair from the children, but before long she developed a deep, racking cough. Finally, she began to run a fever. One day Joseph was sent to get the doctor. He said she had pneumonia.

She died just a few days later—three months before Joseph's eleventh birthday. He felt as if his whole world was falling apart. The person who had loved him most was gone. Joseph's father, always struggling just to put bread on the table, had never paid much attention to him, so now Joseph felt like an orphan.

As a young man Joseph carried a locket containing a tiny portrait of his mother. He often spoke of her with great affection. The effect of her early teaching is clearly seen in the quiet and gentle spirit Joseph demonstrated. He did not "forsake the law" of his mother, and it became an "ornament of grace" to his head. (See Proverbs 1:8–9.)

2 HE LEARNED TO FORGIVE THOSE WHO REJECTED GOD'S DESIGN.

Life was not easy for the Merrick family after Mrs. Merrick died. Arrangements had to be made right away for someone to take care of Joseph and his younger sister. The family moved to a boarding house, and Mr. Merrick hired the landlady to watch the children while he was at work. The landlady was a young widow with two children of her own.

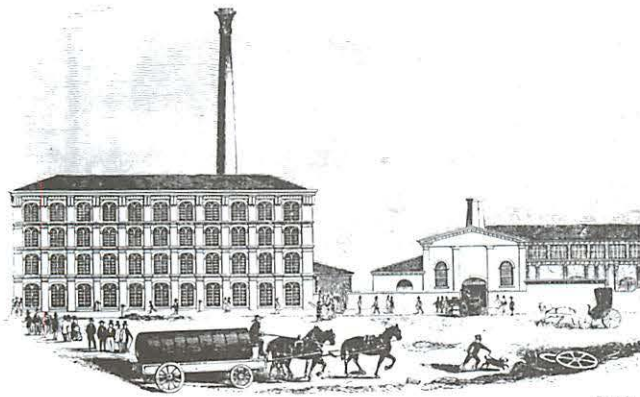
When she and Mr. Merrick were married a year and a half later, Joseph was suddenly faced with having to adjust to a stepmother of whom he would later write: "Henceforth I never had one moment's comfort, . . . together with my deformity, she was the means of making my life a perfect misery."

The new Mrs. Merrick seemed to accept his sister as one of her own, but she constantly scolded Joseph. She took special delight in pointing out his faults to his father. Not surprisingly, her children also teased and mocked the deformed boy mercilessly.

Two or three times when Joseph received more than he could stand of this abuse, he fled to his uncle's house. Uncle Charlie would always listen to the boy's troubles and tell him he could stay there as long as he liked. Then Joseph's father would arrive to take him home.

Joseph was not sure whether Mr. Merrick really cared about him or was just embarrassed that he had left, but the situation did not improve for Joseph at home. In fact, it became worse because his stepmother insisted that he drop out of school to get a job.

His startling appearance as well as his lameness made it difficult to find any employer who would be willing to consider him. Besides, the tumor growing on his cheek was interfering with his speech, and Joseph was having an increasingly difficult time making himself understood. Eventually he managed to find employment at a factory, where he worked all day to earn only a few pennies.



An eighteenth-century factory carried with it a whole new set of challenges for Joseph Merrick.

Nevertheless, that first payday as Joseph made his way home with those few coins in his pocket, he felt elated. He thought maybe now his father and stepmother would not be so critical.

It was already dark when he stepped through the door into the warm kitchen. His father had not come in from work yet, but his stepmother was sitting at the table. "It's about time you got home," she yelled at him. He tried to explain that it was payday and that he had had to wait in a long line to get his pay, but she interrupted. "Where is the money, or have you already wasted it buying sweets in the street?"

Without a word, Joseph laid all but one half-penny on the table. She glared at him. "All of it, young man. I'll not have you stealing from me the very first time you're paid!" Joseph had hoped to save a few pennies in order to buy a book he wanted.

"Please, let me . . ." he began, but she screamed, "No!" Joseph dropped the coin on the table and turned to walk into the other room. As he turned, he bumped the coal bucket with his walking stick, and several pieces of coal went rolling across the floor.

"You ox!" bellowed his stepmother. "Now look what you've done!" Joseph mumbled he was sorry and stooped to pick them up. When Mr. Merrick came a few minutes later, the stepmother angrily told him how unhappy she was with Joseph. She ended her complaint with "If that boy of yours is as clumsy at the factory as he is at home, he'll soon be out of a job."

So it went week after week. His stepmother continually visualized failure for him, and his father never offered one word of encouragement. All the while, Joseph's deformity was becoming more severe. His right arm and hand were so enlarged by now that they were practically useless to him.

He worked hard at his job, and the foreman was pleased with the quality of his work, but as the months passed, Joseph produced less than his quota more often than not. After nearly two years at the factory, he had to quit. A long period of unemployment followed. It was during a time when even an able-bodied man might have had trouble finding work, but Joseph persisted in trying to obtain another job.

Being rejected by potential employers, however, was not as painful as the mocking and criticism he had to endure when he got home. Often his stepmother would accuse him of just wasting time rather than looking for work. Sometimes she would give him only half as much food as the others, saying, "Even this is more than you've earned."

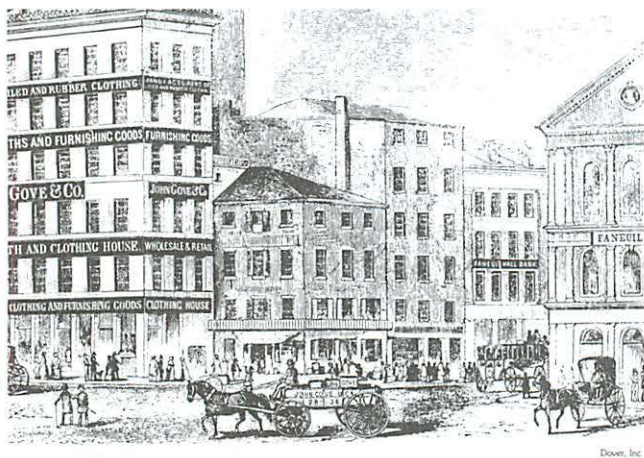
Many days he would stay in the street and go hungry rather than returning home to listen to his stepmother's bitter tirades. When his father finally realized that Joseph was not going to be able to find work, he decided to give the boy an opportunity to earn his keep another way.

Mr. Merrick owned a haberdashery. It was a small store, so he did not need his son to work there, but he had the idea that Joseph could sell goods from house to house. After obtaining a peddler's license for the boy, he prepared a box with a

shoulder strap, filling it with gloves, scarves, and other items from the shop.

Joseph was glad to have something to do, but he soon found that it was not easy to sell the quota of merchandise his father had set. As he limped up and down the streets of Leicester knocking on doors, he discovered that his frightening appearance worked against him even more than when he had gone from shop to shop looking for a job.

By this time the masses of bone on his skull had grown so large that they pulled his facial features out of place. The protrusion of flesh near his mouth made it impossible for him to speak plainly, and most strangers could not understand him.



Joseph was about fifteen when he started peddling things from door to door. Because of his appearance, most people were afraid to do business with him even though he tried to be friendly. He longed to spend the few pennies he earned on things he saw in the store windows as he walked home, but he knew this would infuriate his stepmother.

Often when young Joseph knocked, someone would peek out a window. When they saw who was there, they would refuse to open the door. Even worse, sometimes an unsuspecting maid or housewife would open the door, see his grotesque face, and immediately slam the door without a word. Joseph did not blame them; it was a shock even to him whenever he saw himself in a mirror.

In spite of all this, Joseph managed to sell his quota. Perhaps it was because some people bought things from him out of pity. Some people who did not want to buy would toss a couple of pennies on his tray. He received no encouragement at home, however. He was always made to feel that he had not worked hard enough. He wondered what would happen if he ever came home without having met his quota, but he did not really want to find out.

One evening as it grew dark, Joseph realized he had not sold enough gloves and stockings that day. He was so tired and hungry he did not think he could force his deformed feet to trudge down even one more street. He decided to try, but families were already sitting down for supper. Several people angrily told him to go away.

He started toward home and passed by a food shop. The delicious aroma was too much for him to resist. He went in and bought a piece of meat pie. Now there was even less in his cash box.

After that, he walked even more slowly than usual, but finally he arrived home. He had hardly closed the door before his stepmother came toward him demanding, "Where is the money?" She grabbed the little box from his hand and dumped the coins on the table.

As soon as she saw that he had not sold his quota, she hollered for Mr. Merrick to come to the kitchen. "Look at this! Your worthless boy has been loafing again," she told him. Mr. Merrick glared at Joseph and began to count the money and the merchandise. His anger began to rise as he saw that some of the money was missing.

When Joseph confessed that he had spent a little on something to eat, his father flew into a rage. He took off his wide leather belt and began to beat the boy. Whenever the blows would let up, his wife would urge him on. He did not stop until Joseph was unconscious and bleeding.

When he regained consciousness several hours later, he was lying on the kitchen floor. The household was asleep. Joseph knew he could not stay even one more night in that house. He quietly gathered up his few belongings and slipped out into the darkness.

The year was 1877; Joseph was barely fifteen. His mother was dead. He could not find a job. Now his own father had completely rejected him. He had never felt so alone, but God had not abandoned him. Perhaps during this time Joseph read in his Bible the special promise the Lord gives to orphans: "A father of the fatherless . . . is God in his holy habitation" (Psalm 68:5).

Joseph could easily have chosen to be bitter, but through all of these humbling experiences God poured out His grace. The young man accepted it and was able to forgive those who had hurt him deeply. Later someone who knew Joseph wrote that he was "free from any trace of cynicism or resentment, without a grievance [or] an unkind word for anyone."

3 HE LEARNED TO FOCUS ON INNER CHARACTER INSTEAD OF TRYING TO BE "NORMAL" OUTWARDLY.

For awhile Joseph continued trying to sell his wares from door to door, barely making enough money to buy a little food and rent a cot in a cheap lodging house each night. One afternoon as Joseph was wearily making his way from one house to another, he heard a familiar voice calling his name. It was Uncle Charlie.

"Joseph, I've been looking for you for days," he said. "I heard what happened to you at home. Where in the world have you been staying?"

Joseph mumbled the name of the street where the lodging house was located.

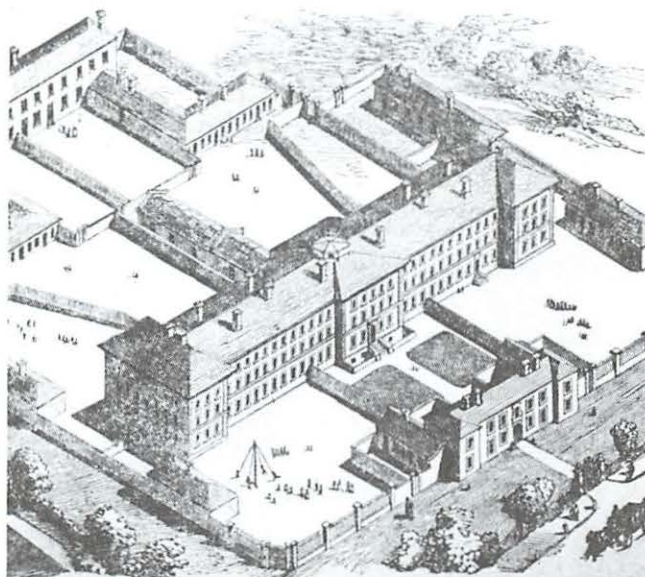
"Oh, no, you can't stay there. Come home with me." He took the boy back to the rooms over his barbershop where he lived with his wife. Three of their four children had died before they were grown. Though they were poor, his uncle and aunt agreed that Joseph could live with them as part of their family. This time Joseph's father did not come looking for him.

Joseph was so grateful for his uncle's kindness that he wanted to do his part. Out to the streets he went again with his tray of haberdashery items. Selling was not any easier, but at least he could go to a home at night where he would find some support and concern.

During the next two years the young man's deformity became still worse. Now it was a usual occurrence for a small crowd to gather around him whenever he went out into the streets. Curiosity-seekers would follow him around as he tried to peddle his wares.

In fact, he was creating such a stir that when it came time to renew his peddler's license, the city officials decided it would be better to keep "such a freak" off the streets. Their action deprived him of what seemed to be the only possible way he had to earn a living.

His uncle and aunt were sympathetic, but Joseph knew that he could not continue as a member of their household, especially since his aunt was expecting another child. The only option he saw was to enter the workhouse, and kind Charles Merrick had to agree. He allowed his nephew to stay until after Christmas, but on December 29, 1879, Joseph Merrick was officially enrolled in the Leicester Union Workhouse.



The typical English workhouse in the 1800s was a sprawling, prison-like structure with walls separating the men from the women and the children from the adults.

As Joseph walked into the vast complex of tall brick buildings surrounded by a high wall, he had the feeling that this place was more like a prison than anything else. Over nine hundred destitute men, women, and children lived there. Joseph could tell right away that it was not supposed to be a pleasant place. The officials were afraid that if the inmates became too comfortable, those who could work would not be motivated to leave the workhouse.

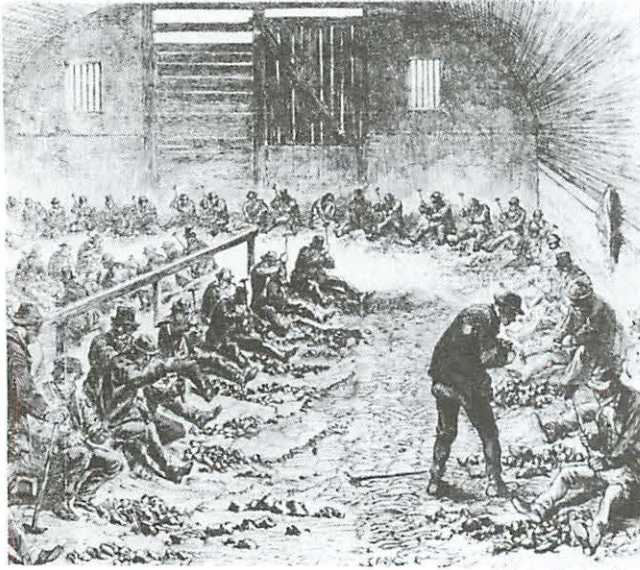
As far as Joseph was concerned, he would gladly have left the next day if he could have found a job. In fact, three months later he did sign himself out of the workhouse. For two days he tried his best to obtain work. Just as before, no one would hire him. More frustrated than ever, he returned to the workhouse. This time he would not be discharged for four years.

Although his basic necessities were provided, he had a horrible existence. He hated the clanging bells that seemed to govern his whole life. The wake-up bell rang at five or six. It rang to summon the inmates to the huge, drafty dining hall, where they all sat at a long table and ate in silence.

The bell rang when the meal was over. It rang to signal that it was time to go to work. It rang at quitting time. Finally it rang at about ten at night as a warning that the gas lights were about to be turned out and the dormitory doors locked.

Everybody was assigned a task. Joseph's job was separating hemp rope into fibers that could be reused. All day long he sat at a table and pounded

with a wooden mallet on old pieces of rope. Then with his fingers he painstakingly pulled apart the individual fibers. Every inmate had a quota. Even though Joseph had only one hand with which to work, his quota was no less than anyone else's.



Radio Times Hulton Picture Library

All the inmates in the workhouse had to work. A common task was breaking large stones into gravel as these men are doing. Those with physical handicaps like Joseph were assigned to somewhat less demanding jobs.

It would have been a hard life anyway, but Joseph's deformity added greatly to his misery. Daily he was subjected to the sneers and crude jokes of other men. At least he could be grateful that the men were segregated from the women even in the dining hall. By this time his face had become so grotesque that it was not unusual for women to scream when they saw him.

Joseph's "elephant trunk," the protruding lump of tissue near his mouth, had continued to grow and was now about eight or nine inches long. He could hardly talk, and it was almost impossible for him to chew his food.

One day during his second year in the workhouse the monotony was broken when an officer came into the workroom and ordered everyone to go to the dining hall. Joseph wondered what was happening. Then he heard the two men who were in line in front of him saying that it must be time for the annual physical all the inmates had to take.

The doctor who examined Joseph told him he would be sent in a few days to the Leicester Infirmary, the county hospital, for surgery. As he

pounded hemp that afternoon, Joseph thought about what the doctor had said. Could he dare to hope that these doctors would be able to reconstruct his face? Maybe he would at least be able to eat and talk normally.

Surgery in those days involved a high risk of infection, which often proved to be fatal. Joseph was grateful to escape this complication. Within a few weeks he was back at his worktable. His "trunk" was gone, but he knew that the operation had done little to lessen his disfigurement and nothing to slow the progressive effects of his disease.



Leonard Everett Fisher

Joseph's surgery must have been a frightening experience. Anesthesia was not very effective in those days, and in most hospitals only about half of the patients undergoing surgery survived.

If there was one bright spot in his workhouse life, it was Sundays. He always went to the worship service in the chapel and spent the afternoon reading. He loved to read, and it did not bother him that the only reading material he had was the Bible and books of sermons. Reading God's Word gave him the inner strength he needed to withstand the outward attacks he suffered continually.

Sometime during his fourth year in the workhouse, Joseph began to wonder about the possibility of putting himself on exhibit as a *freak*. He certainly did not relish the thought of having people stare at him any more than was already happening, but he saw this as a possible means of escape from the workhouse.

