Wisdom Booklet 26

Wisdom Quiz

Matthew 5:31-32

"It hath been said, Whosoever shall put away his wife, let him give her a writing of divorcement:

"But I say unto you, That whosoever shall put away his wife, saving for the cause of fornication, causeth her to commit adultery: and whosoever shall marry her that is divorced committeth adultery."

How well do you understand the concept of marriage?

True/False

1 Marriage is a contract between two people that is intended to last for the rest of their lives. (Read Malachi 2:14-15.)

- A contract is based on distrust, while a covenant is based on trust. A contract establishes limited liability, but a covenant has unlimited responsibility. A contract can be broken by the mutual consent of both parties. A covenant cannot be broken without continuing consequences.

Does divorce break the marriage covenant? (See Romans 7:1-3.)

2 There are certain causes which could lead to a Scriptural divorce. (Read Matthew 19:3-9.)

- If we must violate Scripture to do what we think is right, it cannot be called a Scriptural action. Divorce today requires civil action, and Scripture clearly condemns going to law before unbelievers. (See I Corinthians 6:1-10.) Scripture also commands us to forgive offenders and to suffer for doing right. (See Mark 11:25-26 and Romans 12:21.) Is a person doing wrong if he or she divorces in order to teach a partner a lesson? (See Romans 12:19.)

3 The exception clause in Matthew 19:9 allows for the divorce of an adulterous marriage partner. (Read I Corinthians 5:1.)

- Any physical relationship that would be an abomination to the Lord certainly could not form the basis of a Scriptural marriage. This includes incest, sodomy, and multiple partners. To use the wide definition of pomeia (fornication) as the grounds for divorce would in reality justify divorce for any cause.

Was Joseph's intention to put Mary away prompted by motives of judgment or kindness? (See Matthew 1:18-19.)

4 If there is provision for a Scriptural divorce, the innocent party would have grounds to remarry. (Read Mark 10:11-12.)

- The syntax (sentence structure) of Matthew 5:31-32 does not permit remarriage under any conditions. The establishment of a new marriage is possible; however, those who do it violate their vows (see Ecclesiastes 5:4), the blood covenant of marriage (see Malachi 2:14-15), and several direct commands of Scripture.

If a Christian divorces and remarries, should both parties in the new marriage acknowledge that they have sinned? (See Luke 16:18.)

Total Correct 3

Sweeter as the Years Go By

1. Of Jesus' love that sought me, When I was lost in sin; Of wondrous grace that brought me back to His fold again; Of heights and depths of mercy, Far deeper than the sea, And higher than the heavens. My theme shall ever be.
"IT HATH BEEN SAID, WHOSOEVER SHALL PUT AWAY HIS WIFE, LET HIM GIVE HER A WRITING OF DIVORCEMENT:

"BUT I SAY UNTO YOU, THAT WHOSOEVER SHALL PUT AWAY HIS WIFE, SAVING FOR THE CAUSE OF FORNICATION, CAUSETH HER TO COMMIT ADULTERY: AND WHOSOEVER SHALL MARRY HER THAT IS DIVORCED COMMITTETH ADULTERY."

In the verses which precede this passage, Jesus explained that those who thought they were not guilty of murder and adultery were actually committing these crimes by being angry and lustful.

With the same reasoning Jesus makes it very clear in these verses that those who think they have justification for divorcing their partners violate the spirit of God's Law on marriage and are actually guilty of adultery.

The only uncleanness which justifies a divorce would include illegal marriages of incest (see Leviticus 20 and 1 Corinthians 5:1) and sodomy (see Leviticus 22 and Jude 7) and situations of betrothal unfaithfulness (see Matthew 1:19).

PUT AWAY
Greek: ἀπολύω (ah-paw-LOO-oh)
DEFINITION: Apo means "from" and λύω means "to loose." To release, dismiss, let go, put out, send away.

WIFE
Greek: γυνὴ (goo-NAY)
DEFINITION: The root word for woman, a wife in this context.

WRITING OF DIVORCEMENT
Greek: ἀποστάσιον (ah-paw-STAH-sih-on)
DEFINITION: Apo means "from" and στάσις means "standing." Termination of the bonds and protection of marriage.

CAUSE
Greek: λόγος (LAW-goss)
DEFINITION: (The same word for Christ and Scripture.) The ground of deliberation; the reason for an action.

FORNICATION
Greek: πορνεία (por-NAY-ah)
DEFINITION: A general term denoting illicit sexual relations.

CAUSETH
Greek: ποιέω (poy-EH-oh)
DEFINITION: The verb form "to do," Expressing by an act the thoughts and feelings; to produce; to make.

COMMIT ADULTERY
Greek: μοιχεύω (moy-KEW-oh)
DEFINITION: To commit unlawful intercourse with the spouse of another. The middle voice is used in which the subject (the man) participates in the results of the action (adultery).

DIVORCED
Greek: ἀπολύω (ah-paw-LOO-oh)
DEFINITION: The same word for "putting away." This word is the result of a bill of divorce in Mark 10:4.

What Old Testament law provides for a bill of divorce?

The law contained only one section explaining divorce and remarriage—Deuteronomy 24:1-4. It did not give a command to divorce but a provision to regulate the hardness of a man's heart. (See Matthew 19:8 and Mark 10:5.)

Abraham sent Hagar away without a bill of divorce. This illustrates the protection of marriage since Hagar was a concubine and since God agreed with Sarah, who demanded that she leave. (See Genesis 21:9-14.)

How did a sixteenth century humanist influence reformation theology?

The views on divorce and remarriage held by Martin Luther, John Calvin, and other reformers were influenced by Erasmus, a man who combined humanistic philosophy with Biblical truth.

What is the significance of Ezra's command to put away strange wives?

Jehovah had a covenant with Israel which required faithfulness. Israel, however, took heathen wives who turned their hearts from God. These illegal relationships were to be severed. (See Deuteronomy 7:2-3 and Ezra 10.)

Do Resource A.

Do Resource B.

Do Resource C.
How does God illustrate the principles of one flesh in the world of nature?

The genetic laws which God designed for man are also found in the breeding of animals.

In the 1800’s, Gregor Mendel studied pea plants and identified principles of one flesh in the world of genetics.

The same laws control characteristics of animals such as rats.

Each parent rat contributes only one of its color factors to its young.

What legal debate prompted the Pharisees to question Jesus on divorce?

The rabbinical school of HILLEL allowed divorce for any cause, including a burnt meal. The school of SHAMMAI permitted divorce only for moral impurity.

Jesus rejected both schools by restating God’s original marriage design.

What legal document did the Pharisees use to divorce their wives?

The divorce provision of Deuteronomy 24:1-4 was a concession to those who had hardened hearts. Here is one bill of divorcement typical of those used in Israel:

On the day of the week in the month in the year from the beginning of the world, according to the common computation in the province of by whatever name I may be known, of the town of , with entire consent of mind, and without any constraint, have divorced, dismissed and repelled the daughter of by whatever name thou art called, of the town of who has been my wife hitherto. But now I have dismissed the daughter of by whatever name thou art called, of the town of to be free at the own disposal, to marry whatsoever thou pleasest, without hindrance from anyone from this day for ever. Thou art therefore free for anyone who would marry thee. Let this be thy bill of divorce from me, a writing of separation and expulsion, according to the law of Moses and Israel.

What is the legal distinction between putting away and divorce?

The Greek word for putting away is ἀπολύω (ah-paw-LOO-oh). It means “to release fully.” The Greek word for divorce is ἁπαντατομία (ah-paw-STAH-sih-on). In Matthew 19:8 Jesus used ἀπολύω (to put away) to include the bill of divorcement. In either case, remarriage was forbidden by Jesus. (See Mark 10:4-11.)

How do prime numbers illustrate the principles of “one flesh”?

The manner in which the genes of the husband and wife come together illustrates the oneness of flesh which God designed in marriage. The ultimate outward expression of that oneness is demonstrated in the procreation of a child.

What is the relationship between divorce and cancer?

Synthesis describes marriage, “two making one,” while schism describes divorce, “destroying oneness.” In medical science synthesis refers to building up, such as photosynthesis or synthesis of protein from amino acids. Schism refers to breaking down. Breaking the DNA strand is one of the causative mechanisms of cancer.
RESOURCE QUIZ

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

HOW DOES GOD DEFINE MARRIAGE?

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- How is cleaving pictured by plywood? ................. 1197
- Does becoming "one flesh" constitute marriage? .... 1198
- How is marriage a "blood covenant"? ............... 1199
- How do oxen illustrate the meaning of marriage? .... 1203

WHAT DOES THE "EXCEPTION CLAUSE" MEAN?

- How does pomeia differ from moicheia? ............. 1205
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HOW DO TWO BECOME "ONE FLESH"?

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DISCOVER THE MEANING OF THE WORDS GOD USED IN SCRIPTURE FOR THE PROTECTION OF MARRIAGE.

The wedding ring, the bride's white dress, and the wedding vows are three of the many symbols which establish marriage as a blood covenant.

When Jesus answered the Pharisees' questions on divorce, He based His statements on God's original design for marriage.

In the beginning God used several key words to describe the permanence of marriage. The New Testament repeats these words. Thus, both the Hebrew and the Greek enable us to understand the true intentions of God for marriage.

Words which express God's intentions for marriage:

- Leave
- Cleave
- One Flesh
- Covenant
- Vows
- Joined

1 HOW IS LEAVING THE FIRST STEP OF MARRIAGE?

Just as cells divide within the body in order to multiply, so a son leaves his parents to establish a new family.

In one profound statement God set in motion the physical, mental, and emotional realignments for a marriage:

"Therefore shall a man leave his father and his mother..." (Genesis 2:24).

- Leaving takes place for the cause of marriage.

God did not instruct a son or a daughter to leave his parents when he turns eighteen, when he becomes self-employed, or when he decides it is time to go out and live on his own. He established leaving for the purpose of marriage. The stronger the family is before marriage, the stronger the marriage can be that comes from it.

- Leaving involves direction, not rejection.

Leaving is not possible emotionally if there are unresolved conflicts between a son and his parents. For this reason harmony must surround the decisions of marriage, which include the person, the timing, and the procedure.

In none of these points is the son to reject his parents, but with their blessing he is to leave their authority for the purpose of cleaving to his wife. He is not to leave for the purpose of his pleasure, his financial goals, or his vocational ambitions. He is to leave to be one with his wife.
**Definition of leaving:**

The Hebrew word הָעַל (nah-ZAV) means “to loosen, to leave behind, to commit oneself, to relinquish.”

The Greek word for leave is καταλείπω (kah-tah-LAY-poe). It means “to leave behind” and carries with it the idea of being loosed from the bands which held it down. The word is used of a servant who is set free and of a beast of burden that is relieved of its load.

- **Leaving is directed by God, not parents.**
  
  Once parents give their approval for a marriage, it is not their prerogative to continue controlling the decisions of their son. A wise son will listen to the counsel of his parents and his parents-in-law, but he must give priority to the cautions of his wife.

- **Leaving involves the man, not the woman.**
  
  It is significant that God does not state that a woman should leave her parents and cleave to her husband, but rather that the man must do the leaving. The wife must know that her husband has transferred his ties from his mother to her.

  She must also know that her counsel would take precedence over his mother's counsel. A situation where two women have equal influence in a man's life produces conflict.

- **Leaving is a public, legal declaration.**
  
  In Scripture the marriage ceremony was carried out in a public setting in the presence of witnesses to give public recognition that a new and legal entity now exists.

  A couple who lives together without the public ceremony has not fulfilled the requirement of leaving father and mother. Nor have they established a legal marriage in the eyes of God because the father or guardian of the girl must give her away in the marriage. Without the legal procedure there is no protection for either party under the law. (See 1 Corinthians 7:38 and Deuteronomy 22:28-30.)

- **Leaving must be tested by the parents.**
  
  There must come a point in a man's heart and mind when he consciously decides to listen to his wife rather than his parents if the two are in conflict. The decision of a man to leave may be theoretical before the marriage, but it will become a reality in the first actual test.

  After three years of being away, a young married couple returned to the husband’s parents’ home for a visit. At 7:30 in the evening the wife stated, “It is time for the baby to go to bed.” The husband’s mother quickly appealed to her son, “Can’t she stay up a little longer? I get to see her so seldom.”

  Without understanding the significance of the situation, the husband agreed with his mother, thus overriding the authority of his wife.

  Soon the husband realized that his wife had left the room. When he found her in a back bedroom, she fixed her eyes on him and asked, “Why did you choose your mother over me?” Since he had not intended to do such a thing, he reproved her for her “silliness.” He then walked out of the room and expected the matter to be forgotten. It wasn’t.

  On their next visit to his parents’ home three months later, the situation repeated itself. This time, however, he had learned what it meant to leave his father and mother. When his wife stated, “It’s time to put the baby to bed,” the mother-in-law immediately objected by saying, “She doesn’t have to go to bed early—she is at my house.”

  The husband tactfully but firmly stated, “I believe that for the overall goals of our visit it would be best for her to go to bed.” This time his mother went to the back room; however, the husband instinctively understood that he could not follow her as he had his wife.
Leaving precludes incestuous marriages.

The requirement of a son to leave his father and mother would be an obvious prohibition against an incestuous marriage. Laws against an incestuous marriage are further defined in Leviticus 18:6-8. In the New Testament, Paul pronounced severe judgment on the man in the Corinthian church who violated the law by marrying his father’s wife. (See I Corinthians 5:1-5.)

2 HOW IS CLEAVING THE BONDING OF A COUPLE?

The large press which glues plywood together pictures the process of a couple cleaving in marriage. Glue, pressure, and heat join the plies of wood together in a permanent bond.

Once a man receives direction and approval for marriage and leaves his father and mother, he is instructed by God to cleave to his wife.

"...For this cause shall a man leave father and mother, and shall cleave to his wife..." (Matthew 19:5).

Cleaving establishes loyalty and affection.

A marriage relationship requires total trust and commitment to one another. For this purpose both parties in the marriage vow that they will forsake all others and cleave to one another. Pressures in the marriage should then be used to strengthen their relationship rather than being allowed to weaken it.

Scripture commands a wife to honor and obey her husband; however, God also instructs the husband to love and to lead his wife. As a husband loves his wife, it is easier for her to obey him, and to the degree that he provides wise leadership, she is able to honor him.

Cleaving unites spirit, soul, and body.

Intimacy established in cleaving involves far more than the physical relationship. It begins by achieving oneness of spirit. Then comes a oneness of mind, will, and emotion. Finally, it brings oneness in the physical relationship.

If individuals pursue the reverse order (i.e., pursuing the physical first), the spirit of the marriage will be broken. The communication and the physical fulfillment that God intended for the marriage will never be achieved.

Definition of cleaving:

When God told Adam that a man was to cleave to his wife, He used the word בָּאָח (dah-VAHK). It means "to cling, to adhere, to abide securely." Figuratively, it means "to catch by pursuit, to follow hard after, to overtake." The Greek word which Jesus used in Matthew 19:5, προσκολλάω (pross-kaw-LAH-oh), means "to join oneself to, to unite closely in interest or affection, to have strong attachment to."

Cleaving damages both parties in divorce.

If two sheets of plywood are glued together, the wood becomes stronger than the same thickness of wood without such bonding. Also, the bond is actually stronger than the pieces it holds together.

If anyone attempts to pull the two plies of wood apart, they will permanently damage both sheets of wood. Similarly, divorce does not just damage the marriage, it does irreparable damage to both parties in the marriage.

PROJECT

Glue two pieces of cardboard together with a permanent glue. Let the glue dry, and then try to pull the two pieces apart. Discuss the results and how they illustrate the concept of cleaving and the false idea of trying to get a divorce without severe and lasting consequences.
A Jewish couple was officially married at the time of betrothal. The husband would then return to his father’s house to prepare a home for his bride. Later he would return for her and the marriage celebration would take place. At the conclusion of the seven-day feast the couple would come together as one flesh.

When leaving and cleaving have taken place and when the marriage vows are consummated in the physical relationship, the man and the woman become one flesh.

"Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh" (Genesis 2:24).

**One flesh involves spiritual mysteries.**

Paul used the term one flesh in speaking of the marriage relationship and the relationship of Christ to the Church.

“For this cause shall a man leave his father and mother, and shall be joined unto his wife, and they two shall be one flesh. This is a great mystery: but I speak concerning Christ and the church” (Ephesians 5:31-32).

A mystery of God is a hidden truth in Scripture which is revealed by the Holy Spirit. God promises to reveal such truths to those who seek for wisdom as they would for silver and search for it as they would for hidden treasure. (See Proverbs 2:4.)

As a couple comes together in a physical union, they share intimacies which are reserved only for the two of them. Similarly those who walk with God in intimate fellowship are able to receive from Him special truths by the teaching ministry of the Holy Spirit.

**Definition of one flesh:**

The phrase in which these two words are given is properly rendered, “the two shall be unto one flesh.” This means, “to make whole, to restore to the original, to cause each partner to look at the other as an extension of himself.”

This concept is emphasized in Ephesians 5:28, “So ought men to love their wives as their own bodies. He that loveth his wife loveth himself.”

The “becoming one flesh” is the result of leaving and cleaving; thus, it denotes the full integration of both persons’ spirit, soul, and body as in 1 Thessalonians 5:23.

The term “becoming one flesh” certainly includes the physical relationship which consummates the marriage and is to continue throughout the marriage. (See 1 Corinthians 7:5.)

**One flesh occurs with a physical union.**

When God brought Eve to Adam, He first recognized her as his own flesh, “... This is now bone of my bones, and flesh of my flesh...”

He further understood that she was taken from him; thus, he called her woman. “... She shall be called Woman, because she was taken out of Man” (Genesis 2:23).

The fact that the woman was created from Adam and not from the dust of the ground is significant. Had she been created out of the dust of the ground, their union would have been that of two equal and separate identities.

Instead, part of Adam was missing, and Eve was made as a help meet for Adam. (See Genesis 2:18.) For these reasons the man was dependent upon the woman, and the woman was dependent upon the man. They were both dependent upon the Lord. (See 1 Corinthians 11:11-12.) Their coming together was to form an inseparable unity of fellowship for life.

God designed the physical relationship in marriage to be a powerful bonding force. The disciplines needed for it would strengthen the spiritual lives of the partners, and the pleasures of it would fulfill their need for companionship, communication, and multiplication.
• One flesh alone does not constitute marriage.

The same phrase that God, the Lord Jesus Christ, and the Apostle Paul used for the consummation of the marriage was also used to define an illicit relationship with a harlot.

“What? know ye not that he which is joined to an harlot is one body? for two, saith he, shall be one flesh” (I Corinthians 6:16).

The law provided that if a man beguiled a girl who was not yet betrothed and had a physical relationship with her, they were not married. The father of the girl still had the responsibility to decide whether or not to give her away in the marriage covenant. (See Exodus 22:16-17.)

The conversation which Jesus had with the woman at the well further confirms this fact. He pointed out that she was living with a man who was not her husband.

“For thou hast had five husbands; and he whom thou now hast is not thy husband: in that saidst thou truly” (John 4:18).

• One flesh establishes different responsibilities.

God’s design in the marriage relationship is clearly defined in the creation and coming together of Adam and Eve. The stated purpose of God in creating Eve was to be a help meet for Adam. For Eve to fulfill this function effectively, Adam must exercise leadership. For Eve to continue to carry out this function, Adam must protect her. Paul explains this relationship of protection in I Corinthians 11:1-3.

God established the leadership responsibility of a man through the procedure He used in creating Eve. “For the man is not of the woman; but the woman of the man. Neither was the man created for the woman, but the woman for the man” (I Corinthians 11:8-9).

These responsibilities are symbolized by the fact that God took Eve from Adam’s side, not from his head to rule over him, nor from his feet to be trampled upon.

4 HOW DOES THE COVENANT OF MARRIAGE ILLUSTRATE DEATH TO SELF?

The permanence of the marriage relationship can only be fully appreciated by understanding the Biblical meaning of the blood covenant.

The blood covenant which God established with Noah began with the offering of sacrifices and concluded with the symbol of the rainbow which was the promise of protection.

Contrary to popular opinion, the marriage relationship is not a contract between two people. It is a covenant between a couple and God.

“Yet ye say, Wherefore? Because the Lord hath been witness between thee and the wife of thy youth, against whom thou hast dealt treacherously: yet is she thy companion, and the wife of thy covenant” (Malachi 2:14).

Definition of covenant:

The word for covenant in the Hebrew is בהר (buh-REETH). Strong’s Concordance defines this word “in the sense of cutting; a compact made by passing between pieces of flesh.” It literally means to “cut covenant.”

The phrase “to cut covenant” appears throughout the history of the Old and New Testaments. It refers to the formation of a binding agreement by blood. The term “testament” comes from the same word as covenant in both the Hebrew and Greek languages.

A covenant is a bond in blood; “It is a life and death agreement which expresses the ultimate commitment which can be made between two people, between a person and God, and between God and a person.”
Every covenant has a “covenant initiator.” This person assumes the greater responsibility of carrying out the covenant. In marriage the covenant initiator is the man. A covenant contains binding vows spoken before witnesses and sealed with the shedding of blood.

The sacrifices used for Old Testament covenants symbolized the death to self that parties experienced when they entered into the covenant. They were also a solemn reminder of the consequence of breaking a vow.

Blood covenants made in the Old Testament involved an agreement that if the covenant was ever broken, the judgment required would be the death of the covenant violator. This practice is reflected in the severe penalty which accompanied the misuse of communion, the symbol of the New Testament (covenant).

God sealed the covenant of salvation by the blood of His Son.

By taking communion we remember Christ’s shed blood to seal the covenant of salvation.

“Wherefore whosoever shall eat this bread, and drink this cup of the Lord, unworthily, shall be guilty of the body and blood of the Lord . . . For he that eateth and drinketh unworthily, eateth and drinketh damnation to himself, not discerning the Lord’s body. For this cause many are weak and sickly among you, and many sleep” (1 Corinthians 11:27-30).

When God “cut covenant” with Abraham, He had Abraham divide sacrificial animals in half and lay them opposite to each other. Then God passed between those pieces. (See Genesis 15:8-18.) “In the same day the Lord made a covenant with Abram . . .” (Genesis 15:18).

How does the marriage covenant relate to the blood covenant?

Marriage is a blood covenant. The wedding ceremony is the making of that covenant. The word covenant (גָּכֶן, cut covenant) appears throughout the Scripture.

Even the words leaving, cleaving, and one flesh are covenant words and cannot be fully understood or appreciated without knowledge of the procedures which were used in Biblical times when making a covenant.

All the aspects of cutting covenant will not be given each time the word covenant is used. However, by studying many references and putting them together, we have a rich and clear picture of what it means to cut covenant.

1 Giving an initial pledge

When Jonathan made a covenant with David, he gave him his coat as an initial pledge. “Then Jonathan and David made a covenant . . . And Jonathan stripped himself of the robe that was upon him, and gave it to David . . .” (1 Samuel 18:3-4).

The use of the coat as a pledge is also given in Proverbs 20:16.

God makes an analogy between salvation and the wedding ceremony in Scripture. When we enter into the covenant of salvation, we receive the initial pledge of the Holy Spirit. (See Ephesians 1:13-14.)

This pledge includes the “garment of Christ’s righteousness.”

“. . . For the marriage of the Lamb is come, and his wife hath made herself ready. And to her was granted that she should be arrayed in fine linen, clean and white: for the fine linen is the righteousness of saints” (Revelation 19:7-8.)

2 Making personal vows

When God made a covenant with Noah, He clearly stated the terms of the agreement. “And I will
establish my covenant with you; neither shall all flesh be cut off any more by the waters of a flood; neither shall there any more be a flood to destroy the earth” (Genesis 9:11).

When God made a covenant with Abraham, He gave many details of what “cutting covenant” meant.

God’s covenant with Abraham established the promise of many descendants. “... Look now toward heaven, and tell the stars, if thou be able to number them: and he said unto him, So shall thy seed be” (Genesis 15:5).

During the wedding ceremony the vows establish what each partner will do. In a marriage the wedding vows confirm the purpose and meaning of covenant. “In sickness and in health, in joy and in sorrow, for richer and for poorer, for better and for worse, until death do us part.”

3 Giving a token of covenant

After giving David his coat, Jonathan also gave him his belt and his weapons. The belt symbolizes strength, and the weapons symbolize protection. By these tokens Jonathan was saying, “I give you my strength and from now on whoever attacks you is attacking me.”

After making a covenant with Noah, God put a symbol in the sky to remind Himself of His covenant. “And God said, This is the token of the covenant which I make between me and you and every living creature that is with you for perpetual generations: I do set my bow in the cloud, and it shall be for a token of a covenant between me and the earth” (Genesis 9:12-17).

In the wedding ceremony the rings are tokens of the marriage covenant. They can illustrate the strength and protection that each partner is giving to the other. The circle of the rings can be related to the rainbow in the sky as seen from the air.

4 Taking on new identities

After making a covenant with Abram both God and Abraham took on new identities. God changed Abram’s name to Abraham and thereafter Jehovah took on the additional title “the God of Abraham.” (See Genesis 17:5.)

When a person enters into salvation, he takes on the identity of Christ by being called a Christian, and God is called his Father. Each Christian is also given a special name as explained in Revelation 2:17.

After the wedding both parties take on new identities; the woman is thereafter called by her husband’s last name, and the man is known as the husband of the woman.

5 Eating the covenant meal

A covenant was concluded with a meal. All those who took part in the meal were pledging their commitment and loyalty to the covenant and their responsibility to honor it.

The most striking illustration of this is found in the Lord’s Supper. In its observance each participant pledges himself or herself anew to the Lordship of Christ and the terms of the salvation covenant.

“And when he had given thanks, he brake it, and said, Take, eat: this is my body, which is broken for you: this do in remembrance of me.

“After the same manner also he took the cup, when he had supped, saying, This cup is the new testament [Covenant] in my blood: this do ye, as oft as ye drink it, in remembrance of me” (1 Corinthians 11:24-25).

6 Establishing the blood of the covenant

There are many Scriptural reasons given for the use of blood in a covenant. In a covenant what one pledges is life to another, and the life of the flesh is in the blood. (See Leviticus 17:11.) A covenant is a pledge until death and the loss of blood is a vivid reminder of this.
Most important, however, is that all covenants relate to salvation, and "... without shedding of blood is no remission of sin" (Hebrews 9:22).

In God's covenant with Abraham, He first instructed Abraham to take sacrificial animals, divide them down the middle, and lay each side opposite to the other. (See Genesis 15:9-17.) It was between these sacrifices that the burning lamp passed and God made His covenant.

In making the covenant of salvation, Christ gave His blood and in receiving salvation we are crucified with Him. (See Galatians 2:20.)

During the course of God's covenant with Abraham, God established circumcision and said regarding it, "... It shall be a token of the covenant between me and you" (Genesis 17:11).

Just as there was blood from circumcision, the physical sign of Abraham's covenant with God, so there is blood from the first physical relationship between a wife and her husband.

Definition of vows:

A vow in both the Hebrew and the Greek is a statement made to God. The Hebrew word for vow is יְרֵשׁ (Yeresh). It means, "a promise to God." The Greek word for vow is εὐχή (Euchê), and denotes a commitment to God such as Paul made in Acts 18:18-23.

The etymology of the English word vow is significant; it means "affirming one's belief." From the root word and this definition we get the words: vote, votary (consecrated one), votive (that which is given by vow), devoted, devout, and avow. These words come from the Latin words vovere, meaning "to affirm," and votum, meaning "affirmation."

Vows are debts.

When a person makes a vow, he or she is entering into a debtor's relationship. The debt continues until the vow is fulfilled. For this reason David and others refer to "paying their vows."

"I will go into thy house with burnt offerings: I will pay thee my vows, Which my lips have uttered, and my mouth hath spoken, when I was in trouble" (Psalm 66:13-14).

God rewards vows that are fulfilled.

The motive for making the vow is usually the reward which comes to those who fulfill them. An Israelite who entered into Nazarite vows was given special spiritual capacities. Samson was given special abilities by the Holy Spirit as long as he fulfilled his Nazarite vow. (See Judges 16:20.)
The Apostle Paul was given special revelations by God and making special vows were a part of his worship to the Lord. (See Acts 18:18.) Perhaps the most common motive and reward for vows is receiving help or deliverance in times of extreme crisis.

In a time of trouble when only God can rescue us, it is quite natural to make an agreement with God by means of a vow.

- **God requires payment of vows.**

  Whatever the motive behind a vow, God will hold us to it.
  
  "If a man vow a vow unto the Lord, or swear an oath to bind his soul with a bond; he shall not break his word, he shall do according to all that proceedeth out of his mouth" (Numbers 30:2).

  God does make provision for releasing a person from vows which would violate Scripture. For example, a wife or a daughter cannot make a vow which would be contrary to the will of her husband or her father. (See Numbers 30:3-16.)

- **God applies pressure to motivate people to make and fulfill vows.**

  The testimony which David gave regarding the making and keeping of his vows is significant. He stated that God had caused enemies to overwhelm him. He "went through fire and through water," which speak of purification. At that point he made a vow unto God. As a result, God delivered him from trouble and brought him into a wealthy place. Once delivered, he said, "I will go into thy house with burnt offerings: I will pay thee my vows, Which my lips have uttered, and my mouth hath spoken, when I was in trouble" (Psalms 66:13, 14).

  Jonah also made vows; however, he did not keep them. So God prepared a storm and then a great fish to bring Jonah to the end of himself. In the belly of the fish he prayed, "... I will sacrifice unto thee with the voice of thanksgiving; I will pay that that I have vowed. Salvation is of the Lord" (Jonah 2:9). Immediately after Jonah purposed to pay his vows, God delivered him from the great fish.

  The judgment God brings upon a man who breaks his marriage vows is described in Malachi 2:13-15. He is under such pressure that he covers the altar of God with tears.
  
  "And this have ye done again, covering the altar of the Lord with tears, with weeping, and with crying out, insomuch that he regardeth not the offering any more, or receiveth it with good will at your hand.

  Yet ye say, Wherefore? Because the Lord hath been witness between thee and the wife of thy youth, against whom thou hast dealt treacherously: yet is she thy companion, and the wife of thy covenant.

  And did not he make one? Yet had he the residue of the spirit. And wherefore one? That he might seek a godly seed. Therefore take heed to your spirit, and let none deal treacherously against the wife of his youth."

### 6 HOW DOES BEING JOINED REQUIRE TEAMWORK IN MARRIAGE?

A yoke of oxen pictures the concept of a man and a woman being joined in marriage.

When Jesus Christ clarified the true purpose of marriage, He emphasized the point that God is the One Who joined the man and the woman together in marriage.

"Wherefore they are no more twain, but one flesh. What therefore God hath joined together, let not man put asunder" (Matthew 19:6).
**Definition of joined:**

The Greek word which Jesus used in describing the joining together of a marriage couple is συνεργείω (soon-ehr-GEH-oh). It means "to yoke together, to be in union with one another, and to unite in wedlock." On the basis of this definition, there are many clear analogies and applications which can be drawn.

- **Joining a Christian to an unbeliever in marriage will result in unnecessary pressures.**

  Paul warns that a Christian should only marry another Christian; to do otherwise is to be unequally yoked with an unbeliever.


  Even though God’s will is for the marriage partners both to be Christians, a person who marries a non-Christian is bound in that marriage and should not seek to get out of it. The very pressures of such a union can be the motivation for character development and crying out to God to bring the unbelieving partner to Himself.

  The potential of a wife winning her unsaved husband is explained in I Peter 3:1-6. If one partner becomes a Christian after marriage, he or she is to remain in the marriage unless the unbelieving partner refuses to continue the marriage. The Christian partner is to continue working and praying for the salvation of his or her partner even after separation.

  "For what knowest thou, O wife, whether thou shalt save thy husband? or how knowest thou, O man, whether thou shalt save thy wife? (I Corinthians 7:16)."

- **Joining two Christians makes the yoke easy.**

  When both marriage partners are growing in the Lord and learning more about Him, the marriage yoke becomes easy and light.

  Christ lives in each partner and helps lift the load according to His promise, “Come unto me all ye that labour, and are heavy laden, and I will give you rest. Take my yoke upon you, and learn of me; for I am meek and lowly in heart: and ye shall find rest unto your souls. For my yoke is easy, and my burden is light” (Matthew 11:28-30).

- **Joining requires one to take the lead.**

  By comparing the marriage bond to a yoke, a wealth of practical analogies are obvious. In a yoke one member must take the lead and the other must quickly respond. Two forceful leaders will wear each other out and accomplish little.

  A yoked team must pull in the same direction. The longer they work together, the more they will anticipate each other’s movements.

  The reward of such teamwork is that the two together can accomplish what neither one could do alone. The yoke also provides constant fellowship and mutual encouragement.

**PROJECT**

Match each word with the right symbol and then think through how you would apply each one.

- Leave
- Cleave
- One Flesh
- Covenant
- Vows
- Joined
A threefold test should be applied to every doctrine. A threefold test, like a threefold cord, has more strength than a onefold or twofold cord of the same thickness.

WHAT IS THE "EXCEPTION CLAUSE"?

The "exception clause" is the term which many have used for the words of Christ in Matthew 5:32 and in Matthew 19:9:

"But I say unto you, that whosoever shall put away his wife, saving for the cause of fornication, causeth her to commit adultery . . ." (Matthew 5:32).

"And I say unto you, Whosoever shall put away his wife, except it be for fornication, and shall marry another, committeth adultery . . ." (Matthew 19:9).

WHY IS IT ESSENTIAL TO INTERPRET THIS CLAUSE CORRECTLY?

The continuation of many marriages is being determined by the interpretation and application of the "exception clause."

If the verse is interpreted one way, couples are encouraged to reaffirm their marriage vows and to commit themselves to making their marriages successful. Those who interpret the clause in a different way claim they have justification for divorce and take steps to end their marriages.

WHAT IS THE CRUCIAL GREEK WORD IN THE "EXCEPTION CLAUSE"?

The crucial and controversial word in the exception clause is porneia (pore-NAY-ah). Was Jesus using this word to refer to unfaithfulness before marriage, illegal marriages, unfaithfulness during the marriage, or any moral impurity in the life of the marriage partner?

WHAT ARE THE POSSIBLE MEANINGS OF "PORNEIA"?

The word porneia comes from the noun pome, which, in turn, is derived from the root word which means "to sell." Pomeia was used to refer to offering one's body for a price or engaging in prostitution or whoredom.

The Greeks used the word pomeia to refer to any unlawful sexual activity, including unchastity, prostitution, homosexuality, and incest.

HOW CAN THE POSSIBLE MEANINGS OF "PORNEIA" BE TESTED?

In order to determine the correct interpretation and application of pomeia, it is important to take each possible meaning and measure it against a threefold test of sound doctrine.
increasing impurities in the bloodstream. Since these impurities did not exist for the sons and daughters of Adam and Eve, they were able to intermarry.

SECOND CONCLUSION:
The Scriptures make it abundantly clear that an incestuous marriage should not continue. Thus, the exception clause would read:

"But I say unto you, That whosoever shall put away his wife, saving for the cause of fornication [a man marrying his mother or his sister] . . .” (Matthew 5:32).

3 THE “PORNEIA” OF A FRAUDULENT MARRIAGE

- **Try the spirit of this application.**

  When Joseph discovered that his espoused wife Mary was with child (by the Holy Spirit), he considered quietly divorcing her: "Then Joseph her husband, being a just man, and not willing to make her a public example, was minded to put her away privily” (Matthew 1:19).

  The Jewish betrothal, unlike modern engagement, was a legal covenant. It could only be broken by a formal divorce or death. Betrothal was as binding as marriage in Old Testament law. (See Deuteronomy 20:7 and 24:1.)

  Also, it was the practice of a bridegroom to pay a dowry to the father of the bride at the time of betrothal. The marriage was not consummated at this time, however, for the bridegroom was then to go to his own father’s house to prepare a dwelling place for his bride.

  Ordinarily, a year would elapse between the betrothal and the actual wedding. If, during this period of time, the bride would be unfaithful, the bridegroom could divorce her.

  A divorce could also take place if, on the first night of marriage, the bridegroom discovered that his bride was not a virgin at the time of betrothal.