Perhaps what made Joseph start thinking along these lines was the opening in September 1883 of the "Palace of Varieties" in Leicester. Owned by Sam Torr, this establishment was a popular new music hall on Wharf Street.

Joseph had heard that Mr. Torr was always looking for "novelties." After agonizing over the decision for months, he finally wrote the showman a letter. To the young man's amazement, Mr. Torr promptly came to the workhouse to pay him a visit. There in the visitors' room he listened with interest to Joseph's story of his mother's encounter with the elephant and how his deformity had developed.

Mr. Torr could see at once that Joseph had real possibilities as a freak show attraction. He also knew that such a show could stay only about a week in one spot before moving on. He told Joseph he would check into the prospects of negotiating with several other showmen he knew in other towns.

Within a week or so he was back to inform Joseph that everything was ready. "Come down to my office as soon as you can get yourself out of this place," he told Joseph. So one Sunday morning in late August 1884, Joseph Merrick exchanged his inmate's uniform for his own clothes and left the workhouse for good.

4 HE LEARNED TO SHOW DEFERENCE EVEN TO THOSE WHO MOCKED AND RIDICULED HIM.

During the next couple of weeks, Mr. Torr and one of the other agents coached Joseph for his first public appearance. It was decided that he would be billed as "The Elephant Man, Half-a-Man and Half-an-Elephant." Joseph must have winced inwardly at the thought of broadcasting the nickname with which he had long been taunted, but he agreed that it would catch the public's curiosity better than anything else they could design.



An old advertisement for the music hall operated by Sam Torr shows the stage where Joseph was first exhibited as "The Elephant Man."



From The Era, 26 Oct. 1901

Tom Norman

That autumn "The Elephant Man" was exhibited in several towns around Leicester. It was too late in the season to start on the carnival circuit, so the agents sent Joseph down to London, where a showman named Tom Norman was to make arrangements for exhibitions around the great metropolis. It was a lonely life with few comforts. Joseph's ghastly appearance made him unwelcome at hotels, so he

usually had to sleep in a show wagon.

It was probably Mr. Norman who made the disguise for him to wear when he went out in public. The strange-looking clothes attracted almost as much attention as the deformities themselves.



The London Hospital Medical College Museum

Joseph's cap with its heavy veil is still on display at a museum in London.

This outfit included a peaked cap with a short bill. Joseph's head was now so enlarged with bony masses that it measured 36 inches around, so the cap had to be huge. From it hung a thick veil which hid Joseph's face and head. The veil had a horizontal oblong opening in the front just large enough for him to look out with his one good eye. There was also a big cape or cloak which completely covered his twisted form all the way to the ground. To hide his misshapen feet, he wore a pair of bag-like slippers.

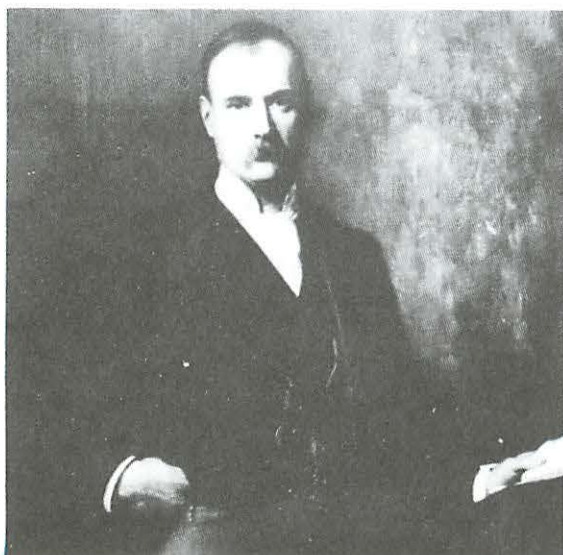
In the beginning, Joseph did not like the idea of hiding his face, but the more he thought about it, he realized that in this way he could avoid offending or scaring people.

The first place where Tom Norman put Joseph on exhibit was a vacant shop he had rented on Whitechapel Road in the middle of the city's East End slum district. A large canvas banner was stretched across the front window of the shop. On it had been painted in garish colors a caricature of a man changing into an elephant. Big, bold letters announced: "The Elephant Man—Great Freak of Nature, Half-a-Man and Half-an-Elephant!" The shop was located across the street from the famous London Hospital, often called simply "The London." A medical college was attached to the hospital.



The 690-bed London Hospital was said to be the finest in the whole British Empire at that time.

A brilliant young surgeon named Frederick Treves practiced at the hospital and taught at the college. Although he was only thirty-one years old, Dr. Treves had just that year been promoted from assistant surgeon to full surgeon. He was greatly respected by his colleagues and students.



Sir Frederick Treves became famous a few years later as the surgeon who removed the appendix of Edward VII on the eve of his coronation as King.

Another doctor who knew that Dr. Treves was particularly interested in rare diseases made it a point to tell him about the freak show across the street. The next day the surgeon took time out of his busy schedule to see for himself. What he saw made such an impression that he had vivid memories of it even forty years later.

Dr. Treves began his description of his first encounter with the Elephant Man with these words: "The far end of the shop . . . was cut off by a curtain or rather by a red tablecloth suspended from a cord by a few rings. The room was cold and dank, for it was the month of November. . . ."

"The showman pulled back the curtain and revealed a bent figure crouching on a stool and covered by a brown blanket. In front of it, on a tripod, was a large brick heated by a Bunsen burner. Over this the creature was huddled to warm itself. It never moved when the curtain was drawn back. Locked up in an empty shop and lit by the faint blue light of the gas jet, this hunched-up figure was the embodiment of loneliness. . . ."

"Stand up!" Mr. Norman commanded harshly. His tone of voice sounded as if he were talking to a dog, but this was just part of the showman's attempt to convince the audience that this was truly a man who was half animal.



As he came closer, the doctor noted that the Elephant Man gave off a very strong, foul smell. The stench was so nauseating that even the doctor had to put a handkerchief to his nose.

As Joseph stood slowly, the blanket slid off his shoulders and fell to the dusty floor. He was wearing neither shirt nor shoes. Dr. Treves saw that Joseph's

chest and back were practically covered with thick folds of rough, warty skin. The contorted features of the face and the massive head with its lumpy outgrowths of bone shocked the surgeon.

In all his years of medical practice in a large city hospital, he had seen many cases of both congenital deformity and injury-caused disfigurement, but when he first saw the Elephant Man he was taken aback. He wrote later: "There stood revealed the most disgusting specimen of humanity that I have ever seen." After a few moments the doctor was able to put aside his emotions and begin making clinical observations. He first realized that the painting outside had led him to expect a much larger creature than the 5-foot-2-inch figure he now saw before him. Joseph seemed even shorter because of the way his spine was twisted.

Dr. Treves noted that Joseph's right arm was enlarged to several times the size of his left. His left arm, in fact, appeared small and delicate. The fingers of his right hand were like "thick, tuberous roots," while the thumb was large and bulbous.



The British Medical Journal, December 11, 1886

The most striking feature was his head. It was as big around as his waist. The doctor was amazed by the huge bony mass projecting from his forehead and the "bag of spongy, fungous-looking skin" hanging from the back of his head.

He described the outgrowth of bone from Joseph's upper jaw: "It protruded from the mouth like a pink stump, turning the upper lip inside out and making the mouth a mere slobbering aperture." A sickening odor came evidently from the pendulous folds of skin that covered his body.

When Mr. Norman first brought the well-dressed gentleman into the shop, Joseph must have

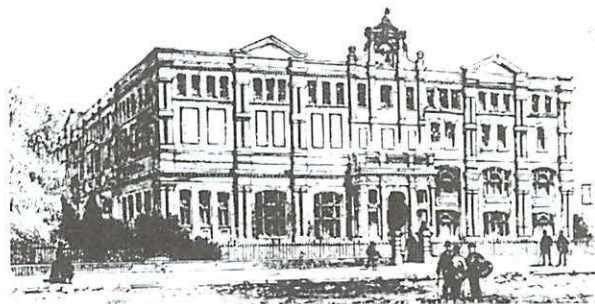
wondered why he was interested enough in a freak to pay extra for a "private showing" like this. He listened closely when the doctor began asking Mr. Norman many questions.

Finally Dr. Treves said, "I am a surgeon at the London Hospital across the street, and I would like to examine your Elephant Man more closely. Could you have him at my office at ten tomorrow morning?"

As the two men talked about the arrangements for the next day, Joseph went back and sat down. As he tried to warm himself over the feeble flame, he must have felt a spark of hope stirring within him. Perhaps this doctor could do something to help him; perhaps he could make him look like a normal person.

Dr. Treves walked over to where Joseph sat and gave him a small piece of cardboard. "Here, Merrick," he said. "This is my card. You will need to present it tomorrow morning at the gate so they will let you in." Then he left the shop.

The next morning Mr. Norman and Joseph, wearing his cap and long cloak, got into a cab. It would have been only a short walk to the medical college, but Mr. Norman did not want the sight of Joseph in his disguise to draw a mob and attract the attention of the police.



The London Hospital Medical College

Dr. Treves' study was located in the London Hospital Medical College building.

Joseph was ushered into Dr. Treves' private study. The tall, athletic-looking surgeon greeted him warmly and invited him to take off his cap and cloak. On seeing the grotesque face again, the doctor instinctively drew back. He quickly recovered his composure, however, and began to question the young man about his background and the history of his disease. As was the case with most people who did not know Joseph well, Dr. Treves had a very difficult time understanding his speech.

He soon gave up the effort and started the physical examination. With precision and great detail

Dr. Treves inspected and measured every part of Joseph's deformed figure. The dimensions themselves were bizarre. The circumference of his head was 36 inches. His right wrist measured a full 12 inches around, and his largest finger 5 inches. After the doctor had cataloged every abnormality he could find, he was still not sure what disease Joseph actually had. As far as he knew, it was something that had never before been described in medical literature.

In regard to the Elephant Man's personality, Dr. Treves said he was "shy, confused, not a little frightened and evidently much cowed." Because of Joseph's unintelligible speech the doctor actually assumed that he had been mentally retarded from birth. The doctor thought it better for Joseph if he were retarded. To possess the intelligence to fully understand his own predicament, Dr. Treves reasoned, would be almost unbearable.

With the idea in mind that he might publish the facts of Joseph Merrick's condition as a case study in a medical journal, Dr. Treves had photographs made at this time. He also made arrangements with Tom Norman to "exhibit" Joseph at a meeting of the Pathological Society of London a few days later. None of the physicians who attended was able to diagnose the disorder any more precisely than had Dr. Treves. They could say only that it was a congenital deformity.

Doctors have since learned that Joseph suffered from a disorder of the nervous system called *neurofibromatosis* (NOOR-oh-fie-broe-muh-TOE-sis). Although it is a relatively common disease, most cases are not as severe



Transactions of the Pathological Society of London, Vol. 36, 1885

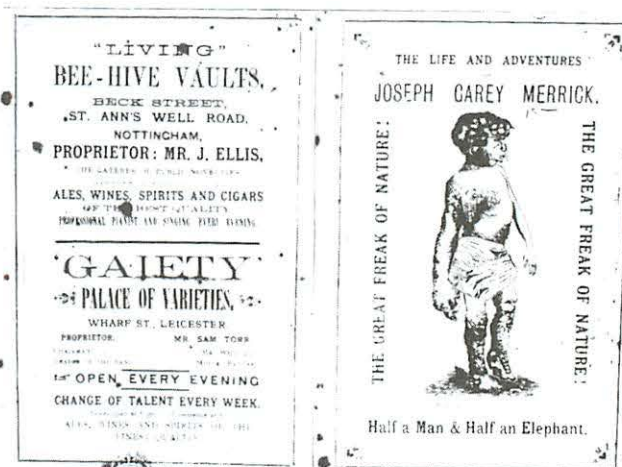
Dr. Treves used photographs along with verbal descriptions to communicate the severity of Joseph's condition.

as his. It is incurable, but surgery can help remedy the effects of it in some cases.

Joseph was deeply disappointed as he realized that in spite of Dr. Treves' compassion, the surgeon could do nothing to improve his condition. Once again reminded that the Creator was in control, Joseph did not allow his disappointment to become bitterness.

After the night of the Pathological Society meeting, Dr. Treves lost contact with Joseph. That same week he noticed that the freak show on Whitechapel Road had been closed by the police. He assumed he would never see the deformed young man again, but he did proceed with his plans to publish an article. It appeared in the 1885 edition of the society's journal along with engravings made from the photographs.

Very little is known for certain about what happened to Joseph during the next year and a half. Probably Mr. Norman took him back to Leicester for the winter. In Leicester a small pamphlet entitled *The Life and Adventures of Joseph Carey Merrick* was printed to be sold to people attending the freak shows.



British Library

The drawing on the front cover of the pamphlet containing Joseph's story was based on the photographs taken at the London Hospital. On the back cover were advertisements for the music halls owned by two of Joseph's managers.

It is likely that Mr. Torr and the other agents continued to exhibit Joseph at music halls in various towns in central England. With the coming of spring they began traveling to the many fairs held around the country, but they could never stay in one place very long.

Though it was not a comfortable or easy life, Joseph was able to begin saving some money. The

showmen gave him a certain percentage of what they earned, and he probably received a little from the sale of the pamphlet. In several months' time he had put aside about fifty pounds. This nest egg would have been sufficient for his livelihood for at least a year.

However, it was becoming increasingly difficult for the showmen to run the traveling freak show. The police and local magistrates were tightening their control on that type of operation to the point that it was no longer very profitable. The showmen did not abandon Joseph but attempted to make other arrangements for him.

Someone had the idea of sending him to tour the countries across the English Channel. They thought there would be fewer restrictions there than in England. So Joseph set out for the Continent with an Austrian man serving as his manager.

The tour was a failure from the beginning. They had problems with the police in practically every town. This struggle continued for several months until they arrived in Brussels, Belgium, during June of 1886. Once again their show was closed by order of the local authorities. The next morning Joseph woke up late. Sunshine was streaming in the windows of the cheap hotel room he and the manager were sharing to keep expenses low. He noticed that the other man was not there. Looking slowly around the room, he saw that all the man's clothes and belongings were gone, too. He suspected that he had been abandoned. It did not take long for him to discover that his savings of fifty pounds had disappeared as well.

Alone and penniless in a strange city, Joseph almost panicked until he reminded himself that God would take care of him in this distressing situation. He could hardly make himself understood in England, much less in a foreign country where he did not know the language, but somehow he managed to pawn the few possessions he had left in order to buy a ticket back to London.

First, he took a train to the coast. It was a miserable trip. Other passengers tried to shoo him away. People on the platform gaped at the windows at every stop, but leaving the traincar was even worse. A crowd would gather, and people would start speaking harshly to him. Joseph could only guess what they were saying, but he felt sorry for them because he knew that their rejection of him meant they had trouble accepting God's design for themselves.



Getting off the train at Ostend, Joseph was almost immediately surrounded by a flock of street urchins. Taunting and jeering, they tried to lift up his cloak and pull off his cap.

When he finally reached the ferry, the captain refused to let him board the vessel. Perhaps he was afraid Joseph had a contagious disease or would hurt the other passengers. The poor lonely man wandered back into the terminal, having no alternative but to sit and wait and pray.

As he sat in a corner hoping no one would bother him, Joseph saw through the slit in his veil that a man wearing a suit was coming toward him. He was afraid the man was going to tell him he could not sit there.

Joseph lifted his head in amazement when he heard the gentleman speaking to him in English. "Do you need help?" the man asked in a kind voice. Joseph was able to make him understand what had happened and where he wanted to go.

The man advised him to take another train to Antwerp instead. There he could catch a boat to England. He helped Joseph purchase the appropriate tickets, perhaps even paying part of the fare himself. So Joseph set off again, somewhat encouraged by the man's kindness.

The next evening Joseph embarked from Antwerp on the 150-mile trip across the North Sea. He spent most of the night huddled in a dark corner on the deck trying to avoid the other passengers. The last leg of the journey was the early morning train ride from the port of Harwich into the city of London.

Joseph was too upset to sleep. As the gray countryside slipped by outside his window, he cried out to God in his spirit. He did not know where to go or what to do next. He had no money and probably had not eaten in days. Exhausted physically and spiritually, he had no one to whom he could turn. The only place he could go was back to that hated Leicester workhouse, which was nearly a hundred miles away, and he had no way to get there even if he did decide to go.

Joseph arrived at the Liverpool Street Station at about seven in the morning. What happened when he got off the train was what almost always happened to Joseph in public places, except that this time he had lost his will to hobble away and hide. People stared and pointed. A crowd began to gather. The murmured comments turned into catcalls and jeers. Before long the police arrived.

The bobbies quickly escorted the foul-smelling, cloaked figure into the third-class waiting room and held the doors shut against the curious mob, but they could make no sense out of the strange, high-pitched sounds that came from behind the gray flannel veil. Finally, Joseph fumbled in a pocket with his good hand and brought out a small, dirty piece of cardboard.

One of the policemen took it and studied the faded print. It proved to be the card of someone who worked at the London Hospital, which was not far away. A messenger was dispatched right away to see if the gentleman could come and assist the police in their dilemma.



Liverpool Street was still filled with the traffic of people going to work as Dr. Treves hurried to the train station that morning.

Within half an hour, Dr. Frederick Treves was pushing his way through the crowd outside the waiting room door. He had been wondering all the way to the station about the strange situation in which the police needed his help, but as soon as he entered the room the familiar stench told him that the figure huddled in the corner was the Elephant Man. One look also told him that Joseph Merrick was at the end of his physical resources and desperately needed someone to take care of him.

After speaking briefly with the police, Dr. Treves agreed to take Joseph with him. A couple of officers helped the young man hobble out of the station and clamber into a hansom. The surgeon climbed in after him, and off they went. On the way to the hospital Joseph felt so relieved at finding someone who was willing to help him that he fell fast asleep.

Because Joseph's disorder was incurable, there was no medical treatment the London Hospital could offer. He could not be admitted to a ward as a regular patient but would have to be put in one of the private rooms, which were normally reserved for people with infectious diseases. Yet, he had to be helped.

When they arrived at the hospital, Dr. Treves gave orders for the new patient to be bathed, fed, and put to bed in a small room in the hospital attic. Joseph was very grateful for everything that was done for him.

The next morning Joseph could hear the nurses bringing the breakfast trays to the wards on the floor below. Then the door to his little room swung open. The nurse looked up cheerfully from the tray she was carrying and was about to say, "Good morning." When she saw Joseph's face, he realized that no one had warned her about his appearance.

Joseph cringed as a look of horror swept across the nurse's face and the dishes and silverware crashed to the floor. She turned and ran screaming down the corridor. Joseph felt bad—not because she had hurt his feelings but because his face had frightened her.

During the next few days Dr. Treves took time to give Joseph another thorough physical examination. What he found only confirmed what he had suspected since the moment he saw Joseph in the train station: his condition was worse than when he had first examined him.



The True History of the Elephant Man, Michael Howell and Peter Ford, Penguin Books

When Joseph was admitted to the London Hospital in June 1886, his condition was much worse.

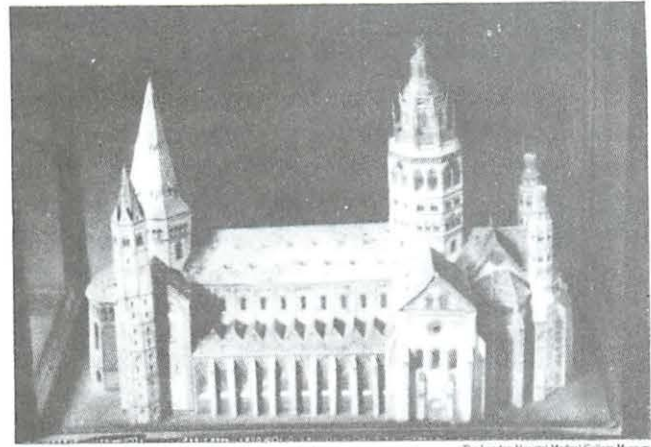
5 HE LEARNED TO EXPRESS GRATEFULNESS IN ACTIONS EVEN WHEN HE COULD NOT IN WORDS.

After a few days of rest and good food, Joseph was feeling much better. His recent experiences, however, had left him very nervous and fearful. He was especially anxious about strangers coming into his room and seeing him for the first time. Just a knock on the door would cause him to start trembling.

Gradually Joseph began to calm down. As the faces of the doctors and nurses became more familiar to him, he started trying to be friendly to them. They soon discovered that if he bathed once or twice a day, the horrible odor from his skin was barely noticeable. Dr. Treves became more accustomed to Joseph's strange, high-pitched speech and soon was able to understand most of what he said.

Almost everyone who came to know Joseph was impressed with his gentle personality and the sincere gratitude he expressed for what was being done for him. He soon made friends with his nurses. They sometimes brought him model kits from the toy store, and Joseph would spend hours putting together the little cardboard buildings.

Because he could use only his left hand, the nurses often had to help him. As soon as he finished one of these models, he would give it to one of the hospital staff to show his appreciation. Later he spent several months constructing an intricate cardboard model of the cathedral he could see from the window of his home.



The London Hospital Medical College Museum

Joseph expressed his deep gratitude to the famous actress Madge Kendal, who had sent him many gifts, by painstakingly designing and building this detailed scale model of a church, which he then presented to her.

By the time winter came, Joseph's presence in the hospital was beginning to be a problem. Officially he should never have been admitted, and certainly he could not stay on indefinitely. The doctors were not actually treating his disease, and he was occupying space that was needed for regular patients. No one was in favor of putting him back out on the street to fend for himself, but something had to be done.

Joseph knew his situation was precarious. Having been forced by circumstances to leave every home he had ever known, he dreaded the day when Dr. Treves would tell him he had to leave the London Hospital.

On several occasions the chief surgeon had spoken of the Elephant Man's case to the hospital administrator, Mr. F. C. Carr Gomm. Mr. Carr Gomm had agreed to try to find a place for Joseph at another institution. Some weeks later he reported to Dr. Treves that the Royal Hospital for Incurables would not accept him as a patient. He later received the same reply from other hospitals.

At that point Mr. Carr Gomm took the unprecedented step of appealing to the British public on Joseph's behalf. He wrote a letter to the editor of *The London Times*. His account of this "most exceptional case" was published on December 4, 1886. It began: "There is now, in a little room off one of our attic wards, a man named Joseph Merrick, aged about twenty-seven, a native of Leicester, so dreadful a sight that he is unable even to come out by daylight to the garden. He has been called 'The Elephant Man' on account of his

terrible deformity. I will not shock your readers with any detailed description of his infirmities. . . .”

The letter went on to explain how Joseph came to be in the hospital and why he could not stay there. “Terrible though his appearance is, so terrible indeed that women and nervous persons fly in terror from the sight of him . . . yet he is superior in intelligence, can read and write, is quiet, gentle, not to say even refined in his mind.”

He closed by asking the readers to suggest a fitting place for Joseph and to contribute to his financial support. The response was immediate and generous. As other newspapers carried the appeal, even more people began sending money to help pay Joseph’s expenses. One man even offered to give fifty pounds annually for Joseph to be allowed to stay at The London.

Over two hundred pounds was received in just the first week. As donations continued to pour in, the hospital governing board officially decided that Joseph could continue to live at the hospital. Plans were then made to remodel a couple of rooms into a small private apartment for Joseph.

Tucked away in the basement of the east wing were two storerooms, with a small window looking out on what was known as Bedstead Square, a large, sunny courtyard where workmen repaired and repainted the big iron bedsteads. The larger room had a fireplace and was used as a bedroom/sitting room. The other room was turned into a bathroom. Joseph was delighted with his new home. It was far enough removed from the flow of hospital activities to give Joseph the privacy he greatly desired.

In an addendum to an article about his case in *The British Medical Journal*, Joseph later wrote the following: “I should like to say a few words of thanks to all those that came forward with help and sympathy after my case was made known by Mr. Carr Gomm in the public press. . . . I have a nice bright room, made cheerful with flowers, books, and pictures. I am very comfortable, and I may say as happy as my condition will allow me to be.”

The only problem with his new living quarters was that he had a hard time believing he would really be allowed to stay there. One day when Dr. Treves came for his daily visit, Joseph looked at him with timid eyes and asked, “Where are you going to move me to next?” The doctor gently explained to him, as he had many times before, that this was his home and no one was going to move him to another place against his wishes.



The London Hospital Medical College Museum

The entrance to Joseph Merrick’s rooms at the London Hospital looks like this now. The apartment is no longer in use.

6 HE LEARNED TO SMILE WITH HIS SPIRIT EVEN WHEN HE COULD NOT WITH HIS FACE.

Once Dr. Treves had done what he could to provide physical comforts for the Elephant Man, he began to be concerned about his social development. He observed that Joseph was still very nervous about meeting strangers, especially women. This was understandable because he had had practically no contact with women for the past seven years.

With the publicity generated by Mr. Carr Gomm’s letter to the *Times*, a number of people requested permission to visit Joseph in the hospital. Up until this time, only men had come.

One day during his daily chat with Joseph, the surgeon casually mentioned that he had a friend, a lady, who wanted to meet Joseph. At first the Elephant Man was silent. He could not imagine why a lady would want to come see him.

Dr. Treves explained, “Well, I’ve told her a lot about you. She knows that you love to read. She does, too. How about next Thursday afternoon?”

Joseph agreed somewhat hesitantly. He was afraid his face would scare her. The doctor told Joseph not to worry.

Since women were repulsed by his face more than men, Dr. Treves had felt it was especially important that Joseph have the opportunity to relate to women (other than his nurses) who would treat

him as a human being rather than as an animal. After carefully considering whom he might ask to go visit Joseph, Dr. Treves had finally decided to ask Mrs. Maturin, a young, attractive widow.

"He just needs a lady to smile at him," the doctor had explained, "to look him in the face and not turn away in disgust. Do you think you could do that?" Mrs. Maturin was ready to accept the challenge, fully understanding how important this was to Joseph's feelings about himself.

That Thursday afternoon, Joseph sat in front of the fireplace, waiting anxiously. He heard footsteps on the stairs outside his door, but it was only one person. Then he recognized Dr. Treves' quiet knock. "Ah, Joseph," said the doctor, "if you're all ready for your visitor, I'll bring her down."

"I think so," said Joseph. He was wearing the new suit they had had specially tailored to fit his enlarged right arm and twisted torso. Dr. Treves stepped briskly over to Joseph and straightened his tie a bit. "You look great," he said. "I'll get Mrs. Maturin."



The London Hospital Medical College Museum

Joseph always wore his "Sunday best" to receive visitors.

As they entered the room, the doctor watched the young woman closely to see if her face would register any negative reaction to what she saw. It did not. She smiled gracefully, stepped over to Joseph to shake his hand, and said, "I'm pleased to meet you, Mr. Merrick."

Joseph, however, was too overcome with emotion to speak. All at once he began to sob, and Dr. Treves had to usher Mrs. Maturin out. Shortly afterward Joseph confessed to the surgeon that, as far as he could remember, it was the first time a female stranger had ever smiled at him, much less taken his hand.

It is not certain whether Mrs. Maturin ever called on the Elephant Man again, but her brief and awkward visit that day marked a turning point for Joseph. Her genuine acceptance of him renewed his confidence in his ability to relate to others in spite of his handicaps.

After that many women, as well as men, came to visit. Among them were some of London's celebrities. It even became fashionable among the duchesses and countesses to be able to say they had met the Elephant Man.

At first Joseph was hesitant about receiving strangers as guests, but gradually he became more relaxed and confident in his role as host. After a time he even began striking up conversations with the workmen outside his window in Bedstead Square.

When Dr. Treves had first examined Joseph, he observed that Joseph's face was incapable of smiling or otherwise expressing emotion. It reminded him of "a block of gnarled wood." Now he was amazed to see how Joseph could communicate a smiling spirit. This was possible because the Elephant Man had come to the point of thanking God rather than blaming Him for his condition. Since he had stopped focusing on his unchangeable defects, the people he met soon did, too.

As Joseph learned more about the world, there was one thing he wanted to experience for himself. He told Dr. Treves that he would like to spend some time in the country. This wish seemed quite impossible to fulfill, but through the generosity of one of Joseph's new friends it became a reality.

One of the wealthy ladies who sometimes visited him offered to let him stay in a cottage on her rural estate outside Northampton. For six wonderful weeks Joseph had the freedom to wander through the woods and meadows. His frequent letters to Dr. Treves always included an enthusiastic account of some woodland creature he had seen and a sampling of the wildflowers he had picked and carefully pressed between the pages of a book.

Each summer for three years he was able to spend part of the summer there. He always returned from his holiday refreshed but glad to be back home at The London.

Dr. Treves was amazed at how joyful and contented Joseph had become now that he was no longer the object of scorn and ridicule. Several times he commented to the doctor, "I am happy every hour of the day." Because his mouth was so deformed, Joseph could not whistle or sing to express his inner joy, but often when the doctor would come into his room unannounced, he would find the young man "beating time on the pillow to some tune that was ringing in his head."

One day in May of 1887, Joseph was feeling more excited than usual about the visitors he was to receive that afternoon. He had put on his newly pressed suit and polished his huge orthopedic shoes until they shone. Everything in his little apartment had been cleaned and carefully arranged. He sat in his armchair and tried to rehearse what he would say when the guests arrived. He could not remember a word of what he had planned to say.

No wonder the Elephant Man felt a little nervous. His visitors that day were to be the Prince and Princess of Wales! Any Englishman would have considered it an honor to meet the future king and queen of his country, but for someone who had been an outcast for most of his life it must have been almost incredible.



Princess Alexandra officially opened the new Nurses' Home at the London Hospital on May 21, 1887. Later she and her husband visited Joseph.

Princess Alexandra sat in a chair next to Joseph so they could talk. She could not understand his high, flute-like speech, so Dr. Treves interpreted. Prince Edward walked over to the mantle and examined the photographs and souvenirs, all special gifts Joseph had received from his many visitors.

As they were leaving, the Princess expressed the desire to visit again, and she did so several times in the next three years. Every December she sent Joseph not one, but three or four beautiful Christmas cards. Prince Edward also sent gifts from time to time.

If Joseph had the habit of reading the chapter of Proverbs corresponding to the day of the month, one verse from his reading the next day would have really caught his attention: "*He that loveth pureness of heart, for the grace of his lips the king shall be his friend*" (Proverbs 22:11). His lips had no grace physically, but he communicated a gracious spirit because of his pure motives and forgiving attitude.

By 1890 Joseph's condition was rapidly deteriorating. The debilitating effects of his disease were increasingly obvious to his doctor-friend. Now the only way he could sleep was in a sitting position, propped up by pillows with his huge head resting on his knees. Whenever he would lie down, the weight of his head would make him feel pressure on his throat as though he was suffocating. Several times he mentioned his desire to sleep lying down.

As his physical weakness increased, Joseph seemed to gain spiritual strength. He had become good friends with the hospital chaplain. They often had long talks about spiritual matters. The Bible and the prayer book, which he had always loved to read, became even more precious to him.

The chaplain had made special arrangements so Joseph could attend worship services in the hospital chapel. He sat in the vestry where no one could see him, but by opening the door a couple of inches he could hear everything. He particularly enjoyed the hymn-singing.

On Easter Sunday, 1890, Joseph attended services in both the morning and the evening. The resurrection hymns must have reminded him of that great promise to Christ's followers: ". . . *We shall be changed. For this corruptible must put on incorruption . . .*" (I Corinthians 15:52-53).

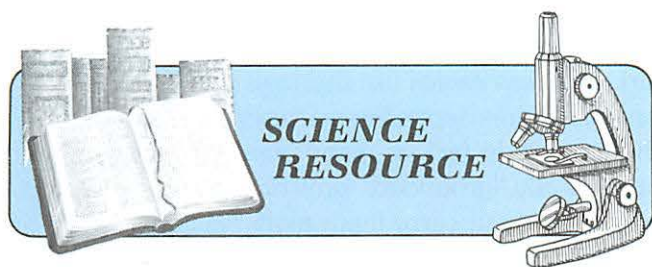
Before the week was over, Joseph Merrick had laid aside his corruptible body. That Friday morning when his nurse checked on him, he had been reading in bed and seemed fine. Another nurse brought his lunch tray at 1:30.

When one of the doctors came to check on him at 3 o'clock, he saw the food was untouched. Joseph was dead. Apparently he had decided to try to sleep lying on his back. His head was so heavy that it sank into the pillow, causing dislocation of vertebrae in the neck. Death was quick and painless.

PROJECT

Discuss how this story has helped you thank God for unchangeable features you previously may have resented.

Date completed _____ Evaluation _____



SCIENCE RESOURCE

HOW DOES UNDERSTANDING THE TURKEY VULTURE HELP US NOT TO WORRY ABOUT OUR STATURES?



If you were given the option of becoming an eagle or a vulture, which one would you choose?

COMPARED TO THE HANDSOME EAGLE, THE TURKEY VULTURE'S PHYSICAL FEATURES ARE CONSIDERED UGLY.

The very word *vulture* is usually spoken in tones of disgust. The perceived ugliness of the bird, combined with the loathsome work it does, makes the turkey vulture repulsive to people.

A turkey vulture enters the world ugly and becomes even more ugly in appearance as it grows up. A hatchling is bald and gangly. Its beak appears to be about three sizes too big for its head, and its stubby legs look as if they are three sizes too small for its body.



Immature yearling



Mature adult

At first the hatchlings have dark black heads and white down. As the birds prepare to leave the nest, their heads gradually fade to gray and their white down is replaced with dark brown feathers.

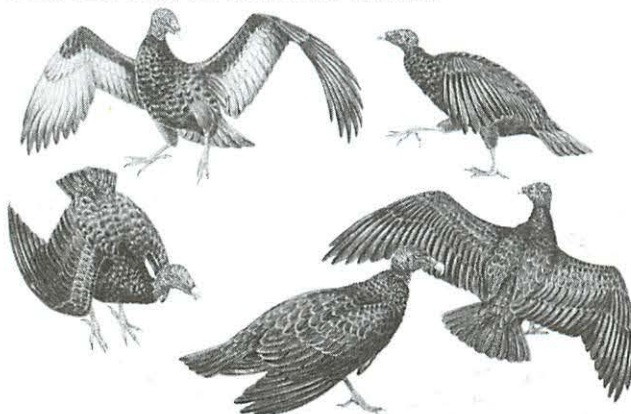
The wings of a young turkey vulture grow to three times as long as its body. This length makes the body look even more out of proportion. By the time a turkey vulture reaches adulthood, it has a big nose, large feet, short legs, oversized wings, and beady red eyes ringed with bright yellow circles.