- **Try the statements by Scripture.**

  According to Old Testament law, the father of the bride was responsible to guarantee that his daughter was a virgin at the time of betrothal. Based on this guarantee, the bridegroom paid the dowry to the bride’s father for the economic loss which her absence would bring to the family.

  If in reality the daughter was not a virgin, the marriage covenant would be fraudulent. Such fraud was a serious matter. If found to be true, it would mean the death of the bride. If proven false, it would result in a stiff fine for the bridegroom. (See Deuteronomy 22:13-21.)

- **Try the fruit of this application.**

  By exposing misrepresentation as prescribed by God’s Law, there would be tremendous motivation for women to remain pure before marriage and for fathers to be strong protectors of their daughters.

  A divorce at this point would not be the breaking of vows on the husband’s part, but rather a confirmation of the higher law of God as to the true picture of marriage which also speaks of the relationship between Christ and the Church.

  “That he might present it to himself a glorious church, not having spot, or wrinkle, or any such thing; but that it should be holy and without blemish” (Ephesians 5:27).

THIRD CONCLUSION:

On the basis of the above, it would be Scripturally accurate to read Matthew 5:32 in the following way:
INSIGHTS THROUGH INVESTIGATION

HOW DOES THE THREEFOLD TEST OF SOUND DOCTRINE CONFIRM THE TRUE MEANING OF THE EXCEPTION CLAUSE?

A threefold test should be applied to every doctrine. A threefold test, like a threefold cord, has more strength than a onefold or twofold cord of the same thickness.

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The Greeks used the word pomeia to refer to any unlawful sexual activity, including unchastity, prostitution, homosexuality, and incest.

HOW CAN THE POSSIBLE MEANINGS OF “PORNEIA” BE TESTED?

In order to determine the correct interpretation and application of pomeia, it is important to take each possible meaning and measure it against a threefold test of sound doctrine.
WHAT THREEFOLD TEST DOES SCRIPTURE GIVE TO DETERMINE CORRECT INTERPRETATION?

God has given at least three ways to test the soundness of a particular interpretation of Scripture. These are as follows:

1 TRY THE SPIRITS.

"Beloved, believe not every spirit, but try the spirits whether they are of God: because many false prophets are gone out into the world" (I John 4:1).

Based on the instruction of this verse, we are first to test the spirit of the one who teaches an interpretation of Scripture. To discern the spirit of truth in a person is quite different from a critical judgment of the person, which is forbidden in Matthew 7:1-2.

Does the teacher have a spirit of Godly wisdom or of carnal pride, envy, or argumentation? These characteristics are further defined in James 3:13-18.

"Who is a wise man and endued with knowledge among you? let him shew out of a good conversation his works with meekness of wisdom.

"But if ye have bitter envying and strife in your hearts, glory not, and lie not against the truth.

"This wisdom descendeth not from above, but is earthly, sensual, devilish.

"For where envying and strife is, there is confusion and every evil work.

"But the wisdom that is from above is first pure, then peaceable, gentle, and easy to be entreated, full of mercy and good fruits, without partiality, and without hypocrisy.

"And the fruit of righteousness is sown in peace of them that make peace" (James 3:13-18).

2 TRY THE STATEMENTS.

The second test given to us in I John 4 is to test the statements which are made. The particular statement cited in I John 4:2-3 is acknowledging that Jesus Christ is come in the flesh. However, the Apostle Paul gives a wider application to testing the statements the person makes.

Paul emphasizes that sound doctrine is to be based on two things: Christ’s own words and that which leads to Christ-like living.

"If any man teach otherwise, and consent not to wholesome words, even the words of our Lord Jesus Christ, and to the doctrine which is according to godliness;

"He is proud, knowing nothing, but doting about questions and strifes of words, whereof cometh envy, strife, railings, evil surmisings,

"Perverse disputings of men of corrupt minds, and destitute of the truth, supposing that gain is godliness: from such withdraw thyself" (I Timothy 6:3-5).

3 TRY THE FRUITS.

"Beware of false prophets, which come to you in sheep's clothing, but inwardly they are ravening wolves. Ye shall know them by their fruits . . ." (Matthew 7:15-16).

The fruit of a doctrine will not only be evident in the life of the teacher, but also in the lives of the learners.

That is not to say that everyone who hears the doctrine will accurately understand it or correctly apply it. However, if the consistent fruit of a teaching is contrary to Godly living, then it must be rejected as an erroneous interpretation of Scripture.

The fruit of the Spirit is listed in Galatians 5:22-23: love, joy, peace, longsuffering, gentleness, goodness, faith, meekness, and temperance.

The fruit of carnality is also listed earlier in this passage: adultery, fornication, uncleanness, lasciviousness, idolatry, witchcraft, hatred, variance, emulations, wrath, strife, seditions, heresies, envyings, murders, drunkenness, revellings, and such like.
HOW DO THE VARIOUS MEANINGS OF "PORNEIA" STAND UP UNDER THE TESTS OF SOUND DOCTRINE?

1 THE "PORNEIA" OF A SODOMITE "MARRIAGE."

• Try the spirit of this application.

The act of sodomy is a total violation of the spirit of God’s holiness and His design for marriage. If the highest form of human love were between two men, as Plato advocated, God would have made a male companion for Adam in the Garden of Eden.

• Try the statements by Scripture.

The word porne from which porneia comes was especially used of slaves who were sold for prostitution. Male prostitutes were common in the ancient Greek and Roman civilizations.

The very word porneia is used in the passage which describes the abomination of homosexuality. After identifying the shameful acts of sodomy in Romans 1:24-28, God described these people with the following statement: "Being filled with all unrighteousness, fornication [porneia] . . ." (Romans 1:29).

A further reference relating fornication directly to homosexuality is given in Jude 7: "Even as Sodom and Gomorrah, and the cities about them in like manner, giving themselves over to fornication, [porneia] and going after strange flesh, are set forth for an example, suffering the vengeance of eternal fire."

This application of porneia is also consistent with other statements of Scripture. God forbids the coming together of two men or two women in Leviticus 18:22.

"Thou shalt not lie with mankind, as with womankind: it is abomination."

• Try the fruits of this application.

The fruit of such a marriage is also contrary to God’s design. His first command to Adam and Eve was, "Be fruitful, and multiply, and replenish the earth . . ." (Genesis 1:28). It would obviously be impossible for sodomite "marriages" to fulfill this commandment.

FIRST CONCLUSION:

Based on this meaning of porneia, the first clear application of fornication in the exception clause would read as follows:

"But I say unto you, That whosoever shall put away his wife, saving for the cause of fornication [a sodomite marriage involving two men or two women "marrying" each other] . . .” (Matthew 5:32).

2 THE "PORNEIA" OF AN INCESTUOUS MARRIAGE.

• Try the spirit of this application.

The example of an incestuous marriage given in the New Testament is that of a son marrying his mother. The fact that this was contrary to the spirit of truth is made clear by Paul’s denunciation of it.

He stated, "For I verily, as absent in body, but present in spirit, have judged already, as though I were present, concerning him that hath so done this deed" (I Corinthians 5:3).

Then Paul commanded that by his spirit with the power of the Lord Jesus Christ this man be turned over to Satan "...for the destruction of the flesh, that the spirit may be saved in the day of the Lord Jesus" (I Corinthians 5:5).

• Try the statements by Scripture.

The very word porneia is used to identify the incestuous marriage of the man in the Corinthian church. "It is reported commonly that there is fornication [porneia] among you, and such fornication [porneia] as is not so much as named among the Gentiles, that one should have his father’s wife" (I Corinthians 5:1).

The prohibition against a son marrying his mother was established at the very beginning when God commanded, "Therefore shall a man leave his father and his mother . . ." (Genesis 2:24). This action is also condemned in Leviticus 18:6-8.

• Try the fruits of this application.

Incestuous marriages today include the marrying of brothers and sisters. Such marriages did occur among royalty in England centuries ago. The results included genetic disorders caused by
increasing impurities in the bloodstream. Since these impurities did not exist for the sons and daughters of Adam and Eve, they were able to intermarry.

SECOND CONCLUSION:
The Scriptures make it abundantly clear that an incestuous marriage should not continue. Thus, the exception clause would read:

"But I say unto you, That whosoever shall put away his wife, saving for the cause of fornication [a man marrying his mother or his sister] ..." (Matthew 5:32).

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When Joseph discovered that his espoused wife Mary was with child (by the Holy Spirit), he considered quietly divorcing her: "Then Joseph her husband, being a just man, and not willing to make her a public example, was minded to put her away privately" (Matthew 1:19).

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Also, it was the practice of a bridegroom to pay a dowry to the father of the bride at the time of betrothal. The marriage was not consummated at this time, however, for the bridegroom was then to go to his own father's house to prepare a dwelling place for his bride.

Ordinarily, a year would elapse between the betrothal and the actual wedding. If, during this period of time, the bride would be unfaithful, the bridegroom could divorce her.

A divorce could also take place if, on the first night of marriage, the bridegroom discovered that his bride was not a virgin at the time of betrothal.

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According to Old Testament law, the father of the bride was responsible to guarantee that his daughter was a virgin at the time of betrothal. Based on this guarantee, the bridegroom paid the dowry to the bride's father for the economic loss which her absence would bring to the family.

If in reality the daughter was not a virgin, the marriage covenant would be fraudulent. Such fraud was a serious matter. If found to be true, it would mean the death of the bride. If proven false, it would result in a stiff fine for the bridegroom. (See Deuteronomy 22:13-21.)

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By exposing misrepresentation as prescribed by God's Law, there would be tremendous motivation for women to remain pure before marriage and for fathers to be strong protectors of their daughters.

A divorce at this point would not be the breaking of vows on the husband's part, but rather a confirmation of the higher law of God as to the true picture of marriage which also speaks of the relationship between Christ and the Church.

"That he might present it to himself a glorious church, not having spot, or wrinkle, or any such thing; but that it should be holy and without blemish" (Ephesians 5:27).

THIRD CONCLUSION:

On the basis of the above, it would be Scripturally accurate to read Matthew 5:32 in the following way:

A year after the betrothal the bridegroom would return with a torchlight ceremony to get his bride and consummate the marriage.
"But I say unto you, That whosoever shall put away his wife, saving for the cause of fornication [concealed immorality before marriage] . . ." (Matthew 5:32).

A marriage feast during the time of Christ

Understanding the laws and customs of a Jewish wedding is essential in interpreting the "exception clause" correctly.

These three examples of pomeia constitute illegal marriage unions. There seemed to be no question in the minds of the Pharisees as to what Jesus meant. They were familiar with the law against such marriages in Leviticus 18, and they agreed with it.

What they challenged Jesus on were additional grounds of divorce which they believed Moses provided in the Law. (See Deuteronomy 24:1-4.)

There is strong support from Scripture, Jewish literature, historical background, and the immediate context that the exception clause referred to technically illegal marriages prohibited by the Hebrew "Law of Holiness." (See Leviticus 18:6-18.)

Dr. Carl Laney, author of The Divorce Myth, does an excellent job of presenting this data.

• New Testament usage

"We find that [incestuous marriage] is the meaning of pomeia in I Corinthians 5:1. Interpreting the exception clause to refer to incestuous marriage would also follow the meaning of pomeia in Acts 15:20, 29, where certain practices are forbidden because of the offense to the Jews.

"... The immediate context of Acts 15:29, when compared with Leviticus 17-18, would indicate that it refers to the forbidden marriage relationships of Leviticus 18:6-18. There would have been no question about the illegitimacy of illicit sexual intercourse, condemned both by Jesus and Paul (see Matthew 5:27-29; Galatians 5:19-21), but marriage within the prohibited relationships of Leviticus 18 was apparently a live issue (see I Corinthians 5:1). . . ."

• Jewish literature

"There is clear first century Palestinian support for an interpretation of pomeia in Matthew 5:32 and 19:9 as a specific reference to an illicit marital union between persons of close kinship. In later Judaism, the rabbis used pomeia not only in a general sense to refer to every kind of extramarital sexual intercourse, but also in the specialized sense of marriage between near relatives. . . ."

• Jewish contexts

"The matter of pomeia would be a problem primarily for Jewish readers acquainted with the Old Testament Law and would account for its inclusion only in Matthew (to Jewish readers) and its absence in Mark and Luke (to Roman and Greek readers, respectively).

"We must understand and appreciate the fact that each gospel writer was selective in what he chose to include in his record of Christ's life and teachings (see Luke 1:1-4, John 20:30, and 21:25). While Mark was led by the Holy Spirit to record Jesus' teaching which applied the same rule of divorce and remarriage to both the husband and the wife (Mark 10:12), Matthew gives us no record of this teaching.

"Why? Because it was common in Roman and Greek society for a wife to divorce her husband, whereas Jewish law made no provision for this. Matthew, therefore, omitted this teaching because it
did not apply to the Jewish culture and setting. On the other hand, Matthew does include the exception clause ("except for porneia").

"He does this in view of the fact that he is writing to a Jewish audience familiar with the Leviticus 18:6-18 prohibition against marriage with a near relative. . . . The Leviticus 18:6-18 interpretation of porneia would well explain the inclusion of the exception clause in Matthew—the Jewish Gospel—and its absence in Mark and Luke."

• Historical background

"Interpreting the exception clause of Matthew to refer to the Leviticus 18:6-18 prohibition against incestuous marriage would also fit well with the historical background of Jesus’ confrontation with the Pharisees.

Because John the Baptist condemned the incestuous marriage of Herod Antipas, Herodias purposed to have him executed.

"As you recall, John the Baptist had been arrested, imprisoned, and eventually executed for speaking out against Herod Antipas who had divorced his wife and married his niece, the former wife of his brother Philip. Recognizing this marriage to be in violation of Jewish law, John declared to Herod Antipas, 'It is not lawful for you to have her' (Matthew 14:4)."

"Precisely what Jewish law had Herod Antipas violated? Leviticus 18:16 commands, 'You shall not uncover the nakedness of your brother's wife; it is your brother's nakedness.' Again in Leviticus 20:21, 'If there is a man who takes his brother's wife, it is abhorrent; he has uncovered his brother's nakedness.' John the Baptist condemned Herod Antipas not only for divorcing his wife, but also for marrying another woman in violation of Leviticus 18:16 and 20:21.

"Since Jesus was being interrogated by the Pharisees in Perea (Matthew 19:1 and Mark 10:1), the territory under the jurisdiction of Herod Antipas, it is quite likely that the Pharisees were trying to trick Jesus into making a statement against the marriage of Herod Antipas. They correctly assumed that since John and Jesus preached the same message (see Matthew 3:2 and 4:17), they probably held the same views on marriage.

"Jesus followed John in condemning incestuous marriage, but while John declared directly, 'It is not lawful,' Jesus avoided a confrontation with Herod Antipas by simply stating that in the case of such an unlawful marriage, divorce was permitted. Thus, the historical background of John the Baptist's preaching and arrest points to porneia as being a reference to marriage with the near relationships prohibited by Leviticus 18:6-18."

• Immediate context

"One final argument for this specialized use of porneia in Matthew 5:32 and 19:9 is the immediate context in which the exception is found. If porneia refers to the prohibited relationships of Leviticus 18:6-18, then Jesus’ teaching is consistent with God’s ideal for marriage as set forth in Matthew 19:4-6 and Mark 10:6-8.

"God's plan for marriage does not include divorce except in the case of what the Jews would understand as an illegal marriage—a marriage relationship with a next of kin. In all other situations marriage is lifelong and binding until death!

"This strict view of porneia would also explain the reaction of the disciples, 'If the relationship of the man with his wife is like this, it is better not to marry' (Matthew 19:10). Had Jesus permitted divorce for adultery or other illicit sexual behavior, His teaching would not have risen above that of Shammai, and would not have provoked such a response."
THE "PORNEIA" OF UNFAITHFULNESS IN MARRIAGE

Try the spirit of this application.

The spirit of Christ was to establish the permanence of marriage, in contrast to the spirit of the Pharisees, who were looking for loopholes to dissolve their marriages.

The spirit of the marriage covenant is unconditional commitment, "for better or for worse, til death do us part." This spirit is violated when conditions are placed upon the covenant.

The spirit of marriage is to be one of love which is forgiving and longsuffering. The provisions for divorce were created because of the hardness of the people's hearts who did not know how to love.

The spirit of New Testament Christianity is to do right and, if need be, to suffer for it, whereas divorce is retaliatory and designed to bring an end to personal distress and unhappiness.

Try the statements by Scripture.

Scripture uses the word covenant rather than contract to define marriage. (See Malachi 2:13-16.) A covenant is based on unlimited trust and unconditional and lifelong commitment. There are no provisions in a marriage covenant for ending a relationship because of unfaithfulness.

When Jesus was asked by the Pharisees, "Is it lawful for a man to put away his wife for every cause?" they were referring to the provision in the law for putting away a wife "because of some uncleanness."

The two rabbinical schools of Jesus' day (Hillel and Shammai) debated over various interpretations of what constituted uncleanness. Jesus by-passed both schools in His answer and reaffirmed God's creation design, "... Have ye not read, that he which made them at the beginning made them male and female,

"And said, For this cause shall a man leave father and mother, and shall cleave to his wife: and they twain shall be one flesh?"

"Wherefore they are no more twain, but one flesh. What therefore God hath joined together, let not man put asunder" (Matthew 19:4-6).

This was Christ's full and complete answer on the matter of marriage and divorce. Notice that there is no "exception clause" in this answer. Only when the Pharisees persisted in justifying their lenient views on divorce did Jesus explain that there were certain special situations that would necessitate putting away a partner.

Marriage is a human object lesson of divine relationships. To allow for divorce and/or remarriage in the case of marital unfaithfulness is to destroy these important spiritual pictures. They include the following:

God's relationship with Israel

God pictured Himself as married to Israel; however, Israel became like an adulterous wife who went off after other lovers. Even though God has the authority to do what we cannot do, i.e., exercise vengeance, His dealings with Israel are designed to provoke them to return to Him.

Even after judging Israel by temporarily withdrawing Himself from her, God's affirmation is significant: "And I saw, when for all the causes whereby backsliding Israel committed adultery I had put her away, and given her a bill of divorce... I am married unto you..." (Jeremiah 3:8, 14).

Jeremiah's faithful preaching to Israel reminded them that they were married to Jehovah and that their adulteries would not separate them from His love and chastening.
• The redemption of mankind

Salvation is compared to the Jewish betrothal and marriage customs. We are now “betrothed” to Christ. When He returns from His Father’s house to catch up His bride, He will consummate the marriage. In order for marriage to picture accurately the permanence of a person’s redemption, divorce must be prohibited.

• Christ’s relationship with the Church

During this time in history in which Jehovah God is waiting for backslidden Israel to return to Him, He is concentrating on the marriage of His Son to the Church. Just as the husband is to cleanse and purify his wife, Christ is fulfilling that responsibility now with the Church.

Scripture confirms that Christians are guilty of spiritual adultery. “Ye adulterers and adulteresses, know ye not that the friendship of the world is enmity with God….” (James 4:4). Yet, Christ will not divorce His bride.

• The believer’s relationship with the Law

In Romans 7:1-4, God uses the analogy of a woman being freed from her husband by his death, not by divorce, to describe the believer’s bonds under law. If we say that divorce frees a partner from the bonds of marriage, we are saying that Christians do not have to “die to themselves” in Christ in order to be free from the bonds of sin.

The book of Hosea contains a significant account of God working with the prophet to bring back an adulterous wife. The hedge of thorns which God placed around Gomer and the careful and patient restoration which Hosea carried out after Gomer returned pictures the true spirit of marriage commitment which Christ outlined in Matthew 5:32 and Matthew 19:6.

Try the fruits of this application.

When divorce is carried out between two believers, they violate Scripture by going to law before the unbelievers. (See I Corinthians 6:1-9.) They demonstrate hardness of heart and an unforgiving spirit.

Ironically, those who are not able to forgive an unfaithful partner often marry another person who has also been unfaithful in past relationships. They are able to forgive that new spouse, but not the former mate to whom they vowed their lifelong loyalty.

Divorce produces guilt and bitterness and causes the parties to break the vows they made to each other and to God. Many who claim Scriptural grounds for divorce base their claim on Deuteronomy 24:1-4. What these people fail to realize is that Deuteronomy 22:28-29 prohibits any divorce if the parties had physical relations before marriage.

Probably most grievous of all is the fact that divorce damages the children of a marriage. This not only offends the little ones, but hinders the development of Godly seed. Both these actions carry severe penalties from the Lord.

PROJECT

Identify ten specific reasons that the “exception clause” does not mean “marital unfaithfulness” by applying the following verses to your understanding of this resource. Look for key words or phrases.

1. Matthew 5:20
2. Matthew 19:6
3. Matthew 5:32
4. Ephesians 5:25-28
5. Romans 12:19
6. I Corinthians 6:7-8
7. I Peter 2:20-21
8. I Peter 4:12-14
10. Matthew 19:9-10

Date completed _________ Evaluation ___________
How did a sixteenth century humanist influence today's views on divorce and remarriage?

Desiderius Erasmus (1466?-1536)

Martin Luther once said, "Erasmus knows well how to expose error, but he knows not how to teach the truth."

Ironically, the truth that Desiderius Erasmus failed to teach on marriage and divorce not only influenced the views of Martin Luther and John Calvin on the subject but also the Church in our day through the Reformation movement.

Fifty years before Martin Luther nailed his ninety-five theses on the door of the Wittenburg Church in Germany, a boy was born in Rotterdam, Holland, named Desiderius Erasmus.

Erasmus was the spiritual heir of John Huss, the Bohemian reformer who fifty-four years earlier was burned at the stake for proclaiming the truth of salvation.

Erasmus became a crusader against the abuses of the Roman Catholic Church of his day. However, his motives and methods differed from the great reformers who followed him.

The martyrdom of John Huss ignited the Reformation fifty years before the birth of Erasmus.

His sharp wit and cutting pen exposed the vices of the Church and lashed out at the monks. One of the more famous products of his biting satire was the book Praise of Folly. In it he unveiled the disorders, ignorance, impurity, and absurd conduct of the Church leaders.

In rejecting the teachings of the Church, Erasmus dedicated himself to Greek and Latin literature. He studied Hippocrates for medicine, Plato for philosophy, and Pliny for natural history. He added to this diet of humanistic thinking a study of the writings of the Church fathers and the New Testament.

In reacting to the doctrines of the Church, he went to the Greek text of the New Testament and made a scholarly translation of it. This edition appeared in 1516 A.D., the year before the Reformation. Through these efforts, he restored the Bible to the learned, just as later Martin Luther restored it to the people.

Erasmus had a hunger for God which mingled with his love for philosophy. He wrote, "The sum of all Christian philosophy is reduced to this: to place all our hope in God, Who, through grace, without our merits, gives us everything by Jesus Christ. . . ."

Along with exalting Scripture, he raised his voice against the distortion of church teachings, by which the people were oppressed and the priests were enriched.
The Church taught that salvation was earned by observing the seven sacraments of baptism, confirmation, communion, confession, last rights, holy orders, and marriage.

In attacking the abuse of the doctrine of marriage, Erasmus also rejected the almost unanimous view of all the Church fathers that there were no Scriptural grounds for divorce and that if divorce should occur, there was positively no Scriptural basis for remarriage. The one dissenter to this view was Ambrosius, a Latin writer in the fourth century.

How marriage came to be viewed as a sacrament

Augustine (354-430 A.D.), who ranks first among the Church fathers, understood the absolute indissolubility of marriage. He emphasized that even an innocent party could not remarry if a divorce occurred because of adultery.

Augustine exalted marriage as a sacred institution, ordained by God and confirmed by Christ, which illustrated the unity of Christ with the Church as expressed by the Apostle Paul in Ephesians 5:31-32.

Many years later Thomas Aquinas (1222-1274) treated marriage as a Church sacrament by which saving grace is transmitted to ones seeking salvation. Aquinas viewed marriage as equal to the other six sacraments, which he taught were instruments of God to dispense saving grace.

The council of Trent (1545-1563) confirmed this view as official Church doctrine. Both Desiderius Erasmus and Martin Luther reacted strongly to the idea that any sacrament could bring about salvation.

In spite of strong teaching on the permanence of marriage, many churchgoers in the days of Erasmus were dissolving their marriages through divorce. Church leaders differentiated between two types of divorce. The first type was a separation from bed and board. Augustine, Jerome, and others advocated this type.

The second type of divorce was an absolute annulment of the marriage by insisting that the marriage had been unlawfully contracted at the outset. Those who wanted such an annulment would seek it from the Church and were obligated to pay whatever fee was demanded.

The double abuse of marriage together with the longing of many Church leaders and members for acceptance of divorce and remarriage prompted Erasmus to combine the humanistic philosophies of fairness with the firm teachings of Scripture.

Erasmus was recognized as one of the leading scholars of his day; thus, his writings gained wide acceptance and influence.

Erasmus emphasized the idea that love should come before any law on marriage. He held the opinion that it was not a loving act to allow many thousands of couples to continue in an unhappy partnership. Thus, he reasoned that if they could be allowed to divorce and remarry, many could be saved from unhappiness.

The humanistic presupposition of Erasmus was that love must at times be allowed to do what is
legally forbidden, but seems justified in the situation. He argued that since Christ sought the lost sheep, the Church should seek to deliver those who suffer in their marriages.

The views of Erasmus on the Sermon on the Mount are significant. He believed this Scripture (including Matthew 5:31-32) was not spoken to the multitudes but to the disciples, who were the purest part of Christ's Body. These were the ones whom He thought belonged to the kingdom of Heaven, and thus, were able to live above the need to divorce.

Within the Church, however, he thought there existed another group which did have need of divorce, oath taking, and the like. These, in his mind, were the imperfect ones who are found in large numbers and constitute the kingdom of the world. In this sphere, Erasmus concluded, that it was not wrong to go to court, take an oath, or obtain a divorce.

How the early life of Erasmus influenced his views

The childhood experiences of Erasmus provided ample motivation for him to arrive at his views allowing divorce and remarriage.

Desiderius was an illegitimate child. His father, Gerard, grew up in the Netherlands and was attracted to a physician's daughter named Marguarit. Gerard's life was not regulated by the principles of Christianity, and soon Marguarit was with child.

The coast of Netherlands, the birth place of Desiderius Erasmus

Gerard's parents and nine brothers urged him to enter a monastery and become a monk. Instead, he fled to Rome leaving behind Marguarit, who was nearing the birth of Desiderius.

Later, Gerard was falsely informed by his parents that Marguarit had died. In a siege of grief he entered the priesthood and took the vows of chastity, poverty, and obedience.

Years later he returned to Holland and discovered that Marguarit and his son were alive and that she had refused to marry anyone but him. However, he felt constrained to be faithful to his priesthood vows which prohibited him from marrying her.

Because they felt they could not marry, they made Desiderius the object of their affection and concentrated on his education.

When Desiderius was twelve years old, his mother died, and a short time later his broken-hearted father followed her to the grave.

The guardians of Erasmus then sent him to a monastery to become a monk. Here he spent eight difficult years during which he reacted to things he saw and did, as well as to the vows he had taken. Finally, he turned from the restrictions of his cloistered life to the freedom of the universities.

There he pursued his studies with vigor and diligence. His accomplishments gained for him notoriety as well as the friendship of such powerful men as John Colet, who became the dean of St. Paul's College and Thomas More, future Lord Chancellor of England.

Thomas More served as Lord Chancellor in the court of King Henry VIII. This was the highest judicial office in England. However, Thomas More resigned in 1532 because of King Henry's plan to divorce his queen. Three years later Thomas More was beheaded for refusing to accept a king as the head of the Church of England.

On the one hand, Erasmus was plagued by the fear of being branded a heretic by the Church. On the other hand, he possessed a burning desire to expose the superstition and error of the Church.

These friends, along with the memories of his parents and his recognized literary ability, gave him boldness to express his revolutionary views on divorce and remarriage.
The new views on divorce and remarriage caused Erasmus to be courted by such rulers as Charles V and Frances I of France and Henry VIII of England.

King Henry VIII had special reason to applaud Erasmus, since Henry desired an end to his marriage with Catherine of Aragon in order to marry Ann Boleyn.

Catherine of Aragon (center) making an impassioned appeal to her husband King Henry VIII: “If there be any offense that can be alleged against me, I consent to depart with infamy; if not, then I pray you to do me justice.”

The vigorous work of Erasmus did have a beneficial effect in preparing the way for Martin Luther’s Reformation of the Church. Erasmus is credited with “laying the egg that Martin Luther hatched.”

In spite of being its bold critic, Erasmus remained loyal to the Church. Although Martin Luther broke with the Church, he retained Erasmus’s views on divorce and remarriage.

In an attempt to free the people from the tyranny of the Church and the false doctrine that the sacraments provided grace for salvation, Martin Luther and other reformers inadvertently adopted the views of Erasmus on divorce and remarriage.

Martin Luther based his conclusions on the Old Testament Law which required adulterers to be stoned. He and other reformers reasoned that even though the civil government did not carry out this penalty, the adulterer could still be considered dead in the eyes of God.

The unfortunate result of these views was a continual loosening of the marriage bond. Gradually, more allowances were made to justify divorce and remarriage. If a believing husband should leave a believing wife and children, the deserter was to be considered no better than a Gentile or an unbeliever who deserved the punishment due an adulterer.

If a wife refused to submit to her husband, “then the husband should let a Vashti go and take an Esther, just like King Ahasuerus did.” Impotence was still another cause for divorce.

Soon emotion replaced reason in the matter of deciding what should be done about a difficult marriage situation. Ironically, the great light that the Reformation brought to the world had in it the seeds of the disintegration of the family in the acceptance of the views primarily espoused by the humanistic thinking of Desiderius Erasmus.

Martin Luther (center) was also influenced by Philip Melanchthon (left), who favored the idea that adultery and desertion are grounds for divorce and remarriage.

**PROJECT**

List at least five Scriptural reasons the view that an adulterous partner should be considered dead and the “innocent party” be free to divorce and remarry is wrong.

Key verses for study:
- Romans 7:1-3
- 1 Corinthians 6:1-9
- Hebrews 11:6
- Deuteronomy 22:28-29
- Romans 12:19
- Matthew 7:1
- Matthew 19:3-10
- Matthew 19:3-10

Date completed ___________ Evaluation ___________
All species of animals and plants conform to the principles of genetics which God designed to make two people “one flesh.”

Genetically inherited traits in the world of plants and animals confirm the fact of a common Creator. Genetics also reveals the secrets of how God causes two people to become “one flesh” in marriage.

At conception you became an exact expression of one half of each of your parents.

As soon as you were born, family and friends looked for characteristics in you that reminded them of one of your parents. They might have made comments like, “You have the eyes of your mother” or “You have the chin of your father.”

The characteristics of a child are genetically determined by each parent.

As you grow older, the expression of these genetically inherited traits becomes even more evident. Your height, build, hair color and curliness, skin color, and hundreds of other characteristics are all influenced by your parents, your grandparents, and their parents before them.

Adam, the first man, also had the likeness of his Father. That likeness was an expression of all three members of the Trinity. Genesis 1:26 states, “And God said, Let us make man in our image, after our likeness . . .”

In that same sense, you are not just the physical product of two parents. You also inherited a third aspect in that you are a spiritual being.

The secrets of genetic traits were understood by Jacob when he cared for the flocks of Laban. (See Genesis 30:25-43.) He was able to breed sheep, goats, and cattle to obtain just the right characteristics based on which ones became his, and which ones became Laban’s.

Biologists have only recently—within the last 125 years—understood the causes of these similarities.
THE CHARACTERISTICS OF EACH OF YOUR PARENTS ARE MANIFESTED IN YOUR PHYSICAL TRAITS.

In the mid-1800's, Gregor Mendel began studying the unique characteristics of pea plants. Mr. Mendel found that his pea plants had either one or the other of the following traits.

- tall
- short
- round
- wrinkled
- yellow
- green
- colored
- white
- inflated
- constricted
- green
- yellow
- axial
- terminal
- tall
- short

They were either short or tall. They had flowers either on the tips of their stems (terminal) or the sides of their stems (axial). They had green pods or yellow pods, green peas or yellow peas, plump pods or skinny pods. Their skins were either smooth or wrinkled, and they had either green seed coats or white seed coats.

These seven pairs of characteristics suggested to Mr. Mendel that pairs of contrasting factors controlled each inherited trait. He simply called them "factors" and believed that each parent plant contributed one, and only one factor for each of the seven characteristics. When the factors from two plants came together, they determined the traits of each offspring.

Gregor Mendel hypothesized that the paired factors must somehow separate so that each parent plant could pass on only one factor from each pair. For example, a parent pea plant could contribute its shortness or its tallness, but not both. It could pass on terminal flowers or axial flowers, one or the other, not both.

To prove this hypothesis, Mr. Mendel raised thousands of pea plants in his garden. He allowed the peas to "self-pollinate" until he found pea plants which always produced the same characteristics. Tall plants always produced tall offspring, and short plants always produced short offspring.

There were a few, however, which continued to produce a mixture of short and tall plants. These Mr. Mendel set aside for future study. He selected for his experiments only those plants which reproduced their own characteristics. These he simply called purebreds.
Once Mr. Mendel found purebred plants for each of the fourteen characteristics, he began to cross-pollinate them to see what would happen.

He noted that when a pure tall plant was crossed with a pure short plant, all the offspring were tall. This puzzled him immensely. Why were not some tall, others short, and still others halfway in-between?

Cross-pollination of a tall and short plant produces tall plants because the trait for shortness is recessive.

To explain all this, Gregor Mendel imagined that the factor for tallness could be symbolized by the capital letter “T” and the factor for shortness by the lower case letter “t.”

He thought that each tall parent plant must have two factors for tallness, “TT,” and that each short parent plant must have two factors for shortness, “tt.” When a pure “TT” pollinated a pure “tt,” Mr. Mendel speculated that every offspring received one and only one factor from each parent. This meant that each offspring wound up with a “Tt” pair of factors. This made them all alike.

Most modern biology books illustrate this concept using a Punnet square, named after an English botanist, R.C. Punnet. Mr. Punnet illustrated Gregor Mendel’s findings by placing one parent’s “factors” on one side of a square and the other parent’s factors on the adjacent side. Each of the four intersecting boxes represented one possible combination of “factors.”

Possible combinations of a tall and short hybrid

All the possible combinations of the two factors, tallness and shortness, are exactly alike.

Today scientists call these factors genes. Genes also come in pairs. Each parent contributes one gene to make a complete pair.

Rats demonstrate the same hereditary characteristics. If a breeder mates a pure black rat with a pure white one, all the offspring are black. Each parent can contribute only one of its two “color” factors to each of its young.

Breeding different colored purebred rats always brings the same results.

3 DOMINANT AND RECESSIVE TRAITS IN YOUR PARENTS DETERMINE YOUR CHARACTERISTICS.

A second major discovery which Gregor Mendel made resulted from his curiosity about why a pea plant with a factor for both tallness and shortness
always turned out to be tall. Mr. Mendel speculated that somehow the characteristic of tallness was "dominant" over the characteristic of shortness. When the two factors appeared together, tallness always masked the influence of the shortness factor.

Mr. Mendel called these factors dominant and recessive. Tallness was dominant, and shortness was recessive. Mr. Mendel was delighted to discover that each of the fourteen traits he studied were also either dominant or recessive.

He found that axial flowers (growing on the sides of stems) were dominant over terminal flowers; green pods were dominant over yellow pods; plump pods were dominant over skinny ones; yellow peas were dominant over green peas; smooth peas were dominant over wrinkled peas; and green seed coats were dominant over white seed coats.

The dominant characteristics of pea plants

When factors for two opposing traits joined together, one was always hidden and the other was always expressed. It was only when two recessive factors came together that the recessive trait was expressed.

Biologists use capital letters to indicate dominant traits and lower case letters to indicate recessive traits, illustrating how a cross between a pure dominant and a pure recessive plant produces only the dominant trait.

Geneticists refer to a plant which contains two identical factors as homozygous. Homo is from the Greek word homos meaning "the same." Zygous is from the Greek zygon meaning "yoke." In a homozygous pea plant both factors for a given trait are the same. All of Gregor Mendel's purebred plants were homozygous.

A pea plant with a "mixed" pair of factors, such as "Tt" (one tall factor and one short factor), is called heterozygous. The Greek prefix heteros means "other."