As if that is not bad enough, the turkey vulture's head continues to change colors. It becomes pink at about one year of age and then gradually darkens into a deep red color at maturity. At maturity the turkey vulture is completely bald except for a few straggly hairs which seem to sprout from between its many wrinkles.

The turkey vulture sounds as bad as it looks. While other birds can make bright cheerful sounds

and songs, the turkey vulture is completely voiceless except for a few hisses and grunts.

On the ground the turkey vulture is so awkward it is barely able to put one foot in front of the other without stumbling. Thus, it hops about on both feet with an awkward shuffle.



Birds: Their Life, Their Ways, Their World, Dr. Christopher Petros, Reader's Digest Association, Inc.

The bodily dimensions of a turkey vulture cause it to be extremely awkward on the ground.

COMPARED TO THE POWERFUL EAGLE, TURKEY VULTURES APPEAR WEAK.

Turkey vultures are easily intimidated and are, therefore, the last ones to eat. They are easily driven off by other predators, such as coyotes, and by more aggressive birds, such as eagles.

Even female hummingbirds have been known to drive off turkey vultures when they get too close to hummingbird nests. The hummingbirds dart back and forth over the bald head of the turkey vulture until it retreats.



A hungry turkey vulture must quickly flee when any other predator arrives.

Unlike eagles and other birds of prey, turkey vultures have such weak wings that they are unable to fly on overcast or rainy days. They must wait for the sun to produce thermals (rising columns of warm

air). Whereas eagles use thermals to soar in the air, turkey vultures depend upon thermals even to get off the ground. In fact, in many places turkey vultures are typically "grounded" until noon, when the rising air currents can carry them aloft.

Turkey vultures also have such weak talons and beaks that they cannot kill or even tear apart fresh meat by themselves. They must wait for their prey to die and decay before they can eat it. This means that they sometimes go without eating even when their meals are in sight.

After an animal dies, turkey vultures wait until other animals open up the carcass or the meat softens sufficiently from decay so the rotten flesh can be torn apart.



The Birds of America, J.J. Audubon, Macmillan Publishing Company

The weakness of a turkey vulture requires it to make sure that its prey is actually dead. Death is determined by pecking at the eyeball of the animal.

When vultures feed on a carcass, they begin with the softest parts first. They make a rough incision along the belly of the victim and literally crawl inside, eating their way from the inside out. Because muscle tissue takes longer to soften than entrails, turkey vultures first make quick work of the intestines, stomach, and internal organs.

COMPARED TO THE "CLEAN" EAGLE, THE TURKEY VULTURE APPEARS VILE.

Even when the turkey vulture finds suitable carrion, it may pass it by if the smell is not bad enough. The turkey vulture will eat only after its sense of smell convinces it that a meal is vile enough to suit its taste.

When the turkey vulture finishes its meal, it has putrefying flesh all over its body. Blood is usually caked on its head, and chunks of greasy fat may be wedged between its feathers. The foul-smelling contents of the dead animal's stomach may also cover its feet.



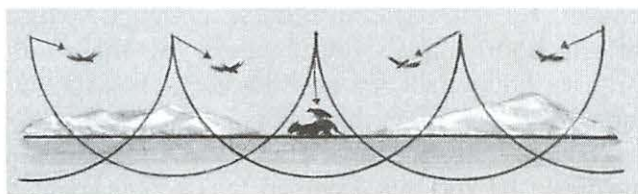
After confirming that a carcass is ready to eat, turkey vultures will actually crawl into it and eat from the inside out.

COMPARED TO THE HONORABLE EAGLE, THE TURKEY VULTURE LIVES IN DISGRACE.

Because of the foul-smelling, disease-ridden meals which the turkey vulture eats, people assume that the turkey vulture carries diseases. Therefore, in order to stop the spread of disease, turkey vultures at one time were slaughtered by the thousands. Finally, however, ornithologists, scientists who study birds (from the Greek word ὄρνις [OR-niss], meaning "bird"), began to discover the truth about the turkey vulture. This unpopular bird has many beneficial characteristics, which God has given to it for a special purpose.

1 TURKEY VULTURES HAVE A SUPERIOR SENSE OF SMELL.

Ironically, the turkey vulture that eats the foulest-smelling food has the keenest sense of smell of any bird. This ability to detect the faintest smell is due to the fact that the turkey vulture has a large olfactory system.



With their keen sense of smell, a few turkey vultures can spot carrion over a large area.

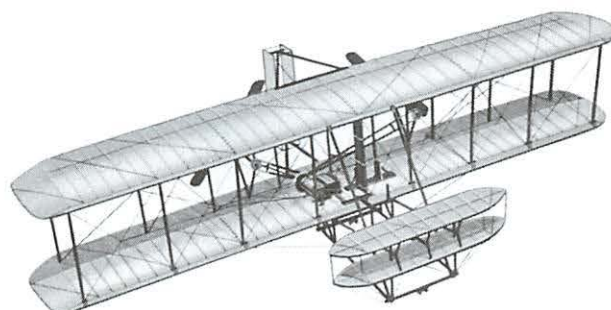
Even high in the air the turkey vulture can detect the faintest odor of a decaying carcass hundreds or thousands of feet below. This is an obvious benefit to the turkey vulture in carrying out the purpose for which God designed it.

Ornithologists have debated for years whether turkey vultures hunt by sight or by smell. The answer seems to be both. They are first drawn to a meal by its foul smell, but they find its actual location with their sharp, beady eyes.

2 TURKEY VULTURES CAN FLY HIGHER AND MORE EFFICIENTLY THAN EAGLES.

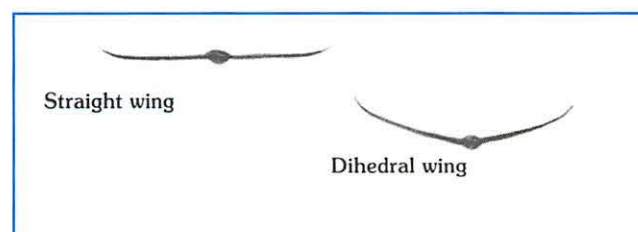
While a turkey vulture is the epitome of awkwardness on the ground, it is a picture of grace in the air. Its broad wings, though weak, are able to take advantage of the lifting power of thermals so efficiently that it can fly for hours without a single wingbeat.

The thermals upon which the turkey vulture relies are actually able to lift it higher than an eagle can fly or soar.



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The Wright brothers' first plane had horizontal wings which were unstable and hard to control. Then Orville and Wilbur noticed that the wing tips of turkey vultures were slightly higher than the wing roots.



When they incorporated the turkey vulture's dihedral wings in their later designs, their planes became far more stable. Thus, turkey vultures are responsible for the dihedral wing structure found in most modern airplanes.

The turkey vulture's remarkable balance is one of the characteristics which allow it to fly effortlessly. The tips of the dihedral wings point upward, allowing its body to swing slowly side to side beneath them like a pendulum.

If a gust of wind causes one wing to dip, the turbulence above the wing increases. The wing is then "lifted" back up. If, on the other hand, a gust of wind pushes a wing up, its lifting surface decreases and the turbulence above the wing diminishes. This causes the wing to come down.

3 **TURKEY VULTURES ARE MORE SANITARY THAN EAGLES.**

How could it possibly be said that a turkey vulture, which covers itself with decayed and diseased remains, could be more sanitary than an eagle? The answer can be found in the way turkey vultures cleanse themselves after eating such a dreadful meal.

Amazingly, the turkey vulture does not use water for "bathing" as do other birds. It cleans its head by exposing it to the ultraviolet rays of the sun. Ultraviolet rays are known to kill bacteria and are actually used in surgery to sterilize equipment.



After a meal the turkey vulture spreads its wings in the sun, allowing the ultraviolet rays to disinfect its entire body.

After a "bath" in the sun, any "leftovers" from the meal dry into brittle flakes. These particles fall off the turkey vulture easily as it flies. Whatever does not fall off during flight the turkey vulture picks off with its beak. Then it carefully preens each feather by pulling it through its beak, much like a person licking his fingers after eating fried chicken.

God designed the feet of the turkey vulture to be sanitized in an entirely different manner.

They are built in such a way that the turkey vulture cannot reach them by bending over. If it tried, it would fall on its face!

Therefore, God provided for the turkey vulture a powerful means of cleansing its legs. Within the turkey vulture are potent digestive juices which neutralize deadly bacteria. These chemicals are so effective that they even destroy bacteria such as *Vibrio cholerae*, which causes the dreaded disease cholera.

Once the juices finish their work in the digestive tract, the turkey vulture allows them to simply run down its legs, cleansing them in the process. By rubbing its legs back and forth, the turkey vulture spreads the digestive juices over its talons as well.



The legs and talons of the turkey vulture are "bathed" with the disinfectant from its digestive tract.

4 **TURKEY VULTURES DO MORE TO PROTECT MAN THAN DO EAGLES.**

In spite of the turkey vulture's weaknesses, limitations, and repulsive outward appearance, God has probably used the turkey vulture to save more human lives than any other creature on the face of the earth, including the eagle.

Without turkey vultures to clean up the rotting remains of diseased animals, epidemics would spread at incredible rates. However, by taking into itself these vile and diseased organisms, the turkey vulture eliminates the potential of their spread.

Anthrax, for example, is a contagious disease caused by the bacteria *Bacillus anthracis*, which affects both animals and humans. Animals with anthrax have chills, fever, dysentery, and convulsions, and they often die suddenly. Some researchers believe that anthrax was the fifth plague of Egypt recorded in Exodus 9. A person can become infected by touching a diseased animal or by simply inhaling contaminated dust particles.

However, the remains of a carcass which has been cleansed by turkey vultures is as free from the infectious bacteria as if the remains were burned.

Cholera is also very contagious. It can be transmitted in food, in water, or by contact. In fact, it is so contagious that flies swarming around the remains of a cholera victim can spread the disease for miles. To restrict epidemics of cholera, doctors must keep patients in strict quarantine. By completely devouring dead animals which were infected with *Vibrio cholerae*, turkey vultures keep such epidemics in check.



One of the most effective means of cleansing the land of infected animals is to allow turkey vultures to remove the dead carcasses.

Although man has admired eagles for their sleek feathers, attractive heads, and powerful talons, even considering them to be gods, God designed the repulsive turkey vulture to do its most effective work of cleansing for the benefit of the very ones who reject the turkey vulture.

Many important lessons can be learned from God's wisdom and love as expressed in His design of the turkey vulture. Can you determine what some of these lessons are and apply them to your life?

PROJECT

Every important lesson in the Christian life is illustrated in the world of nature. For this reason God tells us to "go the ant" to observe its ways so we will not be slothful. (See Proverbs 6:6.)

He also tells us to consider the work of His hands in the heavens, so we will not be prideful. (See Psalm 8:3-4.)

In this project consider the lessons of the turkey vulture in light of I Corinthians 12:21-25 in order not to reject those whom the world wrongly treats as less attractive.

"And the eye cannot say unto the hand, I have no need of thee: nor again the head to the feet, I have no need of you.

"Nay, much more those members of the body, which seem to be more feeble, are necessary:

"And those members of the body, which we think to be less honourable, upon these we bestow more abundant honour; and our uncomely parts have more abundant comeliness.

"For our comely parts have no need: but God hath tempered the body together, having given more abundant honour to that part which lacked:

"That there should be no schism in the body; but that the members should have the same care one for another."

I Corinthians 12:21-25

1. WHO ARE THE "TURKEY VULTURES" GOD HAS PLACED IN YOUR LIFE?

List the physical reasons you would tend to reject this person.

List the ways in which God is using this person to benefit your life.

_____	_____
_____	_____
_____	_____

2. HOW HAS GOD DESIGNED CHRISTIANS TO BE THE "TURKEY VULTURES" OF THE WORLD?

Find a Scripture reference for each point:

Physical Challenges

Spiritual Benefits

1. Despised

1. Spiritual discernment

2. Weak

2. Higher flying

3. Assigned servile tasks

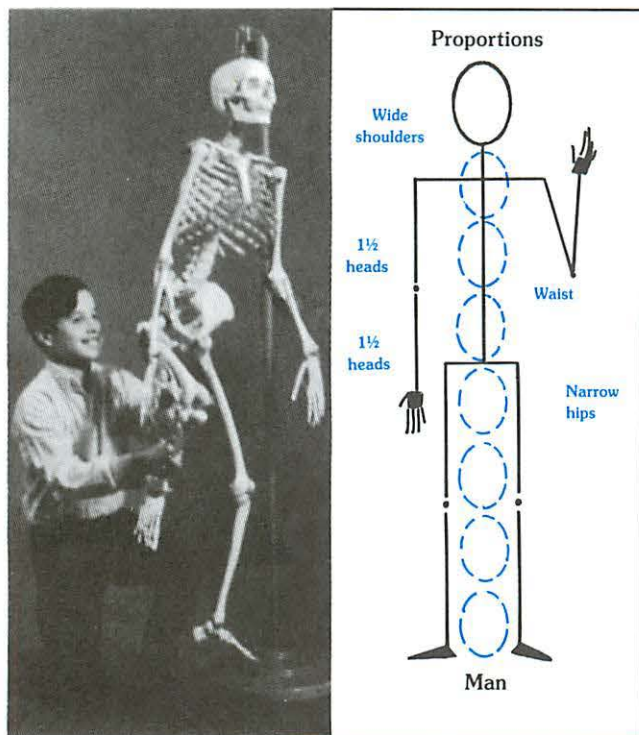
3. Removing evil

_____	_____
_____	_____

Date completed _____ Evaluation _____



HOW DOES GOD'S FORETHOUGHT MAKE IT EASY FOR AN ARTIST TO DRAW A PERSON?



God has designed a marvelous uniformity with regard to the height of man's stature and the interrelationship of the body's parts. Understanding these proportions allows an artist to portray accurately the human form.

1 GOD DESIGNED THE PARTS OF THE BODY TO GROW TO MATURITY AT DIFFERENT RATES.

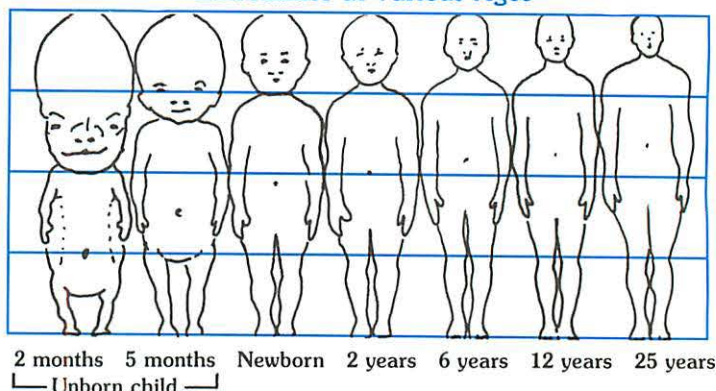
The average infant weighs about $7\frac{1}{2}$ pounds at birth and is about 20 inches long. He grows approximately 10 more inches by his first birthday, 5 more inches by his second birthday, and 3 to 4 inches more before his third.

By the time the average baby is a year old, he weighs approximately 21 pounds. By age 2, he weighs about 26 pounds, and by age 3, around 31 pounds.

When this "average" child is 14 years old, he can expect to weigh 107 pounds and be 5 feet 2 inches tall (62 inches).

Did all the parts of this "average" child's body grow at the same rate? No. Look at the drawing that shows the relative proportions of the parts of the body at different ages.

Relative Proportions of Head, Trunk, and Extremities at Various Ages



This drawing assumes that the 25-year-old adult on the right is the same height as the 2-month-old unborn baby on the left. It shows the changes that take place in one part of the body relative to changes in other parts as the body grows from that of a 2-month-old unborn child to that of a 25-year-old adult.

Look at the size of the head of the 2-month-old unborn child. The head extends from the second line to the fourth line, making up $\frac{1}{2}$ of the length of the entire baby. Look at the head of the newborn infant. It extends from the third line to the fourth line, making up only $\frac{1}{4}$ of the length of the entire baby.

Now look at the head of the 25-year-old adult. It extends only $\frac{1}{2}$ of the way between the third and fourth bars. This makes it only $\frac{1}{8}$ ($\frac{1}{2} \times \frac{1}{4}$) of the length of the entire body. Proportionally, the head went from being $\frac{1}{2}$ of the entire body length to $\frac{1}{8}$.

Does this mean that the head does not grow or that it shrinks? No. It means that the head grows at a much slower rate than the other parts of the body.

The legs of the 2-month-old unborn child account for only about $\frac{1}{8}$ of the child's length. By the time the unborn child is 5 months old, the legs are



about $\frac{1}{4}$ of the length of the child. At birth the legs make up about $\frac{1}{3}$ of the newborn's stature. The legs keep growing until they account for almost $\frac{1}{2}$ of the height of the 25-year-old adult. Proportionally, the legs have grown from being only $\frac{1}{8}$ the length of the body to almost $\frac{1}{2}$ the length of the body.

Take a piece of paper and mark on it the length of the spine of the newborn infant, roughly from the bottom of the chin to the top of the legs.

Moving the paper over, compare the length of the newborn's spine to the spine of the 2-year-old, 6-year-old, 12-year-old, and 25-year-old. What do you find? The relative length of the spine in each case is the same. This does not mean that the spine does not grow. It means that the spine grows so that its length is always in the same proportion to the length of the entire body.