Gregor Mendel knew he was on the right track when he crossed these heterozygous plants and found that their offspring were predictably different. It was no surprise that there were now three plants expressing the dominant trait for every plant which expressed the recessive trait.

Two Heterozygous Tall Plants

The frequency of recessive characteristics when two dominant factors are paired together

Wherever a dominant factor and a recessive factor were paired together, only the dominant trait was expressed. It was only when two recessive factors were paired together that the recessive trait was expressed.
Two Heterozygous Tall Plants

A Punnet square illustrating the heterozygous cross

The Punnet square also suggests that the ratio of tall plants to short plants should be 3 to 1 if tallness (T) dominates over shortness (t). Notice that there are three squares where tallness dominates and only one square where the recessive trait, shortness, is expressed.

In his study of 1,064 plants, Gregor Mendel found that 277 were short and 787 were tall. His experimental ratio of 2.84 to 1 confirmed that one factor always dominates over its recessive partner.

**PROJECT**

LEARN HOW TO WRITE GENOTYPES AND PHENOTYPES.

The trait expressed by a set of genes is the **phenotype**. Phenotype comes from the Greek words phainos, meaning “to show,” and typos, meaning “model.” Tallness and shortness are phenotypes. They describe the way a pea plant “looks.”

The genetic factors which determine the evident traits are **genotypes**. Genotype comes from the Greek words genos, meaning “birth,” and typos, meaning “model.” A plant’s genotype tells what genes the plant carries. The letters “T” and “t” symbolize a genotype for tall and short.

For example, if you wrote “Tt” you would be expressing a **heterozygous genotype**. If you said a pea plant was tall, you would be expressing a **phenotype**.

If we assigned the letters “A” and “a” to represent the genotypes of axial or terminal flowers, “R” and “r” for round or wrinkled peas, “G” and “g” for green or yellow pods, “C” and “c” for colored or white seed coats, “Y” and “y” for yellow or green peas, and “P” and “p” for plump or skinny pods, could you write the genotypes and phenotypes for the following pea plants?

<table>
<thead>
<tr>
<th>PEA PLANT</th>
<th>PHENOTYPE</th>
<th>GENOTYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXAMPLE</td>
<td>Skinny pea pod</td>
<td>“pp” Homozygous recessive</td>
</tr>
<tr>
<td>1.</td>
<td>axiial flower</td>
<td>“AA” or “Aa” Homozygous dom. or heterozygous</td>
</tr>
<tr>
<td>2.</td>
<td>wrinkled ?</td>
<td>“tt” Homozygous recessive</td>
</tr>
<tr>
<td>3.</td>
<td>short ?</td>
<td>Plump pea pod</td>
</tr>
<tr>
<td>4.</td>
<td>Green peas</td>
<td>“Gg” Homozygous recessive</td>
</tr>
<tr>
<td>5.</td>
<td>Colored seed coat</td>
<td>“gg” Homozygous recessive</td>
</tr>
<tr>
<td>6.</td>
<td>Yellow ?</td>
<td>“Gg” Homozygous recessive</td>
</tr>
<tr>
<td>7.</td>
<td>White seed coat</td>
<td>“Pp” Homozygous recessive</td>
</tr>
</tbody>
</table>

Illustrations ©Holt, Rinehart and Winston
The traits from your parents are inherited independently of each other.

Gregor Mendel often studied only one characteristic at a time, but every pea plant he observed expressed all of the seven major traits as either a dominant or a recessive trait. There was just no such thing as a pea plant with only "tallness." Every pea plant also had flowers, pods, seed coats, peas, etc.

As Mr. Mendel observed his pea plants, he recognized that each of the seven pairs of traits he studied was inherited independently of the other traits. None of them were linked together. A short plant could have yellow peas with white seed coats, nestled in either green or yellow pods. Any combination of the seven traits was possible depending, of course, on the characteristics of a plant's parents.

Mr. Mendel proposed that his factors "segregated" like the flipping of coins. It was literally a "toss-up" whether a heterozygous parent passed on a dominant or a recessive factor. The passing of one characteristic in no way affected the passing of other characteristics.

PROJECT

You can illustrate this by flipping seven coins. Each flip of a coin is independent of every other flip. Each side has a fifty percent possibility of landing right side up. You cannot control whether a flip will be "heads or tails."

Line up seven coins on a table. Let each coin represent one of the seven major traits which Mr. Mendel studied. Let "heads" indicate dominance and "tails" indicate recessiveness. Flip the first coin, then the second, and so on. Notice that the flip of each coin is completely independent of the flip of every other coin. Dominance in one characteristic does not influence dominance in another characteristic.

The genetic factors of a mother and a father are passed on to their children with the same fifty percent possibility. A parent is unable to control which genes are passed on to each child. The genes separate and sort themselves independently of our conscious thought.

Today we know that the seven different pairs of traits Gregor Mendel studied were all located on different chromosomes. Mr. Mendel was right. His seven pairs of factors did separate independently.

HOW ARE CHARACTERISTICS LINKED TOGETHER?

Since Gregor Mendel's work, geneticists have discovered that every chromosome contains many genes or "factors." The factors on different chromosomes separate independently, but factors which reside on the same chromosome are linked together and are passed on as a unit.

For example, the gene which causes red-green color blindness is located on the same chromosome as the gene which causes a person to be a male. This means that color blindness and maleness are linked together. That is why most color blind people are men. While 80 out of 1,000 men are color blind, only 5 out of 1,000 women are color blind.

The "bleeding" disease, known as hemophilia, and baldness are also linked to males because their genes are found on the male chromosome. Many other genetic combinations are "linked" simply because they are bound together on the same chromosome.
Perhaps the most famous carrier of hemophilia was Queen Victoria. She unknowingly passed the genes on to her son and two daughters. Notice, however, that only the men in her family were afflicted with the disease.

5 YOUR PHYSICAL TRAITS CAN BE TRACED BACK THROUGH YOUR ANCESTORS.

There are a number of human traits which are inherited much like those of Mendel’s peas. These include hair on your fingers, the ability to taste PTC, attached earlobes, blood type, and a rolling tongue. In this resource you will learn how to identify these characteristics and trace them to the ancestor from whom you received them as an inheritance.

HAIR ON YOUR FINGERS

Look carefully at the portions of your finger between the first and second joint. Is hair growing there? Hair growing in this middle digit area is controlled by genetic “factors.” The dominant gene causes hair to grow, while the absence of hair indicates that a person has two recessive genes.

If you let “H” represent the dominant gene and “h” represent the recessive gene, only a genotype of “hh” has no hair. Genotypes of “HH” and “Hh” produce hair. Study your family’s fingers, and determine each one’s genotype.

ATTACHED EARLOBES

Not every one has attached earlobes. Some earlobes hang freely, while others completely connect to the side of the head. Attached earlobes are an indication of a simple recessive trait. Unattached earlobes are the dominant trait.

Let “E” represent the dominant factor and “e” the recessive factor. Genotypes with “EE” and “Ee” will have free earlobes while those with a genotype of “ee” will have attached earlobes.

BLOOD TYPE

Blood type is a slightly more complex trait. Blood types include three possible factors. Doctors have labeled the factors “A,” “B,” and “O.” Factors “A” and “B” represent antigens which give blood a particular identity. Factor “O” is actually the absence of any identifying factors in the blood.

“A” and “B” are dominant over “O,” but “A” and “B” do not dominate over each other. This creates four different blood groups.

An “AA” or an “AO” genotype is called type “A” blood. “BB” and “BO” genotypes are type B blood. When “A” and “B” factors are both present,
the blood is “AB” type. Only when two “O” factors are paired together is the blood type “O.”

Find out your blood type and determine which factors you received from your mother and which factors you received from your father.

<table>
<thead>
<tr>
<th>Genotype</th>
<th>Phenotype (Blood Type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>A</td>
</tr>
<tr>
<td>BB</td>
<td>B</td>
</tr>
<tr>
<td>OO</td>
<td>O</td>
</tr>
<tr>
<td>AO</td>
<td>A</td>
</tr>
<tr>
<td>BO</td>
<td>B</td>
</tr>
<tr>
<td>AB</td>
<td>AB</td>
</tr>
</tbody>
</table>

Six blood genotypes produce four blood phenotypes.

**ROLLING TONGUE**

Another genetically inherited characteristic which is easy to study is the ability to roll your tongue into a “U” shape. Rolling is a dominant genetic factor. Non-rolling is recessive.

Represent the rolling factor with an “R” and the non-rolling factor with an “r.” A person with the ability to roll his tongue must have an “RR” or ar. “Rr” genotype. If you cannot roll your tongue, what is your genotype? Study your relatives to determine the source of your “tongue-rolling” genes.

**PROJECT**

**MAKE A PEDIGREE TO SHOW WHAT CHARACTERISTICS YOU HAVE INHERITED FROM YOUR ANCESTORS.**

A pedigree is a chart showing the members of a family. Lines indicate a marriage between two people or the birth of children. By listing the genotypes of each person in your pedigree, you can trace your inherited traits back to their origins.

For example, consider the Robertson family’s ears. The father, Ron, has free earlobes. His wife, Sandy, has attached earlobes. Of their four children, Nathan and Matthew have free earlobes, and Jonathan and Elizabeth have attached earlobes.

**FATHER**

Ron
FREE
“Ee”

**MOTHER**

Sandy
ATTACHED
“ee”

**CHILDREN**

Matthew
FREE
“Ee”

Jonathan
ATTACHED
“ee”

Nathan
FREE
“Ee”

Elizabeth
ATTACHED
“ee”

**HOMOZYGOUS**

**DOMINANT**

**HETEROZYGOUS**

**RECESSIVE**

**PROJECT**

• Read the account of Jacob working with the flocks of Laban. (See Genesis 30:25-43.) Based on what you have learned about dominant and recessive factors, explain why Jacob chose the spotted and speckled animals. Why did he then separate these animals from the rest of the flock?

• Discuss the factors of genetics which may be involved in God’s warning to His own people not to marry people of other nations. (Read Deuteronomy 7:1-4 and Joshua 23:11-13.)

Date completed ___________ Evaluation ___________
HOW DO PRIME NUMBERS ILLUSTRATE THE PRINCIPLE OF "ONE FLESH" IN MARRIAGE?

In verses 31 and 32 of Matthew 5, Jesus told the multitudes that God does not intend for marriage to be divided. He told them that those who insist on "putting away" a spouse by giving a "writing of divorcement" are actually committing adultery. Jesus simply restated what the children of Israel already knew.

"Therefore shall a man leave his father and his mother, and shall cleave unto his wife; and they shall be one flesh" (Genesis 2:24).

When two people become one in marriage, their union is unique. No other couple will have the same make-up, neither can their union be expressed in any form other than marriage.

The factors of prime numbers illustrate this concept.

WHAT IS A "FACTOR"?

How many different ways can you fill in the boxes with whole numbers to make the following equation true?

\(? \times ? = 12\)

The whole numbers you used to make the equation true are called the factors of 12.

If you used \(3 \times 4 = 12\), both the 3 and the 4 are called factors of 12. If you used \(2 \times 6 = 12\), both the 2 and the 6 are called factors of 12. Since \(1 \times 12 = 12\) also, a list of all the factors of 12 would include 1, 2, 3, 4, 6, and 12.

\(? \times ? = 20\)

What whole numbers are factors of 20? Think of any two whole numbers whose product is 20. Since the product of 10 and 2 is 20, both 10 and 2 are factors. Since the product of 5 and 4 is 20, both 5 and 4 are factors also. And since the product of 20 and 1 is 20, both 20 and 1 are factors too. A list of the factors for the numbers 12 and 20 would look like this:

<table>
<thead>
<tr>
<th>Number</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>1, 2, 3, 4, 6, 12</td>
</tr>
<tr>
<td>20</td>
<td>1, 2, 4, 5, 10, 20</td>
</tr>
</tbody>
</table>

Both 12 and 20 have six factors, as shown by the six numbers listed for each one.

Originally, the word factor referred to an agent employed by another to transact business. A factory was the factor's workplace. Today, factors are the pieces which make up a whole.
Using the chart below, find all the whole numbers that are factors for each number listed. Then count the number of factors you found and write the total in the last column.

<table>
<thead>
<tr>
<th>#</th>
<th>Factors</th>
<th>Total # of factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>1, 3, 5, 15</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>1, 3, 9</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>1, 2, 3, 6</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>1, 5</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1, 7</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>1, 2, 3, 4, 6, 8, 12, 24</td>
<td>8</td>
</tr>
</tbody>
</table>

If you were able to find all the factors, the correct total number of factors for each number should be as follows: 15 has 4; 9 has 3; 18 has 6; 5 has 2; 7 has 2; and 24 has 8. (If you missed some, did you remember to use 1 and the number itself?)

**WHAT IS A PRIME NUMBER?**

In the chart above, there are two numbers that have only two factors. Both 5 and 7 have only the factors 1 and themselves. Numbers that have no factors other than the number 1 and themselves are called prime numbers. The number 1 is not considered a prime number because it has only one factor—itself.

Any whole number greater than 1 which has exactly 2 factors is called a prime number.

Here is a chart of the numbers 1 - 20, with all the factors included. Which of the numbers are prime? Which are not?

<table>
<thead>
<tr>
<th>1</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1, 2</td>
</tr>
<tr>
<td>3</td>
<td>1, 3</td>
</tr>
<tr>
<td>4</td>
<td>1, 2, 4</td>
</tr>
<tr>
<td>5</td>
<td>1, 5</td>
</tr>
<tr>
<td>6</td>
<td>1, 2, 3, 6</td>
</tr>
<tr>
<td>7</td>
<td>1, 7</td>
</tr>
<tr>
<td>8</td>
<td>1, 2, 4, 8</td>
</tr>
<tr>
<td>9</td>
<td>1, 3, 9</td>
</tr>
<tr>
<td>10</td>
<td>1, 2, 5, 10</td>
</tr>
<tr>
<td>11</td>
<td>1, 11</td>
</tr>
<tr>
<td>12</td>
<td>1, 2, 3, 4, 6, 12</td>
</tr>
<tr>
<td>13</td>
<td>1, 13</td>
</tr>
<tr>
<td>14</td>
<td>1, 2, 7, 14</td>
</tr>
<tr>
<td>15</td>
<td>1, 3, 5, 15</td>
</tr>
<tr>
<td>16</td>
<td>1, 2, 4, 8, 16</td>
</tr>
<tr>
<td>17</td>
<td>1, 17</td>
</tr>
<tr>
<td>18</td>
<td>1, 2, 3, 6, 9, 18</td>
</tr>
<tr>
<td>19</td>
<td>1, 19</td>
</tr>
<tr>
<td>20</td>
<td>1, 2, 4, 5, 10, 20</td>
</tr>
</tbody>
</table>

To locate the prime numbers, find the numbers which have only two factors. These numbers are 2, 3, 5, 7, 11, 13, 17, and 19.

The rest of the numbers all have more than 2 factors. That is, there is more than one way to factor each of the remaining numbers. These numbers are called composite numbers.

Composite numbers are whole numbers greater than 1 which have more than 2 factors.

Here is a simple way to decide if a number is prime or composite: Think of a number. If you can find a second number (other than 1) that evenly divides the first, then the first number is composite. If you cannot find a second number that evenly divides the first, then the first number is probably prime.

Look again at the chart of factors for the numbers from 1 - 20. Find the factor column. What number shows up every time? What number shows up every other time?

What do you think would happen if we extended our chart of numbers and their factors up to 100? Would the number 1 still show up every time? Would the number 2 show up as a factor every other time? What if we extended our chart up to the number 10,000? 100,000? 1,000,000? Do you think that the numbers 1 and 2 would continue to show up in the same pattern?

The answer is yes. No matter how far we extend our chart, the number 1 shows up as a factor of every number. And 2 shows up as a factor of every other number. The numbers that have 2 as a factor are the even numbers. The numbers that do not have 2 as a factor are the odd numbers.

HOW DOES THE SIEVE OF ERATOSTHENES WORK TO IDENTIFY COMPOSITE NUMBERS?

What number shows up as a factor every third time? Every fifth time? Every seventh time? These are called multiples. Numbers which show up every other time are the multiples of 2. The numbers which show up every third time are the multiples of 3. And the numbers which show up every fifth time are the multiples of 5. The numbers which show up every seventh time are the multiples of what?
This idea of multiples led the Egyptian mathematician Eratosthenes to discover a way of identifying prime numbers in the year 247 B.C. His method is called the "Sieve of Eratosthenes" because it sifts out all the composite numbers.

The "Sieve of Eratosthenes" was a method used to identify prime numbers.

Eratosthenes is also credited with using Euclidean geometry to calculate the size of the earth long before satellite pictures were possible.

To try Eratosthenes' method, first write down the whole numbers from 2 to 100.

1. Cross out all the numbers that are multiples of 2 (except 2).
2. Cross out all the numbers that are multiples of 3 (except 3).
3. Cross out all the numbers that are multiples of 5 (except 5).
4. Cross out all the numbers that are multiples of 7 (except 7).

The numbers that are left are the prime numbers between 2 and 100.

For thousands of years, mathematicians have been trying to find the largest known prime number. Since our numbers increase infinitely there is no such thing as the biggest number. However, mathematicians have always tried to find one "bigger" than the one which is known now.

Computers have helped immensely in the search for a "bigger" prime number. The largest known prime number in 1978 was $2^{21701} - 1$, a number that has 6,533 digits. The largest known prime number today is $2^{86243} - 1$, a number with 25,962 digits!

$2^2 = 2 \times 2$
$2^3 = 2 \times 2 \times 2$
$2^4 = 2 \times 2 \times 2 \times 2$

$2^{10} = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 2$

$2^{86243} = 2 \times 2 \times 2 \times 2 \ldots \ldots 86,243$ times!

The exponent indicates that the number 2 is multiplied by itself 86,243 times.

Personal computers do not have large enough memories to test very large numbers to see if they are prime.
Mathematicians have also tried to discover if there is a pattern to the occurrence of prime numbers. For example, 2 and 3 are one digit apart. 3 and 5 are 2 digits apart. 5 and 7 are 2 digits apart, but 7 and 11 are 4 digits apart. Then 11 and 13 are only 2 digits apart. Since there is no pattern, there is no way of predicting where the next prime number will occur.

In 1901, the only prime number made up entirely of 1’s was 11. In 1919, it was discovered that 1,111,111,111,111,111,111 is also prime. Today it is known that the number made up of twenty-three 1’s is also prime.

**HOW DO YOU TEST A NUMBER TO SEE IF IT IS PRIME?**

A prime number can only be divided by itself or 1 without having a remainder.

To determine whether or not a number is prime, you must test it to see if it is evenly divisible by any number other than 1.

For example, is 22 a prime number? Test it by dividing 22 by 2. Since \(22 \div 2 = 11\), 22 is not a prime number.

Is 27 a prime number?

<table>
<thead>
<tr>
<th>Test:</th>
<th>(27 \div 2 = 13\ 1/2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(27 \div 3 = 9)</td>
</tr>
</tbody>
</table>

Since 27 is evenly divisible by a number other than 1, it is not a prime number.

<table>
<thead>
<tr>
<th>Is 29 a prime number?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test:</td>
</tr>
<tr>
<td>(29 \div 2 = 14\ 1/2)</td>
</tr>
<tr>
<td>(29 \div 3 = 9\ 2/3)</td>
</tr>
<tr>
<td>(29 \div 4 = 7\ 1/4)</td>
</tr>
<tr>
<td>(29 \div 5 = 5\ 4/5)</td>
</tr>
<tr>
<td>(29 \div 6 = 4\ 5/6)</td>
</tr>
<tr>
<td>(29 \div 7 = 4\ 1/7)</td>
</tr>
<tr>
<td>(29 \div 8 = 3\ 5/8)</td>
</tr>
</tbody>
</table>

Dividing by larger numbers here will only give quotients (results) smaller than 2. Since 2 is the smallest prime number, there is no need to check further.

The number 29 is a prime number since our testing has not found any other number that evenly divides it.

Can you see why it is so hard to find out if a very large number is prime or not? Computers help, but it still takes a relatively long time (sometimes over an hour) for a computer with a very large memory to test a very large number!

There are, however, some quick tests that you can do on a number to find if it is evenly divisible by the numbers from 2-10.

**DIVIDING BY 2:** If a number is divisible by 2, it will end in an even number or 0.

**DIVIDING BY 3:** If a number is divisible by 3, the sum of its digits will be divisible by 3.

**DIVIDING BY 4:** If a number is divisible by 4, the last two digits are divisible by 4, or are zeros.

**DIVIDING BY 5:** If a number is divisible by 5, the last digit will be 5 or 0.

**DIVIDING BY 6:** If a number is divisible by 6, the last digit will be even and the sum of the digits will be divisible by 3.

**DIVIDING BY 7:** There is no quick test for finding out if a number is divisible by 7.

**DIVIDING BY 8:** If a number is divisible by 8, the last three digits are divisible by 8.
DIVIDING BY 9: If a number is divisible by 9, the sum of its digits is divisible by 9.

DIVIDING BY 10: If a number is divisible by 10, it ends in 0.

How quickly can you determine which of the digits 2-10 would divide evenly into 891?

CHECK FOR DIVIDING BY 2:
Is 278 divisible by 2? Yes, since the last digit, 8, is an even number.

CHECK FOR DIVIDING BY 3:
Is 372 divisible by 3? Yes, since 3 + 7 + 2 = 12, and 12 is divisible by 3.

CHECK FOR DIVIDING BY 4:
Is 624 divisible by 4? Yes, since the number formed by the last two digits, 24, is divisible by 4.

CHECK FOR DIVIDING BY 5:
Is 4,395 divisible by 5? Yes, since its last digit is a 5.

CHECK FOR DIVIDING BY 6:
Is 696 divisible by 6? Yes, since the last digit, 6, is even, and 6 + 9 + 6 = 21, which is divisible by 3.

CHECK FOR DIVIDING BY 7:
The only way to find if a number is divisible by 7 is to do the division. There is no short cut.

CHECK FOR DIVIDING BY 8:
Is 109,624 divisible by 8? Yes, since the number formed by the last three digits, 624, is divisible by 8.

CHECK FOR DIVIDING BY 9:
Is 387 divisible by 9? Yes, since 3 + 8 + 7 = 18, which is divisible by 9.

CHECK FOR DIVIDING BY 10:
Is 210,350 divisible by 10? Yes, since it ends with a 0.

PROJECT 1
Memorize the division facts.

The 64 Division Facts

<table>
<thead>
<tr>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/4</td>
<td>2/6</td>
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<td>7/14</td>
<td>7/21</td>
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<td>7/49</td>
<td>7/56</td>
<td>7/63</td>
</tr>
<tr>
<td>8/16</td>
<td>8/24</td>
<td>8/32</td>
<td>8/40</td>
<td>8/48</td>
<td>8/56</td>
<td>8/64</td>
<td>8/72</td>
</tr>
</tbody>
</table>

PROJECT 2
Using the tests on the left column of this page, list all the numbers between 2 and 10 that evenly divide the following. If you cannot find any, then the number is probably prime.

1. 48
2. 27
3. 72
4. 60
5. 49
6. 81
7. 363
8. 420
9. 139
10. 128

PROJECT 3
Answer the following questions:

1. How long would it take to write a number which has 25,962 digits if you write at the rate of one digit per second?
2. Twin primes are two prime numbers that have a difference of 2. 3 and 5 are called twin primes. From your Sieve of Eratosthenes, find all the other twin primes less than 100.
3. Christian Goldbach was a Russian mathematician who found that every even number can be written as the sum of two odd primes. For example, $6 = 5 + 1$, and $10 = 7 + 3$. Express all the even numbers up to 50 as the sum of two odd primes.

4. Christian Goldbach also found that every odd number greater than 1 can be expressed as the sum of 3 odd primes. For example, $11 = 7 + 3 + 1$, and $15 = 5 + 5 + 3$. Express all the odd numbers up to 50 as the sum of 3 odd primes.

5. Fill the circles below with the prime numbers 5, 7, 11, 13, 17, 19, and 23 so that the sum of any three primes in a row or diagonal is the same prime number. What is the prime number?

**PROJECT 4**

By working through the following analogy, apply the indivisibility of a prime number by any factor other than itself to God's command that the oneness of marriage not be broken.

Each prime number contains exactly two factors, one and itself. The number 1 is a factor common to all prime numbers, whereas the number itself is unique. When these two factors are combined, they form a prime number that cannot be divided any other way, and neither factor can be removed and replaced by another.

Think back to the very beginning of this resource. You found that there were several ways to fill in the boxes so that the following was true.

$$12 \div 3 = 4$$

You also found that for prime numbers there was only one way to fill in the boxes so that the following was true.

$$5 \div 1 = 5$$

A marriage relationship can be illustrated by the same kind of "equation." Since marriage is a union of two individuals, there would be only one way to fill in the boxes so that the following would be true.

$$\begin{array}{c}
  \text{Oneness of Marriage} \\
  12 \div 4 = 3 \\
\end{array}$$

What would happen if you tried to remove and replace one of the factors in this equation?

If you remove and replace one factor, you have to remove and replace the other. You can do this with a composite number because composite numbers have more than two factors.

$$\begin{array}{c}
  2 \times 6 = 12 \\
  1 \times 12 = 12 \\
  3 \times 4 = 12 \\
\end{array}$$

What would happen if you tried to remove and replace one of the factors in this equation?

$$\begin{array}{c}
  5 \div 1 = 5 \\
\end{array}$$

It cannot be done with a prime number since a prime number has only two factors, neither of which can be removed and replaced.

What would happen if you tried to remove and replace one of the factors in this equation?

$$\begin{array}{c}
  \text{Oneness of Marriage} \\
  1 \div 1 = 1 \\
\end{array}$$

It cannot be done. Once established, the marriage relationship, like a prime number, has only two factors, neither of which can be removed and replaced.

Date completed ___________ Evaluation ___________
WHY ARE "NO-FAULT" DIVORCE LAWS BOTH UNSCRIPTURAL AND UNCONSTITUTIONAL?

Until "no-fault" divorce laws were enacted, a domestic judge had significantly more authority to preserve and strengthen marriages.

WHAT IS A "NO-FAULT" DIVORCE?

On July 1, 1984, Illinois became the 49th state to adopt a "no-fault" divorce law. This law grants divorce to any party seeking it for no other reason than "irreconcilable differences."

Illinois' law now reads:

"That the Petitioner and the Respondent have lived separate and apart for a continuous period in excess of two years and that irreconcilable differences have occurred between the parties and that the marriage of the parties has irretrievably broken down. That efforts at reconciliation have failed or (future attempts at reconciliation will be impracticable and not in the best interest of the family)."

The legislative notes indicate that the two-year separation need not be under different roofs. This section should probably be interpreted to mean that living under the same roof, not as man and wife, is sufficient for dissolution of marriage under this ground.

As if anticipating a Constitutional challenge, the following provision was added in order not to invalidate the entire divorce law:

"If any provision of this Section or application thereof shall be adjudged unconstitutional or invalid for any reason by any court of competent jurisdiction, such judgment shall not impair, affect, or invalidate any other provision or application of this Section which shall remain in full force and effect."

Even before the "no-fault" divorce law, the judicial system of our country was making it progressively less difficult to dissolve a marriage. The list of causes in any one state could include some or all of the following:

1. Adultery
2. Desertion
3. Mental or extreme cruelty
4. Physical cruelty
5. Impotence
6. Nonsupport (Willful neglect)
7. Insanity
8. Alcoholism
9. Drug addiction
10. Conviction of a felony
11. Living apart
12. Communication of a venereal disease
13. Public defamation
14. Sodomy
15. Abuse or neglect of a child

HOW WERE "NO-FAULT" DIVORCE LAWS JUSTIFIED?

With the presuppositions that certain marriages were irreconcilable and that an unhappy marriage was damaging to the partners involved, legislators assumed that any hindrances to a speedy divorce were an obstruction to justice.

Prior to the "no-fault" ground, a partner had to prove legitimate grounds for dissolving the marriage and had to be the innocent party. When contested, the divorce proceedings became extensive and costly. The net effect was to slow down the divorce process and to encourage partners to work out their differences.

With the "no-fault" law it is much easier to dissolve a marriage covenant and it can be accomplished in a much shorter period of time. The net affect has been to discourage partners from resolving their differences, thus greatly increasing the number of divorces.
HOW DOES "NO-FAULT" DIVORCE VIOLATE THE PRINCIPLES OF SCRIPTURE?

1 The primary authority over marriage belongs to God—not to the state.

God is the one who originally designed marriage and established it as the foundation of all other human institutions. When God joined the first couple, He ordained laws which were to govern marriage. It is not within man's authority to arbitrarily set these laws aside without serious and lasting consequences.

Jesus confirmed God's authority over marriage when He stated,

"... What therefore God hath joined together, let not man put asunder" (Matthew 19:6).

2 The state has the responsibility to protect marriages—not to destroy them.

Since the state did not create marriage, it can only regulate what God has established. The state has the responsibility to protect marriage because it is basic to the survival of a nation. God gave to human government two primary responsibilities: punishment for those who do evil and praise for those who do well.

"For rulers are not a terror to good works, but to the evil..." (Romans 13:3).

Civil authorities are appointed "...For the punishment of evil doers, and for the praise of them that do well" (I Peter 2:14).

3 God builds marriages on personal responsibility—not on personal rights.

When two people enter into a marriage, each one is to yield personal rights for the benefit of the other. (See I Corinthians 7:4, 32-34.) Marriage then is not a relationship based upon rights; rather it is a covenant based upon responsibilities.

"If we say that we have no sin [no-fault], we deceive ourselves, and the truth is not in us" (I John 1:8). "He that covereth his sins shall not prosper: but whoso confesseth and forsaketh them shall have mercy" (Proverbs 28:13).

God deals with each individual on the basis of personal responsibility. There are four areas of personal responsibility which will receive just reward or punishment. Each of these areas of responsibility has a direct bearing on marriage relationships.

- Our thoughts

The thoughts a married person has toward his or her partner will ultimately influence words, attitudes, and actions. The mouth speaks out of the abundance of the heart (see Matthew 12:34), and a man is as he thinks in his heart (see Proverbs 23:7).

Because of the importance of our thoughts, God commands that we cast down false imaginations and bring every thought into captivity to the obedience of Christ. (See II Corinthians 10:4-5.)
God’s judgment of the secret motives of our hearts is clearly stated in Jeremiah 17:10: “I the Lord search the heart, I try the reins, even to give every man according to his ways, and according to the fruit of his doings.”

- **Our words**
  Verbal abuse in marriage is a major cause for divorce. God listed serious consequences for the man who brought up a false report against his wife. (See Deuteronomy 22:17-19).
  God warns all Christians that “...every idle word that men shall speak, they shall give account thereof in the day of judgment. For by thy words thou shalt be justified, and by thy words thou shalt be condemned” (Matthew 12:36-37).

- **Our attitudes**
  The spirit of a marriage is communicated more in terms of attitudes than it is in terms of words or deeds. In fact, the right words or the right deeds with the wrong attitudes are capable of creating some of the strongest animosities in a marriage relationship.
  Wrong words and actions can be identified; however, wrong attitudes are often unconscious, defended, or denied.
  Peter assures wives that they can draw their non-Christian husbands to Christ with their Godly attitudes (I Peter 3:1-6). In that same chapter Peter warns Christians to keep their tongues from evil and their lips (facial expressions) from speaking guile. (See I Peter 3:10.)

- **Our actions**
  “For we must all appear before the judgment seat of Christ; that every one may receive the things done in his body, according to that he hath done, whether it be good or bad” (II Corinthians 5:10).
  In a “no-fault” divorce the court in effect condemns the marriage rather than the parties involved. The personal faults of the marriage partners which caused or contributed to the marriage problems are never examined.

4 *God warns that divorce is a problem—not a solution.*

God’s commandments prohibiting divorce and remarriage are designed to protect our happiness, not to prohibit it. Many who demand the right to divorce and remarry later affirm the fact that divorce may settle one set of problems only to create a new set which is more devastating than the previous ones.

Those who promoted “no-fault” divorce argued that it would remove bitterness from the divorce proceedings. The experience of divorce lawyers, judges, and the couples involved now disagree with this speculation. The testimony of one lawyer speaks for many:

“My own observations based upon practicing law and counseling divorce clients in four “no-fault” states is that the bitterness is as deep as ever, especially where children or property are involved.”

In a “no-fault” divorce, the party who was faithful in the marriage is actually penalized by the courts siding with the partner who may simply want to end the marriage for selfish and irresponsible motives.

“No-fault” divorce has failed to achieve the benefits it promised. Instead, it has made divorce more socially acceptable, thus encouraging more divorces and discouraging attempts to reconcile.

Some of the obvious problems connected with divorce are:

- **Receiving God’s wrath for doing what He hates**
  “And this have ye done again, covering the altar of the Lord with tears, with weeping, and with crying out, insomuch that He regardeth not the offering any more, or receiveth it with good will at your hand. Yet ye say, Wherefore? Because the Lord hath been witness between thee and the wife of thy youth, against whom thou hast dealt treacherously... for the Lord... hateth putting away” (Malachi 2:13, 16).

- **Contributing to the partner’s adultery**
  “And he sayeth unto them, Whosoever shall put away his wife, and marry another, committeth adultery against her. And if a woman shall put away her husband, and be married to another, she committeth adultery” (Mark 10:11-12).
Experiencing the destruction of our work because a vow was broken

“When thou vowest a vow unto God, defer not to pay it; for he hath no pleasure in fools: pay that which thou hast vowed. Better is it that thou shouldest not vow, than that thou shouldest vow and not pay” (Ecclesiastes 5:4-5).

Causing damage in the lives of the children

“But whoso shall offend one of these little ones which believe in me, it were better for him that a millstone were hanged about his neck, and that he were drowned in the depth of the sea” (Matthew 18:6).

5 God looks at marriage problems as opportunities—not irreconcilabilities.

For a Christian to say that a marriage is irreconcilable is to deny the very nature of the God in whom he or she claims to believe. God delights in working through impossibilities so that men will glorify Him rather than praise their own human achievements. What is impossible with man is possible with God. (See Matthew 19:26.)

“Behold, I am the Lord, the God of all flesh: is there any thing too hard for me?” (Jeremiah 32:27).

History records the unreasonableness of King Ahasuerus, and Queen Vashti reacted to his pride and insensitivity. Esther, however, demonstrated the power of a Godly life and a wise appeal.

Esther certainly could have proven that her husband was a tyrant. Sarah could have walked out on Abraham when he failed to protect her in Egypt. Yet, God promises that a wife can win an irresponsible husband by displaying Godly attitudes and right living. (See I Peter 3:1-7.)

All the tribulations which can occur in marriage can be viewed in the light of Romans 5:3-5.

“How does the “no-fault” divorce law violate the United States Constitution?

The United States Capitol

The “no-fault” divorce law is unconstitutional on at least two accounts. It denies the due process of law guaranteed in the Fifth Amendment, and it impairs the obligation of contracts as forbidden in Section 10, Article 1 of the U.S. Constitution.

The party who does not want a divorce and will be mentally, emotionally, and physically damaged by it is certainly going to be deprived of “life, liberty, and property without due process of law.”
The definitions of each of these terms (life, liberty, and property) must be properly understood in order to recognize how the “no-fault” divorce law violates the U.S. Constitution.

Constitutional definition of life:

“Life protected by the federal Constitution includes all personal rights and their enjoyment of the faculties, acquiring useful knowledge, the right to marry, establish a home, and bring up children, freedom of worship, conscience, contract, occupation, speech, assembly and press.” (Black’s Law Dictionary)

Based on this definition, the “no-fault” divorce law has many counts against it:

- It destroys the marriage without due process.
- It divides the home without due process.
- It divides the children without due process.
- It violates marriage vows without due process.
- It damages the conscience without due process.
- It breaks the contract without due process.

The net effect of all these violations is to damage the community severely by weakening the foundation of our nation. Tremendous financial burdens are added to the whole community to support the wives and children who have been forsaken.