Find the navel in each of the drawings on page 2200. Where is it located on the 2-month-old unborn child? At the first line. This means that $\frac{3}{4}$ of the length of the child is above the navel, and only $\frac{1}{4}$ is below.

At what age has the body grown so that the navel is at $\frac{1}{2}$ the height of the child? At the age of 2.

As a person grows, the relative length of the spine in proportion to body height stays the same.

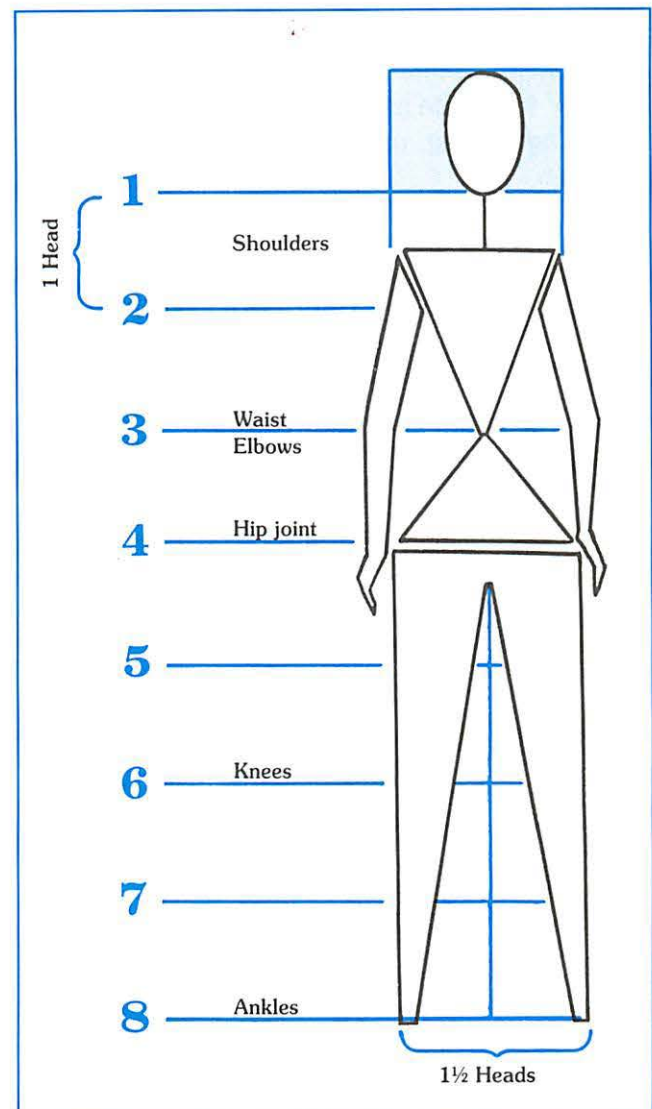
From the age of 2 on, the navel is higher than $\frac{1}{2}$ the height of the person. Where would you expect to find the navel on a 14-year-old who is 62 inches tall—exactly at 31 inches, higher than 31 inches, or lower than 31 inches?

Also by age 2, half of the adult height is reached (for girls, it is reached by 18 months). Thus, to estimate how tall a child will be in adulthood, take his height at 2 years of age and multiply it by 2.

2 GOD DESIGNED ALL THE PARTS OF THE BODY TO BE PROPORTIONATE TO THE HEAD.

Artists know that one of the most difficult figures to draw is the human body. The key to drawing a good likeness of the human body is realizing that its parts are all in proportion to the human head and learning what those proportions are.

Look at the rough drawing of the human body. It is divided into 8 sections, each section the length of the head.



Section one extends from the top of the head to the chin, Section two from the chin to roughly the armpits, and Section three from the armpits to the waist.

The fourth section reaches from the waist to the top of the legs. The fifth one goes to the thighs, the sixth one to the knees, the seventh one to the mid-calf, and the eighth one to the ankles.

The width of the body at the shoulders and hips is $1\frac{1}{2}$ heads wide.

If the artist draws a head that is 3 inches long and makes each section 3 inches also, he knows that the resulting figure will be in exact proportion to the adult human body.

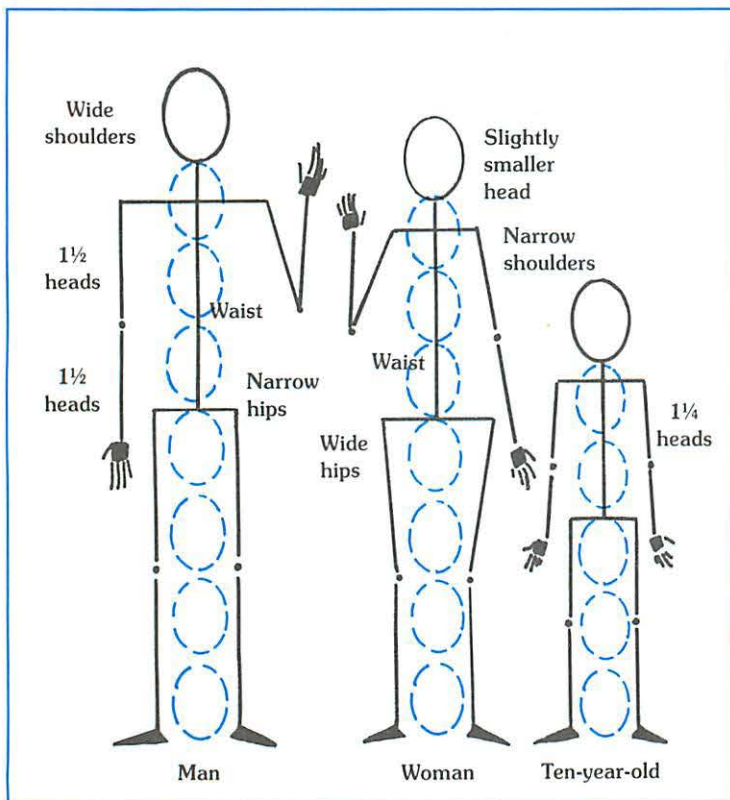
Look at the parts of the body and how they relate to the head. The trunk of the body is 3 heads

long, measured from the chin to the hip joint. The neck is $\frac{1}{2}$ a head long when the body is in an erect position.

Where are the elbows in relation to the waist? At almost the same height, 3 head lengths down from the top of the head. The arm itself is about $2\frac{1}{2}$ head lengths long, measured from the shoulder to the wrist.

Measured from the wrist to the tip of the longest finger, the hand is about $\frac{1}{2}$ to $\frac{3}{4}$ of a head long, or about the distance from the point of the chin to the middle of the forehead. The width of the hand is $\frac{1}{4}$ of a head, or about the distance from the base of the nose to the point of the chin.

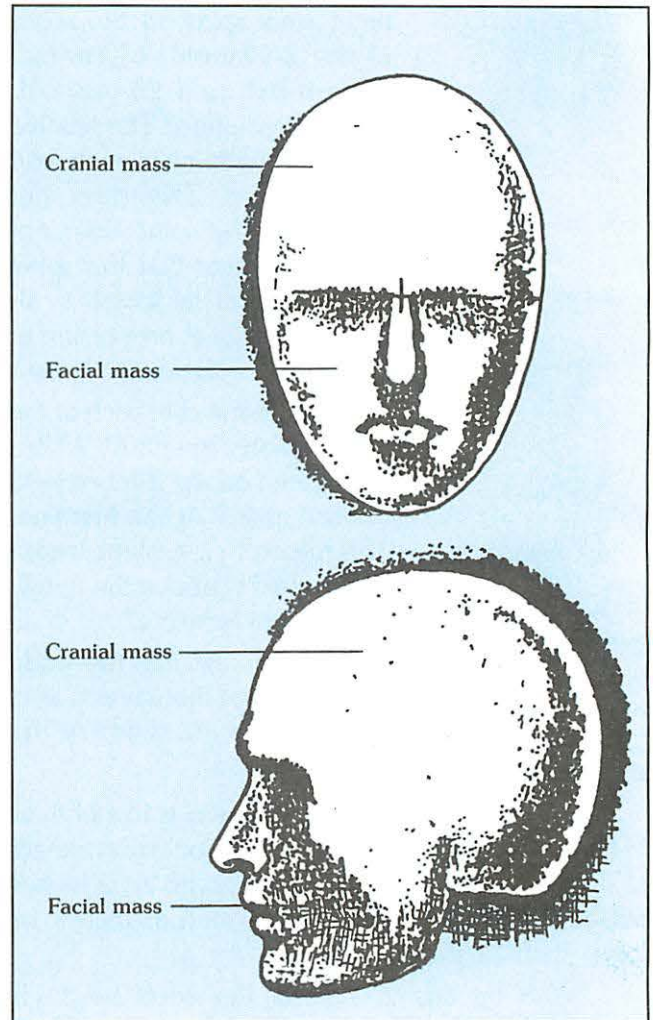
How many head lengths long are the legs in the adult figure? Four lengths, or $\frac{1}{2}$ of the total body length. The foot length (not shown) is equal to the length of the forearm, or $1\frac{1}{3}$ heads long. The width of the front of the foot is $\frac{1}{2}$ a head wide.



While men and women are both 8 heads tall, the proportions of shoulders and hips differ between them. An adult man has wider shoulders than hips, and an adult woman has narrower shoulders than hips. A child's shoulders, hips, and natural stance distance between feet are all approximately equal. Notice that a ten-year-old child is about 6 heads tall. A baby would be about 4 heads long.

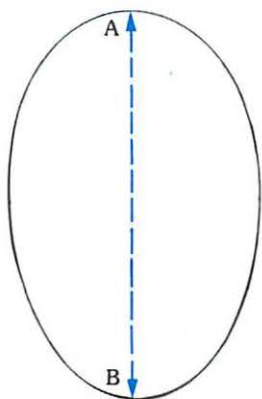
3 GOD DESIGNED THE PARTS OF THE HEAD TO BE PROPORTIONATE TO EACH OTHER.

If the parts of the body are in proportion to the head, to what is the head in proportion? The parts of itself! The head is divided into two parts, or *masses*: the *facial mass* and the *cranial mass*. From the front, the two masses look equal, but from the side, the cranial mass is approximately twice as big as the facial mass.

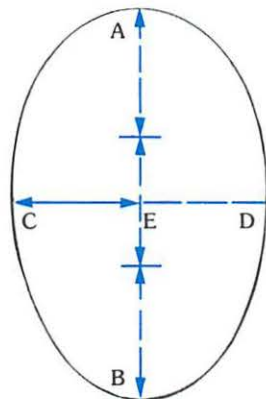


Viewed from the front, the face is an egg shape.

To draw a face with proper proportions, draw a line, AB, dividing the head in half lengthwise. Draw another line, CD, dividing the head in half at the width, and crossing AB at point E. The length of AB should be 3 times the length of CE.

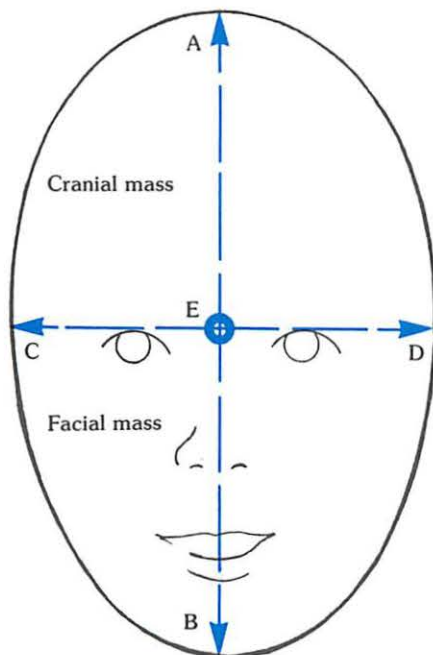


Line AB divides the egg shape in half.



The length of AB is equal to 3 times the length of CE.

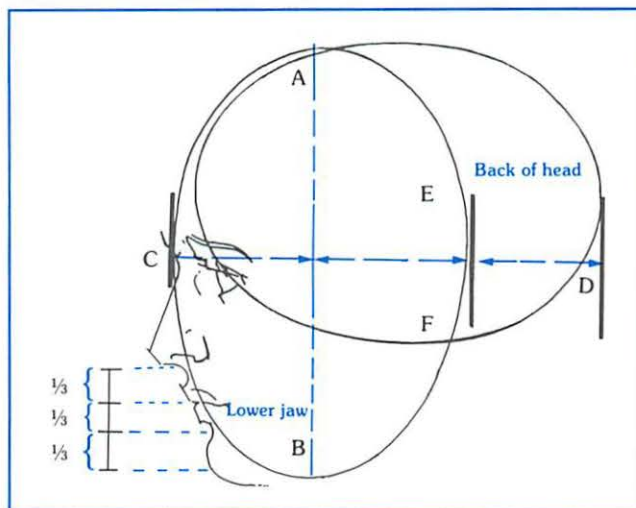
Line CD divides the face into its two masses—the facial mass below and the cranial mass above. Point E is the position of the bridge of the nose. Line CD gives the positioning of the eyes.



Line CD is about 5 eye lengths long. The distance from point E to the end of the nose is about $\frac{1}{2}$ of the length of EB. The width of the lower part of the nose is equal to the length of one eye.

Viewed from the front, the head is *one* egg shape. Viewed from the side, the head is *two* egg shapes.

Draw two egg shapes of the same size over each other, one vertical and the other horizontal. The height of the head, AB, and the depth of the head as measured from the front to the back, CD, are equal.



The lower jaw is at the lower left of the vertical egg. The right end of the horizontal egg becomes the back of the head. If you draw another vertical line, EF, at the back or to the right of the vertical egg, line CD, the depth of the head, is divided equally into three parts by lines AB and EF.

The horizontal egg represents the cranial mass. The part of the vertical egg that is outside of the horizontal egg represents the facial mass.

Although the two masses look the same size from the front view of the head, the cranial mass for an adult is actually twice as large as the facial mass when viewed from the side.

The cranial mass of an infant is more than 4 times the size of the facial mass. This means that the horizontal egg drawn to represent the cranial mass of an infant would have to be twice as large as the vertical egg.



By the time a child has grown to the age of about 14, the facial and cranial masses reach their adult proportions, in which the cranial mass is twice the size of the facial mass.



Look at the distance from the bottom of the nose to the tip of the chin when viewed from the side. Travel $\frac{1}{3}$ of this distance down from the bottom of the nose, and you reach the point where the lips meet. Travel another $\frac{1}{3}$ of this distance down from the lips, and you reach the point where the chin begins.

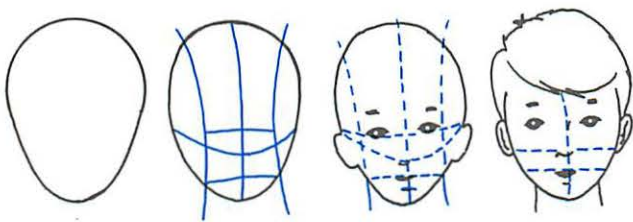
Variations of proportions determine head types. People with head widths at least $\frac{4}{5}$ of the length are said to have broad heads.

People with head widths equal to about $\frac{3}{4}$ of the length are considered to have long heads.

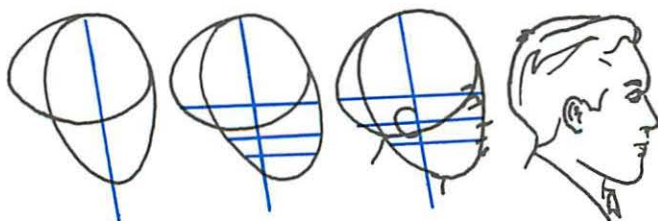
People with head widths less than $\frac{4}{5}$ but greater than $\frac{3}{4}$ of the length of the head fall into an intermediate group.

PROJECTS

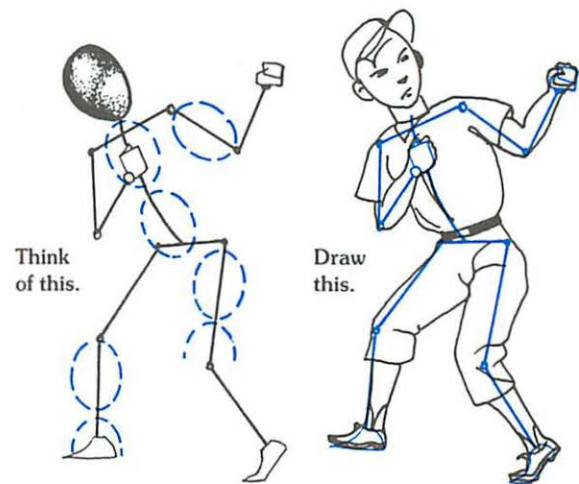
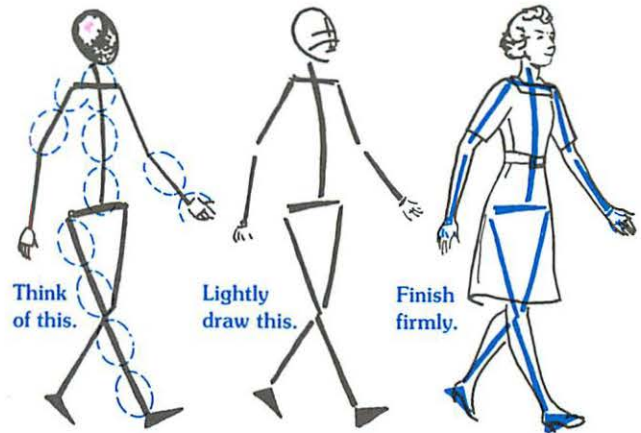
1. Practice drawing faces according to the proportions explained in this resource. Follow these steps for a front view.



Then try a side view.



2. Experiment with whole body action drawings by following these steps. Remember the proportions for varying heights.



3. Know your own body proportions. Measure the distance from your navel to the floor. How much taller would you have to be in order for your navel to be located proportionally where it was when you were 2 years old?

Then determine your head type by measuring the width and length of your head and comparing the measurements.

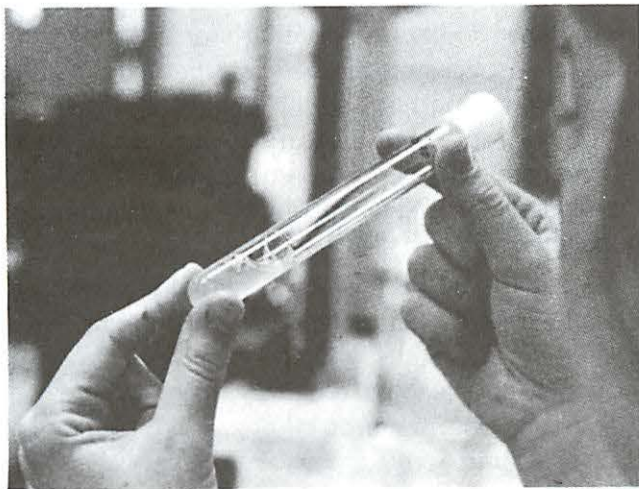
Using a mirror or photograph as a guide, draw a self-portrait.

4. Experienced artists often draw pencil sketches in preparation for their paintings or sculptures. Research the work of Leonardo da Vinci and Michelangelo Buonarroti to learn how their studies in anatomy and God's design enabled them to produce accurate likenesses of people. Then expand your drawing skill to painting, chalk work, or carving.

Date completed _____ Evaluation _____



HOW IS MAN'S "DREAM" TO "ADD A CUBIT TO HIS STATURE" TURNING INTO A NIGHTMARE?



Scientists have long been intrigued with the possibility of "creating" life outside the womb. It is certain that they never anticipated the legal complications which have resulted.

In 1884 Dr. William Pancoast, a Philadelphia physician, was trying to help a wealthy businessman and his wife. They desperately wanted something their money could not provide—a child of their own. The doctor had discovered that the only apparent reason the wife had not been able to conceive was that the man was sterile.

The doctor decided to treat the problem by using a clinical procedure in which he placed another man's seed in the wife's womb. The woman was under anesthesia at the time, and the doctor did not tell her or her husband what he had done. Nine months later she gave birth to a baby. The child so resembled the medical student who had provided the seed that Dr. Pancoast had to tell the woman's husband the truth, but he never did tell the woman.

The procedure itself was nothing new. Near the end of the eighteenth century a famous English surgeon had used the same technique to impregnate a London merchant's wife with her own husband's seed. Just after the Civil War, Dr. Marion Sims, an American gynecologist, used the technique to produce the first "test-tube baby" in the United States.

Dr. Sims performed artificial insemination some fifty-five times on half-a-dozen women, using their husband's seed in each case. He then came to the conclusion that it was an immoral practice and decided to abandon it entirely. He also publicly discouraged other doctors from trying it.

Thus, although the procedure had been used before, Dr. Pancoast's "experiment" was the first recorded case of donor insemination in history. Now, a century later, the technique has become so common that every year an estimated 10,000 to 20,000 babies conceived in this manner are born in the United States.

At first, doctors used the method only with a married woman and only with her husband's seed. Artificial insemination with the *husband's* seed is called *AIH* (Artificial Insemination [*Husband's* seed]). However, it was not long until the temptation to use donor seed, as Dr. Pancoast had done, proved irresistible. Artificial insemination by *donor* seed is known as *AID* (not to be confused with the disease *AIDS*).

When Dr. Hermann Rohleder wrote *Test Tube Babies: A History of Artificial Impregnation of Human Beings* in 1934, he limited his discussion to AIH by saying, "What husband or wife, no matter how intense their longing for an heir, will consent to an injection of strange [seed]? Thank God that most people still have that much tact, decency, and moral feeling." Yet, even he was willing to compromise. He said that a physician should go ahead and perform AID in "desperate, exceptional cases."

Today those exceptions have become the rule, and there is no longer much serious debate regarding the morality of AID. Current books and articles on the topic often mention the ethical concerns as background information, but by and large the assumption is that, like contraception and abortion, artificial insemination is here to stay.

The gradual acceptance of AID by the medical profession and people in general indicates the extent to which our society—many Christians included—has swallowed the lie that we can, by taking thought, "add a cubit to our stature." Operating on the basis of that fallacy has three consequences.

First, people have been deceived into thinking that when they have the technological ability to do something, they should go ahead and do it and worry about the ethics later—if at all. The argument is that we not only *can*, but *must* take charge of our reproductive capacities, both to prevent inconvenient pregnancies and to facilitate conception whenever we choose to do so.

Second, compromise in “little things” has resulted in major violations of God’s design. Although AIH was initially a questionable procedure, it was allowed on the basis of the positive results (i.e., children for infertile couples). Ultimately it has led to immoral practices. For example, currently about 10 percent of AID mothers are single women, and many of them are lesbians.

Third, acceptance of AID has paved the way for various other forms of “reproductive technology,” such as surrogate motherhood and *in vitro* fertilization, which have even more profound moral and legal implications than AID.



United Nations Department of Public Information

In vitro fertilization (*in vitro* means “in glass”) takes place not in a test tube but in a petri dish. Later the tiny embryo is implanted in the womb of the mother or the surrogate.

There are at least six reasons that artificial insemination and other developments it has spawned have created a legal nightmare.

1 IT GOES AGAINST THE SCRIPTURAL PRINCIPLES OF DESIGN, AUTHORITY, AND OWNERSHIP.

God makes it clear in the first book of the Old Testament that as the Giver of life, He is the One who enables a woman to conceive and bear children. When Cain was born, Eve said, “. . . I have gotten a man from the Lord” (Genesis 4:1), not “I have gotten a man from Adam.”

In the story of Jacob’s family, Scripture explains that God opened Leah’s womb, but He did not grant children to her sister. (See Genesis 29:31.)

Rachel’s yearning for a child became so strong that she told Jacob, “. . . Give me children, or else I die” (Genesis 30:1).

Even though this demand made him angry, Jacob wisely did not respond by focusing on Rachel’s barrenness. Instead he asked, “. . . Am I in God’s stead, who hath withheld from thee the fruit of the womb?” (Genesis 30:2). Finally, when Rachel did give birth to a son, it was not because of her human efforts, but because God chose to open her womb. (See Genesis 30:22.)

In their intense desire for children, many men and women today are ignoring God’s sovereignty over this aspect of their lives. In so doing they are actually rejecting His design. Medical treatment to restore the reproductive organs so they can function as originally intended is one thing, but using some external human means to bring about a pregnancy is quite another.

Adam and Eve disobeyed God because they thought He was withholding something good from them. Similarly, a husband and wife who are willing to go to any lengths to conceive risk removing themselves from the protection of God’s authority. (See the *Basic Seminar Textbook*, pages 19–35.)

The fact that infertile couples often experience anger and bitterness about their inability to have children also indicates that they need to yield their rights in this area. (See the *Basic Seminar Textbook*, pages 78–108.)

2 IT ATTEMPTS TO THWART THE DISCIPLINE OF THE LORD.

The first *in vitro* fertilization clinic in the United States opened in the early 1980s, and within just a few months there was a waiting list of several thousand couples. Infertility has become increasingly common over the past fifty years. With the estimated number of infertile couples of child-bearing age topping six million, it surely qualifies as a major challenge in our country today.

Several factors have contributed to this increase in infertility. Among the most significant are the following:

- Because many women are more career-oriented today, they are postponing marriage and/or childbearing only to find that they have lost their fertility.
- It is common knowledge that contraceptives (especially birth-control pills and IUDs) often

result in decreased fertility in the women who use them. The longer these devices are used, the greater the possible damage to the reproductive system.

- Abortions damage the reproductive organs of women, causing decreased fertility, and sometimes sterility, as well as having devastating spiritual and emotional consequences.
- A large percentage of the infertility in women today is due to venereal disease—specifically the pelvic inflammatory diseases, *Chlamydia* and gonorrhea. These two diseases are often “silent” in women, that is, they go undetected and untreated until irreparable damage is done. Venereal diseases are in epidemic proportions in the world today, and according to one estimate, such infections are the cause of one-fourth of the infertility in women between the ages of twenty and thirty-five.
- A similar percentage of all men (25 percent) have sperm counts low enough to classify them as functionally sterile. One researcher, who reports a 30 percent drop in the sperm counts of American males in the last fifty years, attributes this decline to environmental pollution and stress.
- Some Christians are discovering that their failure to implement God’s principles of abstinence in marriage has prevented them from conceiving. (See the *Advanced Seminar Textbook*, pages 180–181.)



Many young couples have no success with conventional infertility treatments. When artificial insemination fails to produce a pregnancy, they try everything from acupuncture to psychic healing and still cannot conceive.

From Scripture, however, we know that the ultimate cause of infertility is God’s withholding children. He is the One who closes the womb, and often He does so as a matter of judgment. When Abimelech was about to enter into an immoral relationship with Sarah, the women of his household all became sterile, including the servants. (See Genesis 20:18.)

Considering the factors that contribute to the present infertility problem, there seems to be a clear indication that as a society, we are reaping what we have sown. People today, though, are much more concerned about their rights than they are about consequences or responsibilities. So one more item has been added to the growing list of rights due to every individual—the right to reproduce.

Thus, many couples believe they are entirely justified in trying to produce children by employing methods like surrogate parenting and *in vitro* fertilization. In effect they are saying, “God has told me ‘No,’ but I am going to do this anyway!”

God’s response to that kind of attitude is not always what we might expect. Just as He sent an angel with a flaming sword to keep Adam and Eve away from the tree of the knowledge of good and evil, so He could easily prevent doctors from achieving any success with these reproductive technologies.

In fact, success rates vary so greatly from one doctor to another and from one clinic to another that it is difficult to predict accurately a couple’s chances of becoming pregnant. In all probability, the majority of those who set out to use these new techniques do not conceive.

Those who do succeed and eventually have a child in this way may find themselves in the position of the Israelites who thought they would die if they did not get some meat to eat. God heard their whining and sent a flock of quail. He also sent a plague. (See Numbers 11.)

The Psalmist sums up what happened in these words: “They soon forgot his works; they waited not for his counsel: But lusted exceedingly in the wilderness, and tempted God in the desert. And he gave them their request; but sent leanness into their soul” (Psalm 106:13–15).

When Abraham and Sarah attempted to get the son God had promised them by an arrangement similar to surrogate motherhood, the result was conflict. (See Genesis 16 and 21.) The same was true in the case of the sons born to Jacob by the servants of Leah and Rachel. (See Genesis 30.)



H. Armstrong Roberts

A woman may be able to get what she wants by violating God's design, but the consequences are far more costly than she realizes.

3 IT VIOLATES THE COVENANT OF MARRIAGE.

One of the reasons AID was suspect in the early days of its use was that most people assumed it was equivalent to adultery. The first court case on artificial insemination in Canada upheld that viewpoint. The judge ruled that a woman who had herself artificially inseminated without her husband's knowledge had committed adultery (*Orford v. Orford*, 1921).

The court stated that even though physical relations had not taken place, the act was adulterous because it had the effect of introducing into the husband's lineage a "false strain of blood." One critic attacked the judge's reasoning by saying that under this definition a man could have relations with another man's wife without committing adultery if they used a contraceptive.

Others mocked the legal rejection of AID by arguing that it takes two people to commit adultery. In this case, they asked, who was the other offender? The donor whom the woman did not know and never even saw? The doctor who performed the procedure? If a female physician injected the seed or if a woman did it to herself, would it still be adultery?

Not surprisingly, it was not very many years later before an Illinois court handed down the ruling that donor insemination, even without the husband's consent, was not adultery (*Hoch v. Hoch*, 1945). However, less than a decade later another judge in the same state ruled that AID "with or

without the consent of the husband is contrary to public policy and good morals, and constitutes adultery on the part of the mother" (*Doornbos v. Doornbos*, 1954).

One commentator pointed out that the *Doornbos* ruling was the strongest condemnation of the practice ever handed down by any court, but she considered it a legal aberration stemming solely from the judge's religious background.

Meanwhile, no laws were being passed to prohibit AID, and public opinion continued to move from toleration to acceptance. With the so-called sexual revolution of the 1960s came a court ruling on AID in California which stated: "On the question of adultery, the court decided, since the doctor may be a woman, or the husband himself may administer the insemination . . . to consider it an act of adultery with the donor, who at the time . . . may be a thousand miles away or may even be dead, is . . . absurd."

Actually the absurdity lies in the fact that the courts no longer have a Biblical basis for their decision making. To determine accurately whether or not a particular practice is adulterous requires a clear understanding of the Scriptural concept of marriage and its purposes.

The idea of marriage as a contractual agreement between a man and a woman is nowhere to be found in the Bible. Marriage is an exclusive covenant between the couple and God. A husband and wife commit themselves to one another and to God for life, and He makes them "one flesh." Anything that violates this exclusiveness, regardless of whether it involves physical relations, should be considered adulterous activity.

In Scripture there is a very close relationship between adultery and idolatry. A person who allows anything to come between himself and God, as in the lustful look, is committing spiritual adultery. (See Matthew 5:27-28.)

When a wife is impregnated by AID, that couple is not only going outside the boundaries God has established, but has probably made children an idol and placed their desire for children above their desire for God's will. (See Proverbs 5:15.)

4 IT ESTABLISHES LEGAL DECEPTION.

Most cases of AID are cloaked in secrecy. The husband does not want others to know that he is unable to beget a child. The expectant mother usually would rather not tell anyone that the child she is carrying is not her husband's. The donor is

guaranteed anonymity, and most doctors keep no records that would make it possible to trace his identity. The vast majority of the thousands of children conceived by AID have never been told the truth about their origins.

This desire to hide the truth arises primarily because of the stigma of illegitimacy. The legal status of the child born as a result of AID is one problem the courts have not been able to solve satisfactorily. In England, for example, AID is legal, but the child is considered illegitimate.

Some states have declared AID legal and confer legitimacy on the child as long as the husband has given written consent. Other states have refused to legalize the practice and hold to the common law rule that when the father is not the husband of the mother, the child is illegitimate.

On the birth certificate of an AID child the space marked "father" should show either the donor's name or the phrase, "father unknown." What happens in most cases is that the husband's name is entered. If the physician knows how the conception took place and yet signs the document with the husband's name on it, he is committing perjury.

To avoid this, the doctor will often tell the couple to have relations on the day of the insemination in order to introduce the possibility that the child is really the husband's, not the donor's. Sometimes he will even mix some of the husband's seed with the donor's for the same purpose. Still, the doctor is aware that the husband's sterility is the reason the couple used the AID procedure. So the deception goes on.

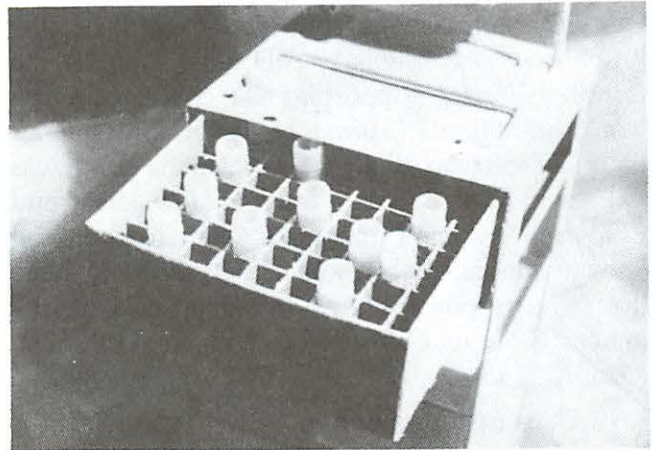
The courts have dealt with this in a typically inconsistent manner. An early New York case held that the AID child had been "semi-adopted" by the husband and was "not illegitimate." However, the ruling stopped short of saying that the child was legitimate (*Strnad v. Strnad*, 1948). Thus, the case did not set up any broad guidelines that could be applied to other cases.

Fifteen years later a judge in the same state chose to follow the common law and declared an AID child illegitimate. In contrast to the prior ruling, the court found that AID failed to meet the legal requirements for adoption (*Gursky v. Gursky*, 1963).

After another decade had passed, another New York court ruled that it was unfair to make any distinction between a child conceived in the usual way and an AID child. The judge felt that illegitimacy was merely a historical concept that had been

rendered obsolete by the new technology and should, therefore, simply be discarded (*Adoption of Anonymous*, 1973).

This last case solves the problem of legal deception on the birth certificate by abolishing illegitimacy and appealing to an even greater deception—the idea that it does not really matter whether a child is conceived out of wedlock.



Cappy M. Rodman

During the 1940s and 1950s, scientists perfected the technology for freezing and thawing human spermatozoa. These specimens will be stored in a special freezer for future use.