Constitutional definition of liberty:

The word liberty as used in the state and federal constitutions means, in a negative sense, “freedom from restraints,” but in a positive sense, it involves the idea of “freedom secured by the imposition of restraint.” It is in this positive sense that the state, in the exercise of its police powers, “promotes the freedom of all by the imposition upon particular persons of restraints which are deemed necessary for the general welfare.” (Black’s Law Dictionary)

It has been generally understood from the founding of our country and throughout all history that strong and stable families are deemed necessary for the general welfare. Therefore, it is the state’s responsibility to exercise restraints on any marriage partner who would arbitrarily, capriciously, or unreasonably take steps to dissolve his marriage and divide his family.

Therefore, the “no-fault” divorce law fails to provide due process on the matter of liberty.

Constitutional definition of property:

Property within Constitutional protection denotes “a group of rights, inherent in a citizen’s relationship to physical things, as the right to possess, use, and dispose of them.

In a marriage a couple works together for the accumulation of property from which they will both gain full enjoyment. By separating the property in a “no-fault” divorce action, each party is deprived of half the property and its enjoyment.

The uniqueness of marriage is that two become “one flesh” and as one are able to enjoy all their possessions. Marriage performed under the state is guaranteed by the state as the basis by which property can be acquired and enjoyed.

When the state dissolves a marriage with a “no-fault” divorce action, it removes the protection of property without due process.

If a court establishes as a fact that which in reality is only presumed against a defendant, this violates due process of law. A “no-fault” divorce law establishes as a final fact without further discussion.
that a marriage is irreconcilable, even though many defendants in "no-fault" suits would vigorously object.

The Fourteenth Amendment of the Constitution establishes the requirement of due process.

**AMENDMENT 14**

SECTION 1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which abridges the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

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**Constitutional protection of contracts:**

If two citizens entered into a legal contract to purchase a house, for example, and one party decided that it was not in his best interest to finish the payments, the government would have no right to declare that the contract was null and void.

This is precisely what the "no-fault" divorce law does with marriages, families, and property in direct violation of Article I, Section 10, of the United States Constitution.

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Marriage is not just a contract; it is also a legal status which comes into existence by the mutual consent of the parties and is based on covenantal vows, knowingly and voluntarily exchanged.

"A status is a legal, personal relationship, not temporary in its nature nor terminable at the mere will of the parties with which third persons and the state are concerned." (Black's Law Dictionary)

The contractual aspect of marriage is vital to the Constitutional concerns of the "no-fault" divorce law.

The "compulsory" nature of the "no-fault" law wrongly breaches the marriage contract and impairs the obligations of the marriage partners. This it is prohibited from doing, according to the Federal Constitution which declares that no state shall pass any law impairing the obligation of contracts. This Constitutional provision refers to laws which act upon the contract itself (marriage) rather than property (a couple's mutual possessions) which is the subject of the contract.

The "no-fault" divorce law unilaterally alters the status and relationships of the marital contract, severely and substantially curtailing a couple's ability to fulfill them.

The requirements of due process are not met when a judicial proceeding denies the right of either marriage partner to present reasonable and legitimate defenses or to show that the claim asserted is unfounded.

The mere fact that a party has the opportunity to present testimony at a hearing does not satisfy due process requirements if by law there are no legitimate defenses which can be established.

Since the "no-fault" law went into effect in Texas in 1970, there has not been a single reported decision of a Texas court wherein a suit for divorce was denied.

It is a sad commentary on the disintegration of our society to compare the present "no-fault" law with what Chief Justice Hemphill of the Supreme Court of Texas wrote years ago:

"The Parties have pledged themselves, not only for their own happiness, but for purposes important to society, to live together during the term of their natural lives. This engagement is the most solemn and important of human transactions."
"It is regarded by all Christian nations as the basis of civilized society, of sound morals, and of the domestic affections; and the relations, duties, obligations and consequences flowing from the contract are so important to the peace and welfare of society, as to have placed it under the control of special municipal regulations, independent of the will of the parties.

"The mutual comfort and happiness of the parties are the principal, but not the only objects of the engagement. It is intended also for the benefit of their common offspring, and is an important element in the moral order, security and tranquility of civilized society.

"The parties cannot dissolve the contract, as they can others, by mutual consent, and no light or trivial causes should be suffered to effect its recession.

"While full effect is to be given to the statute, it should be remembered that, according to the experience of the most enlightened nations, the happiness of married life greatly depends on its indissolubility, and that the prospect of easy separation foments the most frivolous quarrels and disgusts into deadly animosities.

"Parties may not be able to live together very harmoniously, but they cannot be separated except for reason approved of by the law.

"And when they know they must live together, except for causes prescribed by the law, they learn, in the language of Lord Stowell, 'to soften, by mutual accommodation, the yoke which they know they cannot shake off; they become good husbands and wives; for necessity is a powerful master in teaching the duties it imposes.'

"Such construction ought to be given the statute, and such weight allowed the acts of the parties, as would effect the legislative intention; but there should not be such looseness of exposition as would defeat the beneficial objects of the marriage institution and sunder its bonds as much facility as if it were a state of concubinage, dependent alone on the will of the parties." (3 Tex. 85-86).

Laws which strengthen the resolution of couples to maintain their marriages and meet the needs of their families fulfill this responsibility, but laws which make it easy to dissolve marriage destroy the very foundation of the society.

State legislators throughout the nation have the responsibility to make laws which are in harmony with God's laws.

Laws on marriage, divorce, and remarriage should be based on the following premises:

1 Protect Christian marriage covenants.

Christian marriages are more than contracts. Marriages are covenants made before witnesses and in the presence of God. The parties to the marriage recognize the prior authority and regulations of God in designing marriage and the benefits He gives to those who honor marriage.

When the state dissolves a marriage between two Christians, it interferes with the Constitutionally protected right of the dissenting party to exercise his or her faith.

RECOMMENDATION:

State legislatures should establish a provision whereby Christians could enter into marriage covenants that would not have access to disillusion in the state courts. Troubled marriages would then be referred back to the local church for proper counsel and discipline.

2 Give husbands and wives legal authority to protect their marriages.

The Ten Commandments constitute the basis of a successful law system. The United States law system is based on the Ten Commandments.
sixth commandment is “thou shalt not murder.” Thus, we have laws against murder. The eighth commandment is “thou shalt not steal.” Based on this commandment we have laws protecting private property and outlawing theft.

Two of the ten commandments were given for the protection of marriage. The seventh commandment states, “Thou shalt not commit adultery,” and the tenth commandment instructs, “Thou shalt not covet thy neighbor’s wife.” (See Exodus 20:13-17.) It is astonishing that laws protecting marriage have been removed from our law system.

**RECOMMENDATION:**

Re-establish laws on alienation of affection. Until the second half of the nineteenth century, legal actions could be brought for breach of marriage promise, alienation of affection, criminal conversation, and seduction.

Some states still maintain these laws. In 1974, a North Carolina husband was awarded $70,000 in an alienation of affection suit.

If a third party to a marriage knew that a husband or wife could sue for alienation of affection, it would immediately chill much of the widespread promiscuity destroying so many marriages today.

The legal definition of alienation of affection is “the winning away of a spouse’s love,” while criminal conversation is “adultery.” An alienation of affection law would not only preserve the integrity of the family but guarantee the husband and wife exclusive rights to their marriage relationship.

The civil court of Corpus Christi, Texas, wrote a significant commentary on divorce laws in a 1973 ruling:

“Until 1969, . . . Texas legislation on grounds for divorce remained virtually unchanged for over a hundred years. The adversarial nature of divorce litigation remained, and ancient ecclesiastical grounds for separation based upon fault formed the core of substantive divorce law.

“. . . It became apparent in the late 1960’s that the existing grounds for divorce and the defenses thereto were no longer compatible with modern beliefs.”

The changing beliefs in the sixties were certainly influenced by the repeal of the laws prohibiting alienation of affection suits in the forties.

Marriage was not originated by human law but by God’s Law. In 1913, Chief Justice Brown of the Texas Supreme Court wrote:

“All of the duties and obligations that have existed at any time between husband and wife existed between those husbands and wives before civil government was formed. The truth is that civil government has grown out of marriage . . . from which government became necessary to settle the differences in matters of private interest, to protect the weak, and to conserve the moral forces of society, to the support of religion and free government.”

**RECOMMENDATION:**

Based on the fact that “no-fault” divorce laws do encourage the destruction of marriages, these laws should be repealed. They should be replaced by laws which strengthen marriages and discourage any third party from interfering with them.

**PROJECT:**

**Research your state’s divorce laws.**

Check your state’s current revised statutes book on divorce laws. Research these topics specifically: no-fault divorce, irreconcilable differences, and irretrievable breakdown. If the books are not in your local library, contact a private law office or your county law library to obtain copies.

**Research divorce statistics in your state.**

Your local library should have books which contain your state’s divorce rates. Graph the rise of the divorce rate and relate this to the repeal of the alienation of affection laws and the passing of no-fault divorce laws.

**Write to your state representative.**

Use the facts you have gleaned to write an effective appeal to your state legislators, asking them to take what steps they can to design legislation which will protect marriages.

Keep a copy of your appeal with the printed conclusions of your research and any responses you receive from legislators in your Life Notebook or personal file.

Date completed __________ Evaluation ___________

3 Reject laws which make divorces convenient.
 HOW DOES GENETICS CONFIRM THE TRUTH THAT “TWO SHALL BE ONE FLESH”? 

The tremendous magnifying power of the electron microscope made it possible to discover the intricate designs within the cells of the human body.

When Jesus was questioned by the Pharisees about the permanence of marriage, He made it very clear that a husband and wife become one flesh.

“And he answered and said unto them, Have ye not read, that he which made them at the beginning made them male and female, And said, For this cause shall a man leave father and mother, and shall cleave to his wife: and they twain shall be one flesh? Wherefore they are no more twain, but one flesh. What therefore God hath joined together, let not man put asunder” (Matthew 19:4-6).

The ultimate demonstration that two become one flesh is in the conception of a child. There is amazing scientific evidence of a husband and his wife becoming one flesh when they consummate their marriage in a physical union.

HOW PHYSICAL UNION RESULTS IN “ONE FLESH” 

Each cell in the body of a man contains the same chromosomes. Each chromosome produces antigens which identify that man as a unique individual.

A marriage makes two people “one flesh.”

When a husband gives his seed to his wife in marriage, her body is prepared to make an adjustment to receive it and to recognize and accept any further antigens from her husband. If antigens from a different person enter her body, her body produces an allergic reaction to them.

The body of a promiscuous woman has a reaction to the antigens of each stranger. These lower her resistance, making her more susceptible to venereal diseases.

HOW CONCEPTION CONFIRMS “ONE FLESH”

The ultimate demonstration of “one flesh” occurs when a couple conceives a child.
The blueprints containing all the instructions for putting together a human being are located in tiny, coded packets called genes. Each gene is attached to other genes to form long chains called chromosomes.

Human beings have twenty-three pairs of chromosomes which carry an estimated 100,000 genes. If all the information contained in a person's genes were recorded in written form, more than one thousand books, each five hundred pages long, single-spaced, and typewritten would be necessary to present it.

Half of this incredible volume of information comes from each parent. Through a magnificent and complex process the characteristics of each parent are coded into genetic "words" which are joined together at the moment two parents become "one flesh."

The new "flesh" contains genetic information from both mother and father, yet it is not a carbon copy of either. It is a perfect union of the two.

The marvelous process by which two people become one flesh in marriage is unfolded in the study of genetics.

1 God created each person as a unique individual with unchangeable characteristics.

God designed Adam so that every cell in his body contained genes which determined his physical characteristics.

By taking a rib from Adam in order to form Eve, God ensured that she would be "... bone of his bone and flesh of his flesh ..." (Genesis 3:23). In designing Eve, God rearranged Adam's genes to give Eve unique characteristics.

"And the Lord God caused a deep sleep to fall upon Adam, and he slept: and he took one of his ribs, and closed up the flesh instead thereof; And the rib, which the Lord God had taken from man, made he a woman, and brought her unto the man. And Adam said, This is now bone of my bones, and flesh of my flesh: she shall be called Woman, because she was taken out of Man. Therefore shall a man leave his father and his mother, and shall cleave unto his wife: and they shall be one flesh."

Genesis 2:21-24

How do genes determine a person's characteristics?

Genes are actually a chemical alphabet which spell out instructions for making noses, ears, hair, eyes, blood, enzymes, bones, muscles, and fingernails. They determine every physical characteristic of our bodies.

The genetic chemical alphabet consists of four simple molecules. Scientists have named these "letters" adenine, thymine, guanine, and cytosine.

![Man's rib structure, from which God formed Eve](Image)

![The four letters of the genetic alphabet](Image)
Unlike English letters which are written on a page, genetic chemical letters are “written” along a spiraling chain which looks like a twisted ladder. The sides of the ladder are made up of alternating molecules of sugar and phosphate.

The rungs of the ladder contain the genetic letters which spell out the instructions for making a living cell. These instructions form the heart of the genetic code. Each rung consists of a pair of molecules. One is attached to the left side of the ladder, and the other is attached to the right side of the ladder.

The two molecules are bonded together where they meet in the middle of the rung. The mysterious beauty of these genetic letters is that adenine will bond only with thymine and cytosine will bond only with guanine.

This means that every rung of the ladder is either an adenine-thymine pair or a cytosine-guanine pair. When cytosine is on one side, guanine is always on the other. When adenine is on the left, thymine is always matched with it on the right.

The sequence in which the pairs are arranged along the ladder “write” out the genetic code which makes each individual unique. Each rung represents one letter. Three rungs form a genetic “word.” Several “words” form a gene, and many genes are linked together to form a chromosome.

Scientists call each group of three “genetic letters” a codon. The codon GTA directs a cell to produce the amino acid name histidine. AGC translates into the amino acid serine and the codon TCT results in the manufacture of arginine.

When a cell arranges these amino acids in a sequence, they form a molecule of protein. Different sequences of amino acids produce different kinds of protein.

The types and quantities of materials which our chromosomes specify determine whether our hair is brown, whether our teeth are straight, or whether we are girls or boys. Their chemical messages “spell out” every last detail of how our bodies are put together.

As these chains of genetic letters grow longer and longer, they begin to twist to form beautifully spiraling chains. Each complete chain makes up a single chromosome.
Each genetic letter is written between two spiraling legs of a long ladder.

When Francis Crick, Maurice Wilkins, and James Watson, three British biochemists, first discovered these chains in 1953, Watson was quoted as saying, “They are too beautiful not to be true.”

The technical term for these spiraling chains is deoxyribonucleic (dee-ox-rye-boe-NOO-klee-ik) acid. It is abbreviated simply as DNA. DNA is found in the nucleus of every living cell. Special messengers read the DNA code and use its information to manufacture all the materials which every living organism uses.

The messengers which “read” the genetic code stored in chromosomes are called ribonucleic acids or RNA. The root ribo means “a consecutive group of three.” RNA begins translating the code at the beginning of a gene and continues to copy the message until it reaches the end of a gene. The average gene contains from three hundred to five hundred three-letter words.

After a gene has been “translated,” an RNA messenger delivers that gene’s instructions to the manufacturing center of a cell.

How many possible genetic words can you make?

Genetic words are only three letters long, and there are only four letters in the genetic alphabet. How many different three-letter combinations can you make from the four genetic letters A, C, T, and G?

1242

Scientists have found that the combinations ATT, ATC, and ACT act like periods. They signify that a message is ending. The combinations TAC and CAC are like capital letters. They mark the beginning of a message. Each of the other combinations represents one of the twenty common amino acids which occur in nature.

How are genes protected from “typographical” errors?

When a cell divides, it must pass on a complete set of genetic information to each daughter cell. Even the slightest mistake jumbles the information, making it useless and often resulting in the death of the cell.

Consider the following example of a sentence made up of only three-letter words.

THE FAT CAT ATE THE BAD RAT.

Suppose the “C” and the “R” were simply switched. The sentence would then read,

THE FAT RAT ATE THE BAD CAT.

That clearly changes the meaning of the message. If such a switch occurred along a chromosome, the resulting mutation would likely end up in the death of the cell.

But what if a letter was simply missing? For example, if you take the “F” out the sentence would read,

THE ATC ATA TET HEB ADR AT.

A missing letter jumbles the message into complete nonsense. A missing “letter” in the genetic code of a chromosome would have the same effect.

Since 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.

To accomplish this incredible task, each genetic “ladder” is able to “unzip” like a zipper. The two halves separate like a ladder being cut down the middle of each rung by a chain saw.
As the ladder unzips, the letters of the genetic code are exposed. Half the letters remain attached to the right side of the ladder and the other half remain attached to the left side of the ladder. As the letters separate, they quickly attract extra unused letters from the surrounding “sea” of the cell’s nucleus.

New letters fill in the empty spaces to form two duplicate strands.

Adenine always picks up a thymine. Thymine always “grabs” an adenine. Cytosine always attaches itself to a guanine, and guanine always finds a cytosine. Like pieces fitting together to make a complete jigsaw puzzle, each genetic letter fits in place to form a duplicate copy of the original. The result is two identical chains of DNA where there had been only one before.

Every “flesh” contains a characteristic number of chromosomes. These are located in the nucleus of every body cell. Scientists call “body” cells somatic cells, based on the Greek root soma which means “body.”

The somatic cells of fruit flies contain four matching pairs of chromosomes, making a total of eight chromosomes. Cats have nineteen matched pairs or thirty-eight chromosomes altogether in every somatic cell. Humans have twenty-three matching pairs for a total of forty-six individual chromosomes. Every kind of animal has its own fixed number of chromosomes.

These matching pairs of chromosomes are like matching pairs of colored socks. Two green socks go...
together to make a pair. Two blue socks make a pair, but a green and a blue sock just do not match.

Geneticists call matching chromosomes homologous. Each chromosome of a homologous pair is a mirror image of its mate. They both control the same physical characteristics. A complete set of genetic instructions requires information from both halves of a homologous pair.

This cell has three pairs of homologous chromosomes. Can you tell which are the matching pairs?

However, a gene from one half of the pair may call for brown eyes while the same gene on the other half of the pair may call for blue eyes. Where the two homologous chromosomes "disagree," one gene always dominates over the other. At this point, dominant and recessive traits are determined.

**How does a cell protect itself from the confusion of multiple authorities?**

If two somatic cells joined together and each contributed its own twenty-three homologous chromosomes to the nucleus of the new cell, there would be a total of ninety-two individual chromosomes "floating" around in a new cell. These extra bits of dominant and recessive genetic information would lead to confusion and chaos. A cell simply cannot operate under the authority of two sets of chromosomes.

To prevent a confusion between these multiple authorities, the body converts somatic cells into special cells called gametes. The Greek word gametes means "husband," and the Greek word somatic means "wife." Gametes have only half the number of chromosomes as somatic cells. Our body neatly separates the matching pairs of homologous chromosomes so that each gamete contains one and only one chromosome from each pair.

Scientists call normal body cells which have a full set of paired chromosomes diploid. Gametes which have only one chromosome from each pair are known as haploid. Diploid and haploid come from three Greek words. Diplo means double; haplo means single; eidos (id) means resemblance. Something which is polyploid has too many extra chromosomes.

A polyploid pumpkin may grow to exceed two hundred pounds.

A polyploid pumpkin

Plant cells with extra chromosomes are usually bigger and more vigorous. However, animal cells which are polyploid almost always die.

Scientists call the process of sorting and separating homologous chromosomes meiosis. Meiosis comes from the Greek word which means "to lessen." Meiosis lessens the number of chromosomes in a gamete cell by half. When two gametes eventually unite to form a single cell, they each contribute one chromosome from each matching pair so that the new cell winds up with a new set.

**PROJECT**

The process of meiosis is like separating matching pairs of socks into piles so that each pile has one and only one sock from each pair.

As you read the next section, use matching pairs of socks to illustrate each of the ten stages of meiosis. You will need twelve socks altogether.

First find two pairs of socks which are just alike. That will make four socks. Then find four more identical socks which are different from the first group of four. You will now have eight socks. Finally, find another four matching socks which are unlike the first two groups of four. This makes three distinct groups with four identical socks in each group.
Each of these socks represents a single chromosome. Matching socks are like homologous pairs of matching chromosomes. In the following example of meiosis, the cell has six chromosomes which make up three matching pairs. See if you can follow the process with your socks.

**How does meiosis test, sort, and verify every chromosome before a gamete is ready for fertilization?**

Once meiosis begins, it usually proceeds smoothly and orderly without stops and starts unless there are errors, or gaps in the cell's chromosomes. If errors or gaps exist, the cell usually dies, and meiosis begins again in another more suitable cell.

The following ten stages illustrate significant changes in a somatic cell before it becomes a suitable gamete.

**1 Interphase —** Interphase is the normal condition of a somatic cell before it prepares to become a gamete. During interphase, a human cell contains a full set of twenty-three pairs of chromosomes. Because the chromosomes are busy about the business of the cell, they are uncoiled like fine silk threads and are not visible as individual chromosomes.

**2 Prophase I —** Prophase I marks the beginning of meiosis. The chromosomes duplicate themselves and then contract into short, thick coils which are actually visible through a microscope.

During prophase I, each chromosome finds its matching pair and "hooks" onto it with what scientists call a *kinetochore*. Kinetochore comes from two Greek words *kinetos*, meaning "moving," and *chora*, meaning "space." Kinetochores serve the purpose of moving chromosomes from one place to another.
Crossover is one way in which the genes of both parents are mixed together to form a unique set of chromosomes.

A single chromosome after duplication

A matching homologous chromosome after duplication

The spiraling chains of chemical letters which make up chromosomes intertwine.

Whole genes may "cross over" between homologous chromosomes without confusing the genetic code.

By the end of prophase I, the protective membrane surrounding the nucleus disappears, leaving the chromosomes protected only by the cell’s outer membrane.

Illustrate the duplication of chromosomes by adding the remaining six socks to the pile. Sort the socks into six matching pairs and tie each pair together in the middle with a string or rubber band. These pairs represent duplicates of the same chromosome.

Now match up the similar pairs. These are the homologous chromosomes which "cross over" when they intertwine. Tie each of the homologous pairs together loosely in the middle with another string or rubber band. Each bundle of four socks represents a tetrad.

Strings or rubber bands represent kinetochores which bind identical chromosomes together.

3 Metaphase I — Once the homologous chromosomes have found each other, they line up near the center of the cell’s nucleus. Geneticists call the imaginary middle of the nucleus the "equator."

As the chromosomes line up, they sort themselves so that one chromosome from each homologous pair is on an opposite side of the cell’s equator. Each chromosome tests the one opposite it to determine if it is truly matching. If not, it searches for one that is homologous.

Metaphase is a time of sorting and testing.

Threadlike spindles also form during metaphase. These spindles mark a specific pathway along which the chromosomes will move as they prepare to separate from their homologous mates.

Illustrate metaphase I by arranging your three bundles of socks in a straight line. Make sure each bundle is lying so that it has one tied duplicate pair above the imaginary line and its other tied pair below the line.

4 Anaphase I — The chromosomes now begin to move toward opposite poles of the cell. Each kinetochore follows its own spindle until the homologous chromosomes are completely separated. Each pole now has a "half set" of chromosomes, one chromosome from each homologous pair. Geneticists call this a haploid set. A full set of chromosomes which contains both halves of every pair is called diploid.

In the anaphase, the chromosomes separate toward opposite poles.
Illustrate anaphase by cutting the string or rubber band which binds each of the three bundles of socks (tetrads) together. Slowly pull the bundles apart. You now have six pairs of chromosomes. Three pairs are on one side of the cell, and three pairs are on the other side.

5 Telophase I — As a cell reaches the telophase, it literally pulls itself apart and becomes two separate cells. Each cell is different. Each contains a different half of the cell's original chromosomes.

Though a separation has taken place, neither of these two cells is a mature gamete.

Telophase I

As the cell membrane actually splits apart, two separate cells form. Note that the chromosomes still do not have their own protective covering around the nucleus. They are still protected only by the original cell membrane.

Illustrate telophase I by cutting the background cardboard or paper in two. This demonstrates that there are now two distinct cells. Each cell contains six chromosomes, but three of them are merely duplicates.

6 Interphase II — For a short time the chromosomes of each daughter cell uncoil and become invisible, but they quickly continue the process of meiosis as they prepare to become gametes.

Notice that the nuclear membrane does not completely seal. This leaves the chromosomes vulnerable except for the cell's protective outer membrane.

Illustrate interphase II by untying the duplicate pairs and mixing them together inside each of their respective cells.

7 Prophase II — As in prophase I, the chromosomes coil up and become visible, but they do not duplicate themselves again. Coiling appears to protect the long strands of DNA from breaking as they are sorted and pulled to opposite poles of the cell.

Illustrate prophase II by sorting and matching the socks in each respective cell. Tie the duplicate pairs together again with a string or rubber band.

8 Metaphase II—Once again, the chromosomes line up along the equator of each daughter cell. Again the cell tests each chromosome to see if it has a representative from each pair. If a chromosome is missing or if one has been added, the cell breaks off the meiosis process and starts over again with another cell.

After the sorting is complete, kinetochores attach the chromosomes to a spindle, and each cell prepares to divide a second time.
Illustrate metaphase II by lining up each duplicate pair of chromosomes along the cell's equator. Proper sorting and alignment at this time prevents errors and confusion later on when the mature gamete is ready to join another gamete to become one flesh.

Anaphase II — The duplicate copies of each chromosome which were made back in Prophase I now split apart and move along the spindle fibers to opposite sides of each cell. The separation of these duplicate chromosomes forms a haploid cell. It contains one and only one chromosome from each homologous pair. Haploid cells are unlike any other cell. They are reserved for a possible union with another haploid cell when the time comes for fertilization.

Illustrate anaphase II by cutting the strings or rubber bands (kinetochores) which bind the duplicate chromosomes together. Pull the individual chromosomes to opposite sides of each cell. This sorts the chromosomes into four separate haploid sets. Each group of socks has three different socks in it.

Telophase II — Each daughter cell now breaks in half to form four new cells. Each new cell is now a mature gamete and contains only one chromosome from each homologous pair. A protective membrane reforms around the nucleus so that the genetic information contained in the cell's chromosomes is doubly protected.

Mature male gametes are called sperm. A mature female gamete is called an ovum. In males, all four sperm cells survive. However, in females, only one of the four ever live. The other three shrivel up and die.

A gamete from a husband is now ready to unite with a gamete from a wife to form a completely new living cell. The half set of chromosomes contained in each gamete has been sorted and tested so that it contains one chromosome from each original pair. When a male and female gamete finally come together, each is ready to contribute its share of chromosomes to form a new human being.

Illustrate telophase II by cutting each background cardboard or paper in two again. This creates four distinct cells. Each cell now contains three socks (chromosomes). There is one kind of sock in each cell. Some cells, however, may have one right sock and two left socks. Other cells may have two right socks and one left sock, three rights, or three lefts. These variations of right and left socks add to the uniqueness of each mature gamete.
The characteristics of the child are fixed at the moment of conception.

A female gamete is called an ovum, and a male gamete is called a sperm. The process by which the two gametes join together to become one is called fertilization. During fertilization hundreds of sperm cells may surround a single ovum. However, as soon as one sperm penetrates the ovum's outer membrane, a clear impenetrable coating isolates the two cells from all others.

Scientists call the cell which results from the union of a sperm and ovum a zygote. The word zygote comes from the Greek word zygotos, meaning "yoked." The matching chromosomes contained in each gamete literally "yoke" the sperm and ovum together as one flesh.

How does every cell of a person's body share the same genetic information?

Since both the sperm and the ovum carry only a haploid number of chromosomes (one from each of the twenty-three pairs in a normal body cell), a zygote is not complete until each of the twenty-three chromosomes finds its homologous mate. This is like dumping twenty-three pairs of socks together and then sorting out the matching pairs. If a half of any pair is missing, the union is incomplete, and the cell dies.

At the instant the twenty-three matching chromosomes unite, every physical hereditary characteristic of the new zygote is determined and fixed. Within a few minutes the zygote divides in two. When it separates, it duplicates a complete copy of every chromosome so that each new cell has its own set.

The process by which a cell duplicates its complete set of chromosomes and passes it on to a new generation is called mitosis.

How do cells develop special purposes?

At first, all the daughter cells of a zygote are alike. However, within a few days some of the cells begin to look different. They still have the same chromosomes as every other cell, but not every gene on every chromosome is expressed.

This process of differentiation remains a mystery. No one knows how each particular cell knows which genetic instructions were meant for it and which instructions were meant for another cell. Some scientists believe that hormones manufactured by the chromosomes themselves provide a "cryptic" key which selectively directs each cell to fulfill its own predetermined purpose.
By the eleventh day, the growing zygote has formed several distinct features. These include a protective membrane, a yolk sac, and an embryo. The embryo itself has yet another three distinct parts. Its outer layer of cells will eventually become a child's brain, spinal cord, nerves, eyes, nose and ears. Its inner layer of cells becomes the pancreas, liver, lungs and lining of its digestive tract. Between the inner and outer layer is a middle layer which grows into bones, muscles, reproductive organs, and inner layer of skin.

Each of these features are controlled by the chromosomes which each parent contributed at the time of fertilization. Once a sperm and ovum unite, the chromosome composition of that first cell determines the characteristics of every other cell in the body.

4 Interfering with the structure of “one flesh” creates abnormalities.

A mutation is a sudden separation or disruption in a gene or chromosomes. Agents which cause these changes are called mutagens. The word mutagen is a combination of a Latin word muto meaning “to change” and a Greek suffix gen meaning “producing.” A mutagen is something which produces change.

A mutation caused the difference between these two deer.

The lack of coloring in this albino deer is the result of a mutation. Although albinos are beautiful, they cannot hide from predators and have difficulty seeing in bright sunlight.

Doctors have identified many diseases which are the direct result of genetic “errors.” Such diseases as diabetes, emphysema, and hardening of the arteries are known to be associated with genetic errors which may have originated as a mutation. In fact, there may be as many as two thousand mutant genes which lead to genetic diseases.

The most common mutagens are radiation, such as X rays or ultraviolet light, manmade chemicals like PCB and food additives, and viruses. These may affect only somatic (body) cells, or they may affect gametes (reproductive cells). Mutations which affect somatic cells are not passed on to new generations. They affect only the person in which
the mutation occurred. Mutations in gametes, however, may be passed on to successive generations.

Inherited mutations include dwarfism, hemophilia, several kinds of blindness, and sickle cell anemia. Sickle cell anemia is the result of a mutation in just one of 560 different amino acids necessary to keep red blood cells functioning properly.

Mutations may also occur during meiosis. This happens when homologous chromosomes fail to sort themselves properly. One gamete may wind up with an extra chromosome, and another gamete may be one short. Geneticists call this a disjunction. Disjunctions among animals and humans are almost always fatal.

5 Attempting to unite incompatible cells results in rejection.

Organ transplants are attempts to substitute body parts such as kidneys, hearts, skin, livers, or bone marrow from one person to another. Most of the time these substitutions fail because the body’s immune system recognizes the transplants as “different.” Once it recognizes an “intruder,” the immune system mounts an “all out” attack against the stranger.

Doctors call this immune response rejection. Rejection results from differences between the donor organ and the host recipient. With the exception of “identical” twins, no two people are alike. Every person carries antigens which mark a person as a
unique individual. These antigens are determined by the chromosomes which are found in every cell of our bodies.

Antigens reveal the identity of every individual.

Antigen marking sites

Antibodies recognize and destroy "strangers."

Because the severity of rejection is proportional to the difference between the chromosome of the donor and the host, some transplants have been temporary successes. Kidney transplants, for example, are considered a success if they last for five years. Yet, this does not mean that the host has "accepted" a strange kidney as its own. It only means that the rejection process is taking more than five years.

Of the 16,000 kidneys which have been transplanted in the last twenty years, every one (with the exception of identical twins) has shown the scars of rejection. Kidneys shared between brothers or sisters show a slow rate of rejection only because their chromosomes are very similar.

Almost half of the kidney transplants from unrelated donors are rejected before the end of their first year.

In order to retard the rejection process, doctors often administer drugs to "turn off" the immune system's natural rejection response. Unfortunately, this also weakens the body's defense against other diseases.

As a result of immunosuppressive drugs, many transplant patients eventually die from an infectious disease which their bodies would have normally been able to defend themselves against.

**Why are some transplants more successful than others?**

Cornea transplants of the eye are perhaps the most successful of all transplants from one flesh to another. Surgeons perform more than 10,000 cornea transplants each year. The reason for this success is that there is no "mixing" of blood in a cornea transplant.

The cornea is a clear, transparent, fibrous coat which covers the colored iris of an eye. Because light must pass through the cornea without distortion, it has no blood vessels. Without "blood contact" there is no way for the immune system to recognize a foreign cornea as a stranger.

Doctors refer to another form of successful transplant as an autotransplant. Auto comes from the Greek word autos, meaning "self."

Skin and hair transplants from one part of a person's body to another are autotransplants. Doctors may remove a healthy section of skin from one area and graft it to an injured area of the same person. Because the chromosomes of every skin body (somatic) cell are the same, the immune

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**Formation of identical twins**

Identical twins have exactly the same set of chromosomes. Two separate zygotes result from a single egg and a single sperm.
system recognizes the new skin as a part of itself and does not reject it. Skin transplants from one person to another simply do not work.

Hair transplants remove hair follicles from an area with lots of hair and implant them in areas of baldness. Again, because the chromosomes are the same, the transplanted hair is able to take root in its new location and grow.

Hair transplants

Before blood can be “transfused” from one person to another, it must be carefully “typed” and matched. Chromosomes determine which of four major types of blood a person accepts as his “own.” Mismatched blood reacts violently against strange blood, causing huge blood clots and death.

An AB type person can accept AB, A, B, or O type blood. Each blood type rejects any blood which looks strange to it. This prevents an A type person from receiving AB or B type blood.

The danger of genetic engineering

Genetic engineering is a science which studies mutations and attempts to separate and change genes to produce “super” strains of plants and animals.

Some examples of genetic engineering appear to be beneficial and indeed may be. However, a real danger exists in what geneticists do not know. When one gene changes through an artificial mutation, it is likely that other genes may also change. These other changes may result in harmful side effects which may not be evident for several generations.

Genetic engineering is like trying to rewire the circuitry of a complex computer without an instruction manual. Any change is likely to reduce the performance of the computer and may affect other components which we do not know about.

Making random repairs can only make the computer less functional. And, as with any electronic device, a short-circuit which destroys the whole computer is always possible.

Artificial changes in the estrogen level of dairy cows appeared beneficial. However, the changes were harmful to those women who drank the cows’ milk.
PROJECT

Relate the events during the process of meiosis to the development of maturity which must take place prior to a successful marriage.

THE PROCESS OF MEIOSIS

1. Interphase I shows no chromosomes. The chromosomes are present, but not visible.

2. Prophase I begins as chromosomes duplicate themselves.

3. Chromosomes shorten and thicken during prophase I. As they coil up, they become visible for the first time.

4. The tetrad which appear in prophase I mix genes so that each parents' characteristics are blended thoroughly together.

5. The protective nuclear membrane disappears early in prophase I. It does not reappear until the gamete is mature and prepared to join another gamete to form one flesh.

6. The sorting of chromosomes during metaphase I creates a unique arrangement of chromosomes which are expressed as specific characteristics in the next generation.

7. The reappearance of chromosomes during prophase II begins a second process of sorting and testing which prevents any mutations and mismatched chromosomes from maturing.

8. As chromosomes line up in metaphase I, each cell checks to see that it has representative chromosomes from each homologous pair.

9. The separation of chromosomes in anaphase I accentuates the unique qualities which the sorting and rearranging process have generated.

10. Telophase I marks the end of the first sorting and testing process. Neither of the two daughter cells which result are duplicates of the parent cell.

THE PROCESS OF MATURITY TOWARD "ONE FLESH"

A. A son or daughter separates from parents to cleave to a life partner in oneness of flesh.

B. Parents give final character check before the son or daughter separates from them for marriage.

C. A child comes to the place where he makes his own decision to receive Christ as personal Saviour.

D. The couple reproduces themselves in the lives of their children.

E. Discipline by both parents brings proper balance to the child's life.

F. Further testing and discipline are received during youth to protect from future mistakes.

G. The child begins to imitate the character he sees in his parents.

H. The young Christian develops character during his youth which shall be passed on to his own children.

I. The will of the child becomes an important factor to his life.

J. Faith is present in a child, but it must be developed.

Date completed __________ Evaluation ____________

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