5 IT SETS UP CONDITIONS FOR VIOLATION OF INCEST LAWS.

With the development of techniques for freezing seed, it became possible for the same donor's seed to inseminate hundreds of women, resulting in numerous children who are half siblings without knowing it. Marriage or physical relations between a half brother and a half sister are prohibited both by statute and by Scripture. (See Leviticus 18:9.)

Proponents of AID tend to dismiss the potential for unwitting incest as statistically improbable. For example, one researcher calculated that the same donor would have to produce nearly 300 offspring before this would become a problem. However, when two half siblings almost married in rural Maine, it was discovered that their genetic father had begotten over 800 other children by AID!

There are reports of several other marriages between AID half siblings being prevented because the truth was revealed in time. Given the fact that, in the past, donor records were rarely kept, it is likely that in other cases incestuous marriages have taken place because there was no way of knowing that the man was actually the bride's half brother.

6 IT CREATES CONFUSION ABOUT LEGAL RESPONSIBILITIES.

With few exceptions the court decisions in which AID has been an issue have been divorce cases. Apparently as long as the AID mother and her husband remain married and the donor remains anonymous, the legal ramifications of artificial insemination tend to be concealed.

The courts have consistently ruled that the husband who consents to AID must shoulder the responsibility for supporting the child just as he would his natural offspring. However, these rulings have all dealt with situations in which the donor was unknown. In more recent cases in New Jersey and California involving unmarried women who used known donors, the donors were judged to have the same responsibilities and rights as a natural father (*C.M. v. C.C.*, 1977, and *Jhordan C. v. Mary K.*, 1986).

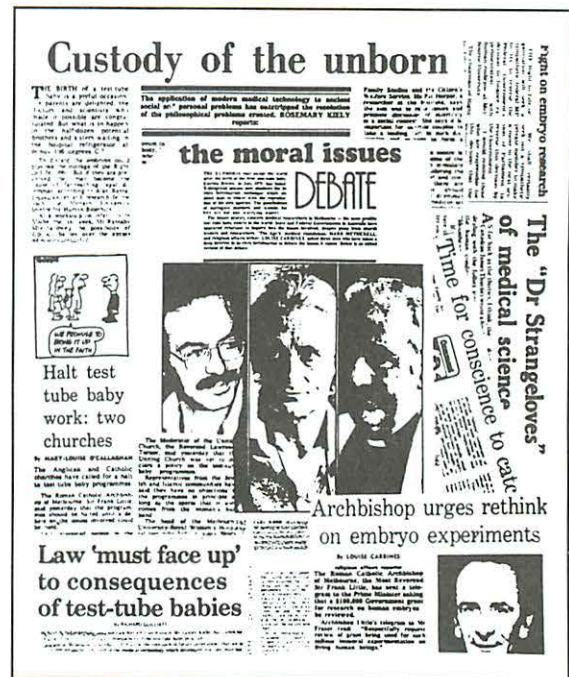
Because the trend now is toward keeping permanent records of donors and the use of known donors even by married couples, there will likely be cases in which the AID husband's rights are in conflict with the donor's. Under those circumstances a judge may have difficulty in discerning how to rule in the best interest of the child.

To date, no court cases have dealt with the question of the inheritance rights of an AID child. Under the current laws of most states, such a child is worse off than an illegitimate child, who has the legal right to inherit from his biological father. However, if the identity of an AID donor is known, the child could make a claim on his estate.

Another area in which no rulings have yet been handed down is that of physician negligence or malpractice. Several instances of women's contracting venereal diseases from artificial insemination have been documented. When an Australian woman was infected with AIDS from the donor seed, all the sperm banks in that country temporarily closed for fear of litigation.

The birth of an AID child with genetic defects also raises the possibility of "wrongful-birth" or even "wrongful-life" suits against doctors.

These same concerns overshadow the increasing use of other techniques such as surrogate motherhood and *in vitro* fertilization. Yet, the prevailing view is that these legal dilemmas are not the result of a fundamental ethical problem, but are due to the fact that the law is lagging behind technology and public opinion.



Test Tube Conception, Carl Wood and Ann Westmore

The media has been quick to respond to the public's curiosity about the legal quandaries the new reproductive technologies generate, but the Biblical perspective is largely ignored.

The solution, the experts seem to be saying, is simply to rewrite the laws to fit the new technology and what people want to do with it. Our concern ought to be to discover what God thinks about these techniques so we can act in harmony with His will.

PROJECT

Some have suggested that the law of levirate marriage sets a Biblical precedent for the practice of AID. Refute this misapplication of Scripture by researching the Old Testament law and the reasons for it. (See Deuteronomy 25:5-10.)



Dore Bible Illustrations

Naomi found a husband for Ruth based on the principle of levirate marriage.

Date completed _____ Evaluation _____



MEDICINE RESOURCE

HOW DO MAN'S ATTEMPTS TO "ADD TO HIS STATURE" LEAD TO HIS CONDEMNATION?



Reuters/Bettmann Newsphotos

Ben Johnson of Canada crossed the finish line first with the help of anabolic steroids. His attempt to "add to his stature" led to his condemnation in the 1988 Olympics.

Advertisement

YOU CAN BE ANYTHING YOU WANT TO BE.

There comes a time when a competitive athlete like yourself discovers that winning is more important than anything else. You have learned the hard way that winning isn't everything—it's the *only* thing!

You know what it's like to pour out your guts for a big event, only to come up short. You know what it's like to hear the crowd cheering for the other guy.

NOW IT'S YOUR TURN. YOU DESERVE TO WIN.

Sure there are some people who are genetically perfect; they win without any help. But people like you and me need an

extra edge to win. Thanks to modern medical advancements, that extra edge is here. Now you can be anything you want to be. There is no longer anything to hold you back. You can have it all.

The really good news is that there is no such thing as too much. In fact, the more you take, the more you'll grow. We love the stuff, and you'll love it, too.

You can put on twenty, thirty, or up to fifty pounds of solid muscle without sweat or long hours in a gym. Improve your strength. Quicken your reflexes. Extend your endurance.

Imagine your wildest dreams coming true. Open the door to certain victory. Write for your free catalog today. It won't cost you a dime, and the sooner you start, the sooner your friends will notice that you're not the same loser that you used to be.

The preceding advertisement is a composite of several promotions appearing in popular sports magazines. They appeal to an athlete's fear of losing and his desire for an easy path to certain victory. However, the advertisements fail to include the consequences of the "magical" elixirs they promote. What they do not say is that failure to accept God's design, even when it comes to the stature of your body, has serious consequences.

Many of the athletes pictured in the same magazines will die within the next ten to fifteen years. The use of drugs will make their deaths an ugly sight. They will lie in hospital beds far from the cheering crowds, covered with tubes and needles as they waste away.

Learn how anabolic steroids and other "miracle" drugs which attempt to "increase a man's stature" promise victory—but at a terrible price.



H. Armstrong Roberts

1 Steroids alter the controls which direct the body's functions.

Hormones control many functions in our bodies, and they are created by God to carry out His purposes and His design. Hormones are divided into three main groups primarily on the basis of their chemical structure. These groups are the *amines*, the *proteins*, and the *steroids*.

One of the amines is adrenaline (epinephrine [eh-pih-NEFF-rin]) which helps the body respond to extremely stressful situations. The protein hormones are all those secreted by the pancreas and the pituitary and parathyroid glands. The steroid hormones include the male and female hormones (androgens and estrogens, respectively), cholesterol, and many others.

In the field of sports medicine there are two categories of drugs: the *restorative drugs*, and the *ergogenic drugs*. The restorative drugs help athletes recover from injuries. The ergogenic drugs are synthetic versions of naturally occurring hormones, which, when taken, increase an athlete's "stature"—his body build and/or performance—beyond what God designed for him. The word *ergogenic* comes from the Greek words, *ergo*, meaning "to work," and *gen*, meaning "to produce; to form." The ergogenic drugs include, among other substances, *anabolic steroids* and *human growth hormone*.

Testosterone (tess-TAHSS-tuh-rone) is a naturally occurring steroid hormone designed by

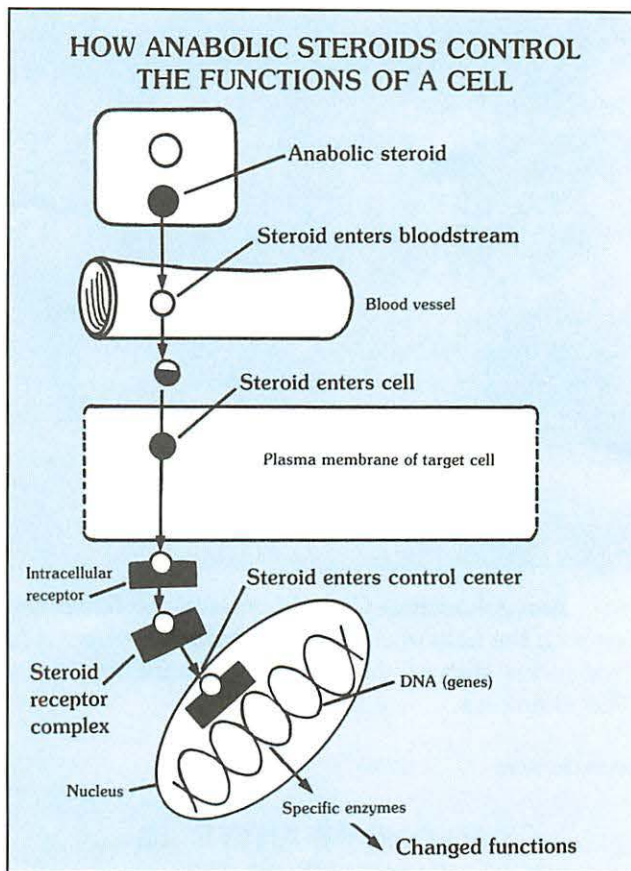


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A hormone which causes manly features is called an **androgen**, and testosterone is one of several in this category. The word **androgen** comes from the Greek words, *andros*, meaning "man," and *gen*.

God to control the rate of biochemical reactions within certain body cells. Testosterone produces the characteristics associated with masculinity—facial hair, deep voice, and most important for athletes, aggressiveness and muscle mass.

Anabolic steroids are synthetic versions of *testosterone*. Some athletes use anabolic steroids to increase the mass of their muscles far beyond their genetically programmed limit. The term *anabolic* comes from the Greek word *anabole*, meaning "a raising up." Anabolic steroids literally raise up cellular activity beyond its intended maximums.



After Principles of Anatomy and Physiology

When an anabolic steroid enters a cell, the steroid binds to its receptor and enters the control center (nucleus). Once inside the nucleus, the steroid increases the rate of protein production, shifting control away from the natural hormones and allowing the artificial (anabolic) steroids to dominate.

Like testosterone, human growth hormone (HGH) occurs naturally, but also may be obtained in synthetic form. HGH is a protein hormone, not a steroid, but it, as well, stimulates special receptors within cells, speeding up the rate at which the cells divide. By causing cells to reproduce more quickly, HGH causes bones to grow and muscles to expand.

Natural testosterone and growth hormone are controlled by delicate feedback systems which maintain them at prescribed levels. When anabolic steroids are taken, the excess testosterone upsets these controls and causes many other problems.

2 Steroids attack and destroy a man's seed.

It is ironic that the very same drugs which give a man an outward appearance of masculinity rob him of his virility and destroy his seed within him. Athletes who use anabolic steroids do, indeed, increase and enhance their manly characteristics; however, they also shut down their natural production of testosterone.

Under normal conditions the level of testosterone in a man's body is determined by his genes. Testosterone levels increase naturally during puberty, stimulating the growth of the male sex organs, muscular and skeletal development, maturation of seed, and a host of masculine characteristics such as broad shoulders, narrow hips, body hair, facial hair, and enlargement of the thyroid cartilage of the larynx, producing a deepening voice.

Testosterone levels are controlled by a substance called *luteinizing* (LOO-tee-in-eyes-ing) *hormone* (LH). Luteinizing hormone is, in turn,

controlled by another hormone—*gonadotropin releasing hormone* (GnRH). When testosterone levels fall, luteinizing hormone stimulates a man's testes to produce more testosterone. If testosterone levels are too high, the testes decrease production.

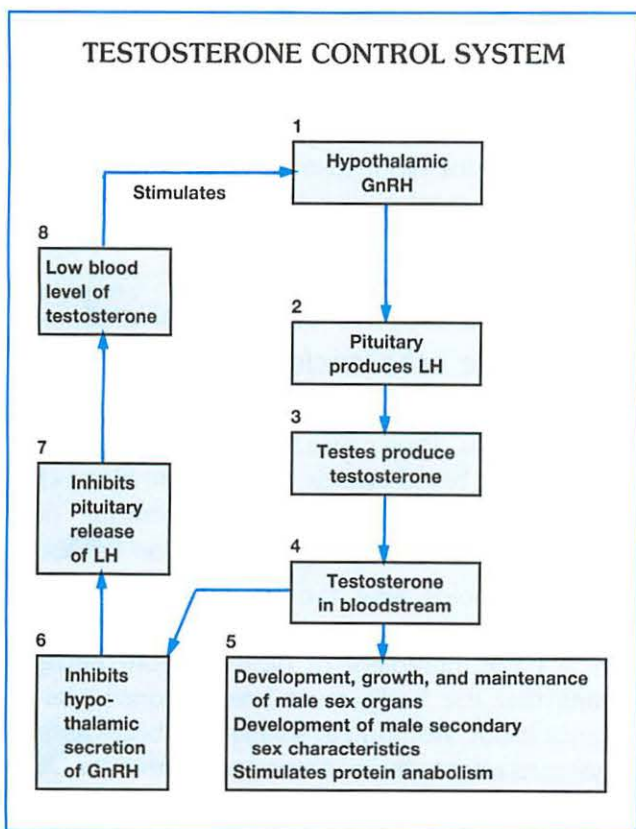
When athletes inject artificial testosterone into their bodies, GnRH and LH shut down the production of natural testosterone. Continued use of anabolic steroids causes the testes to atrophy.

This process suppresses the number, viability, and the maturity of a man's seed. Eventually an athlete on steroids becomes impotent and unable to father children.

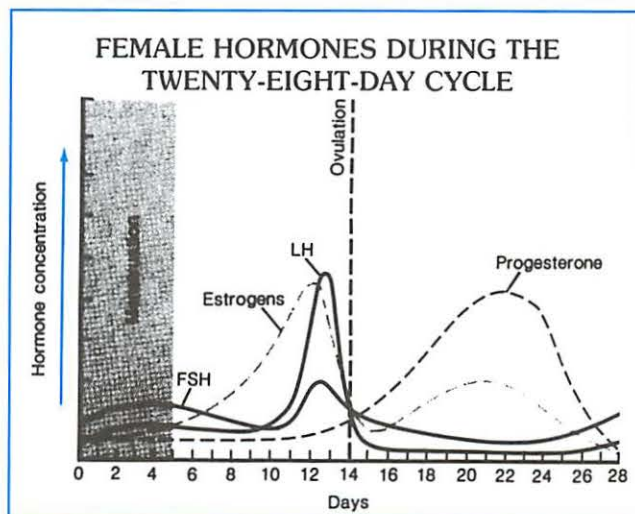
Any seed which remain often suffer genetic damage, increasing the likelihood of inherited birth defects should the man become able to father children again.

Increased levels of synthetic testosterone also enlarge the prostate gland. The more testosterone is taken, the bigger the prostate becomes until it eventually exerts so much pressure on the ureter that it blocks it, and catheterization may be needed for urination. In other words, a male athlete on steroids runs the risk of not even being able to go to the bathroom without help.

When a woman takes anabolic steroids, she develops masculine characteristics. Her muscles become large and powerful, she develops a beard, broad shoulders, a deep voice, and possible bald spots on her head.



Adapted from Principles of Anatomy and Physiology



Principles of Anatomy and Physiology, Tenth and Eleventh Editions, ©1984 Harper and Row Publishers, Inc.

Luteinizing hormone also controls estrogen levels and determines the time of ovulation. Females do have a very small amount of testosterone, but any more than this small amount inhibits the production of LH and interrupts the normal twenty eight-day cycle, preventing ovulation.

Some female athletes, especially gymnasts, take steroids to avoid maturing into womanhood. These drugs block their normal female hormones, causing their bodies to remain small and light. Many female gymnasts who look like they are eleven or twelve years old are actually seventeen or eighteen.

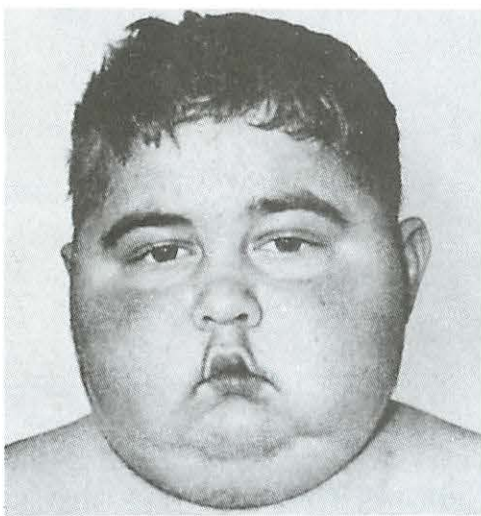
By suppressing ovulation and menstruation, young gymnasts run the risk of remaining sterile or becoming incapable of having a normal pregnancy. In taking steroids they forfeit the possibility of mothering children in favor of the momentary glory of athletic victory.

3 Steroids weaken the body's ability to free itself from impurities.

One of the liver's most important functions is to cleanse the blood of waste products and foreign substances. Medications, vitamins, excess hormones, and even worn-out red and white blood cells are collected by the liver for removal from the body. However, large doses of steroids may overwork the liver as it struggles to remove them from the blood. If the liver falls behind in its functions, toxins build up and begin to destroy liver cells.

For example, the level of another natural hormone, cortisol, increases when a person takes steroids. Because the liver is so burdened with removing the steroids, cortisol is not eliminated properly and begins to build up in the blood.

SYMPTOMS OF EXCESS CORTISOL



Death in the Locker Room. Steroids and Sports. Bob Goldman. Icarus Press

Patients suffering from asthma or arthritis may also experience excess amounts of cortisol as a result of the medications they take. Physicians call the "moon face" symptoms *Cushing's syndrome*.

Excess cortisol causes salt and water retention, abnormal fat deposits, and a weakening of the collagen (KOLL-uh-jen) fibers in the skin, resulting in less elasticity. The combination of these three symptoms results in a puffy "moon face," another characteristic of steroid abuse.

Steroids are also strongly linked to liver cancer and a condition known as *peliosis* (pel-ee-OH-sis). A kind of liver cancer called *hepatoma* (hep-uh-TOE-muh), accounts for 80 to 90 percent of all liver cancers. As steroid abuse has increased, doctors have seen a dramatic increase in the number of cases of hepatoma among young athletes. In seven of eight consecutively diagnosed hepatoma cases at a major mid-western hospital, the patients had taken anabolic steroids.

Peliosis is a condition characterized by blood-filled cysts within the liver. This disease destroys liver tissue and decreases the liver's ability to rid the body of impurities. While peliosis is quite serious in and of itself, physicians have found that when it is caused by steroid abuse, the consequences are often fatal.

Steroids also decrease glucose levels in the blood and increase an athlete's sensitivity to insulin. Because this condition makes even small amounts of insulin more effective, the liver deactivates up to 40 percent of the circulating insulin. This complex process causes glucose levels to drop even further.

As glucose becomes unavailable, the body mobilizes fat as a source of energy. Cholesterol levels then increase, and the incidence of gallstones and cholestatic jaundice rises significantly. The excessive fat content of the blood also forms fat globules in the liver, causing greater liver damage.

4 Steroids elevate cholesterol and promote atherosclerosis.

Anabolic steroids elevate blood pressure in at least four ways. They cause the body to retain fluids, they constrict blood vessels, they elevate blood cholesterol, and they lower the concentration of a substance called *high density lipoprotein* (HDL).

As steroids alter the production of protein within a cell, they cause the body to retain nitrogen, a basic ingredient of protein. More nitrogen means that the body must retain more water to balance it out, resulting in swelling of body tissues. Physicians refer to this condition as *edema* (uh-DEE-muh). The term edema comes from the Greek word *oidema*, meaning "a swelling."

Excess water not only causes body tissues to swell, it also causes blood volume to increase dramatically, overloading the circulatory system and elevating blood pressure.



Anabolic steroids cause atherosclerosis and damage the cardiovascular system in other ways. One nine-time world power-lifting champion almost died from advanced atherosclerosis at the age of thirty-five.

At the same time that steroids increase blood volume, they also stimulate the release of norepinephrine (NOOR-eh-pih-neff-rin) from the adrenal medulla. This hormone causes the smooth muscles of blood vessel walls to constrict, shrinking blood vessels instead of allowing them to stretch to accommodate the additional blood volume. The result is that blood vessels weaken and may actually begin to rip apart.

While the lesions are only microscopic, continued steroid abuse causes a protective covering of atherosclerotic plaque to form over the inner linings of the damaged vessels. This plaque seals the tears, but it also hardens the vessel walls and reduces the internal diameter of the blood vessels, further restricting the flow of blood and elevating blood pressure even more.

Because steroids cause mobilization of fat stores, cholesterol and triglyceride levels in the blood go up. Both substances increase atherosclerotic plaque. Steroids also lower the concentration of high

density lipoprotein (HDL), which is known to gather cholesterol and transport it to the liver for removal.

Without HDL to remove excess cholesterol, plaque builds up at an even faster rate. Physicians suggest that for every 10 percent that the HDL level falls, there is a corresponding 25 percent increase in the risk of heart attack. The normal level of HDL is about 40 to 50 mg/dl (milligrams per deciliter). Athletes using steroids have had levels as low as 5 mg/dl. Such low levels of HDL almost ensure a heart attack at some point during an athlete's life.

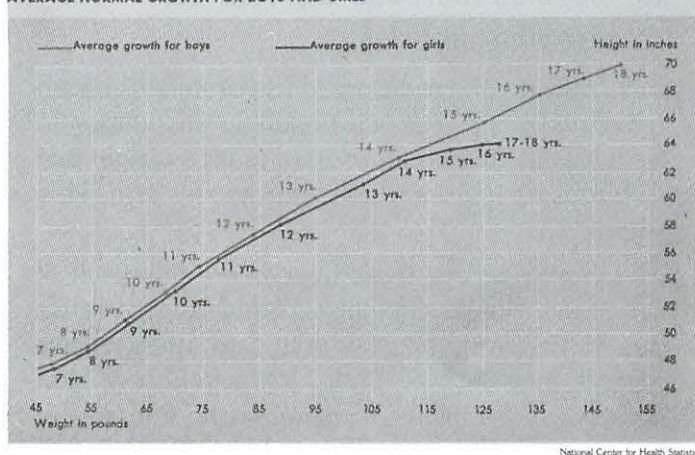
5 Steroids restrict growth potential.

While steroids are known to increase muscle mass, they do not stimulate bone growth. In fact, steroids taken during adolescence actually stunt the normal development of a person's stature.

Unlike other body tissue, bones grow only at their ends. Bone ends have an area of soft cartilage called *epiphyses* (eh-PIF-ih-seez). As the epiphyses grow, new cartilage is added to the ends of the bones, making the bones longer. In time, the older portions of the epiphyses become calcified and harden into bone.

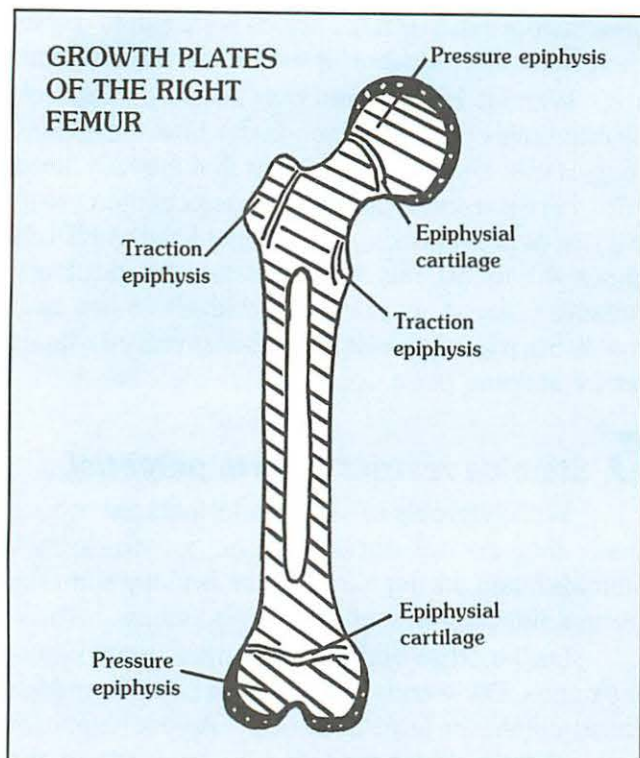
Once the epiphyses "close," however, the bones stop growing. This closure occurs naturally according to a genetically programmed schedule.

AVERAGE NORMAL GROWTH FOR BOYS AND GIRLS



Naturally increased levels of growth hormone produce dramatic growth spurts between the ages of twelve and fifteen. Girls level off at age eighteen, but many boys continue to grow through age twenty.

Steroid abuse causes premature closing of the epiphyseal (eh-pih-FIZZ-ee-ul) growth plates. This means that if a young man takes steroids before he is fully grown, his bones will stop growing. Because this process is irreversible, he will be permanently "frozen" at the height where he started taking steroids.



Growth plates called *epiphyses* are made of soft cartilage. As new cartilage is added, a bone grows longer. The old cartilage is then converted into calcified bone. Once a growth plate stops growing, it cannot be restarted.

6 Steroids increase the risk of disabling injuries.

Because the widespread use of steroids began in the 1960s and '70s, it is no longer uncommon to see a weight lifter strain so hard to lift a weight that his biceps rip apart and roll up inside his arm like a window shade.

Some believe these injuries are the result of steroid-induced psychological changes which cause men to be overly aggressive and to attempt feats beyond their bodies' limits. Others believe that steroids cause athletes to increase the intensity of their workouts too fast. They point to the fact that muscle tissue develops so rapidly under the influence of steroids that the tendons' development cannot keep up. It would be like putting an oversized engine in a small car and watching the drive shaft snap in half.

Steroids also cause tendons to lose their elasticity. Instead of stretching under stress, the tendons tear. In minor cases this leads to tendinitis, but in more severe cases it may result in injuries which suddenly end a professional career.

Cortisone is a naturally occurring, anti-inflammatory steroid hormone. Athletes sometimes take synthetic versions of it to help them recover from injuries. Doctors have noticed, however, that where artificial cortisone has been used to reduce inflammation, there has been an increase in the incidence of ruptured tendons. While cortisone does reduce inflammation and pain, it also inhibits the formation of collagen and may actually prevent an injury from healing.

Collagen is a fibrous protein material which holds tendons and ligaments together, and anything which blocks its formation hinders recovery from an injury.

Unfortunately, repeated injections of cortisone mask the symptoms of an injury, allowing the athlete to return to competition before he is completely healed. In such a case a second injury may completely rupture a weakened tendon or muscle, putting the athlete out of competition permanently.



Steroids may produce a violent rage called "roid rage." An athlete may become so violent that if he does not hurt others, he is likely to hurt himself.

7 Steroids lead to further drug abuse to compensate for sluggishness and depression.

Most athletes taking anabolic steroids report feeling exhilarated and strong. However, the feeling eventually gives way to a constant, tired, dragged-out feeling. The contrast is often so great that an athlete becomes addicted to steroids, even though they are the real cause of his fatigue.

Anabolic steroids are thought to actually increase the production of neurotransmitters—chemical substances which transfer impulses between nerves. Such an increase makes a person feel more aware of his surroundings. He becomes excitable, hyperactive, and feels like a superman. However, the “high” does not last.

Before long, the abundant supply of neurotransmitters drops and a shortage develops. Without an adequate supply of neurotransmitters, the “blahs” set in. Depression and lethargy continue until the body is able to restore the depleted chemicals.

Anabolic steroids also inhibit calcium excretion, causing a dramatic rise in the level of calcium in the blood. Increased calcium, a condition called *hypercalcemia* (high-per-kal-SEE-mee-uh), leads to kidney stones, abnormal calcium deposits in the joints, eyes, and skin, and contributes to feelings of weakness and fatigue.

Instead of quitting steroids, many athletes try to overcome their steroid-induced lethargies by taking amphetamines. Amphetamines were originally prescribed for appetite control because they stimulate the release of adrenaline and adrenaline-related hormones which burn up calories.

Small doses of amphetamines give a sense of well-being, an apparent sharpening of wits, increased heart rate, higher blood sugar, and tighter muscle tone. However, higher doses lead to hallucinations, paranoia, and impaired brain function.



God's design keeps the body in balance with little or no human effort. Steroid abuse has such extreme consequences, however, that it is impossible to maintain hormonal balance, even with counteracting drugs.

Football players who take amphetamines seem to be able to ignore pain from injuries

and play more aggressively. On the other hand, amphetamines may also lead to unnecessary brutality and paranoia to the point of psychosis or schizophrenia.



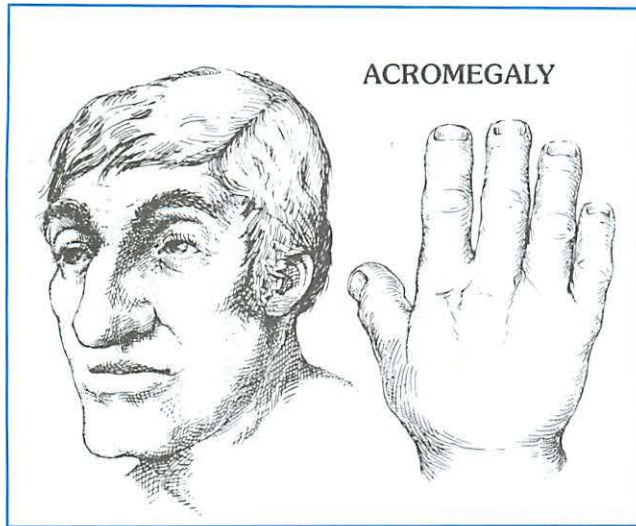
Rough tackles may be more a matter of drug-induced aggression than “heads-up” football. Unfortunately, amphetamines are among the most dangerous and damaging of all abused drugs. When they are used to counteract the side effects of steroids, amphetamines require higher and higher doses to achieve the same results. Even moderate use of them can cause high blood pressure, abnormal heart rhythms, irritability, insomnia, and anxiety.

8 Excess growth hormone distorts physical features and mars the countenance.

Human growth hormone (HGH), also called *somatotrophin* (so-mat-toe-TRO-fin), is produced by the pituitary gland and controls the rate at which the body grows. It also regulates the energy resources required for growth by directing stored fat and glucose to enter the bloodstream where they are more readily available for use.

When a child's HGH level is deficient, there is a place for legitimately taking synthetic HGH, but synthetic HGH taken by athletes can have many consequences. There are many athletes who take HGH, and from time to time there have been shortages of the drug, and children who needed it to live a normal life were not able to obtain it.

The most noticeable result of HGH abuse is a condition called *acromegaly* (ak-roe-MEG-uh-lee). Acromegaly occurs when a pituitary tumor secretes excess HGH, but its symptoms can also be induced by abuse of synthetic HGH.



ACROMEGALY

(Illustrated Siedman's Medical Dictionary, 24th Edition, Thomas L. Siedman, Williams and Wilkins)

Acromegaly is a condition common to giants. The same excessive amount of HGH which make a giant large also distorts his features.

At first an athlete may notice only a slight tightness of a ring, shoes, or hat. There may be a barely perceptible swelling of the nose, lips, or tongue. If HGH abuse continues, however, the lower jaw begins to enlarge dramatically, the forehead widens, and the bones around the eyes begin to bulge. The voice develops a husky, cavernous quality. Fingers and toes flatten into a spade-like appearance, and coarse body hair starts to grow like a coat of heavy fur.

While HGH does stimulate growth, it so distorts a person's countenance that he is marked



Death in the Locker Room, Steroids and Sports, Bob Goldman, Icarus Press

for life. The term *acromegaly* comes from two Greek words, *akron*, meaning "extremity," and *megas*, meaning "large." The price of taking excess synthetic HGH is having large extremities which are completely out of proportion with God's design.

PROJECT

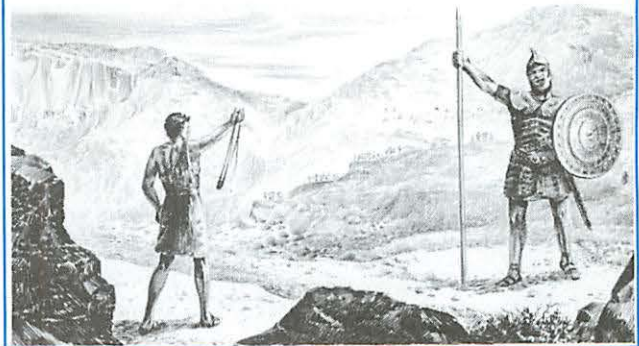
Would you exchange your soul for a moment of glory?

A recent survey of athletes posed the question, "If you could take a drug that would guarantee victory, yet, you knew that the drug would kill you in five years, would you take it?" Fifty-one percent of those who responded said, "Yes." Many athletes are taking those drugs. They are willing to exchange their souls for a brief moment of glory.

Read the story of David and Goliath in I Samuel 16–17. Notice how stature had nothing to do with victory that day. Even though David was the youngest of Jesse's sons, he conquered a man approximately twice his size. David was willing to face the enemy just as God had made him. He was content with his stature and relied on the Name of God rather than on his own strength.

Match the following verses with principles of spiritual stature which David possessed.

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|--|----------------------|
| <input type="checkbox"/> 1. DESIGN | A. I Samuel 17:38–39 |
| <input type="checkbox"/> 2. RESPONSIBILITY | B. I Samuel 16:7 |
| <input type="checkbox"/> 3. AUTHORITY | C. I Samuel 17:15 |
| <input type="checkbox"/> 4. SUFFERING | D. I Samuel 17:47–50 |
| <input type="checkbox"/> 5. OWNERSHIP | E. I Samuel 17:45 |
| <input type="checkbox"/> 6. FREEDOM | F. I Samuel 16:23 |
| <input type="checkbox"/> 7. SUCCESS | G. I Samuel 17:28 |



Date completed _____ Evaluation _____