Matthew 5:25–26

"Agree with thine adversary quickly, whiles thou art in the way with him; lest at any time the adversary deliver thee to the judge, and the judge deliver thee to the officer, and thou be cast into prison.

"Verily I say unto thee, Thou shalt by no means come out thence, till thou hast paid the uttermost farthing."

1. How well do you understand what it means to agree with your adversary quickly?

True/False

An adversary is anyone who has a complaint against you.
(Read Matthew 5:40.)

- As indicated by the context of the passage, an adversary is one who has a legitimate claim which will stand up in court. If a neighbor wrongly accuses you of putting your fence ten feet on his property, should you let him have the property? (See Proverbs 22:28.)

2. The wisest time to agree with an adversary is when he first tells you about his complaint.
(Read Proverbs 18:13.)

- Every complaint needs to be checked into quickly and thoroughly if the facts are not already known. Such an investigation should be agreed to immediately, unless the obvious facts would warrant a different response.

If you dented your neighbor’s car fender while backing out of the drive-way, and he offered to settle for fifty dollars, should you agree? (See Proverbs 22:1–3.)

3. Agreeing with the adversary applies to settling doctrinal differences.
(Read Jude 3–4 and Titus 3:10–11.)
- The basic doctrines of Scripture are non-negotiable. To compromise on any of them is to become an adversary of God.

A pastor taught that the tithe should be given to the local church. One member felt led of God to give his tithe elsewhere. Was the man right? (See Malachi 3:10–11.)

4. If taxes are used for immoral purposes, it is Scripturally and constitutionally right to withhold payment.
(Read Matthew 22:15–22.)

- Few governments were more corrupt than Herod’s and Caesar’s. Yet, Christ’s parents paid taxes to Herod’s government, which later slaughtered innocent children, and Christ paid taxes to Caesar’s government, which later put Him to death.

Is it right to give money to a Bible-believing church if you know that its leaders will misuse the money? (See Luke 21:1–4.)

Total Correct __________

Only a Sinner

1. Naught have I got - ten but what I re - ceived; Grace hath be - stowed it since
2. Once I was fool - ish, and sin ruled my heart, Cau - sing my foot-steps to
3. Tears un - a - vail-ing, no mer - it had I; Mer - cy had saved me, or
4. Sin - for - a sin - ner whose heart o - ver-root, Lov - ing his Sav - or to

I have be - lieved; Boast-ing ex-clud - ed pride I a - base; I’m on - ly a
God to de - part; Je - sus hath found me hap - py my case; I now am a
else I must die; Sin had a - turned me fear-ing God’s face; But now I’m a
tell what he knew; Once more to tell it would I em-brace—I’m on - ly a

sin - ner saved by grace!
“AGREE WITH THINE ADVERSARY QUICKLY, WHILES THOU ART IN THE WAY WITH HIM; LEST AT ANY TIME THE ADVERSARY DELIVER THEE TO THE JUDGE, AND THE JUDGE DELIVER THEE TO THE OFFICER, AND THOU BE CAST INTO PRISON.”

The “adversary” is not just any accuser, but one who has a legitimate claim against you. Agreeing with an adversary results in humility, which God rewards with grace. (See James 4:6.) Agreeing also allows us to demonstrate love to our brother.

“VERILY I SAY UNTO THEE, THOU SHALT BY NO MEANS COME OUT THENCE, TILL THOU HAST PAID THE UTTERMOST FARTHING.”

Refusing to agree with our adversaries forces God to use His ministers to humble us. They remove the basis of pride: the freedom and resources to make our own decisions.

What king was punished for not agreeing with his adversary quickly?

An Assyrian war chariot

In 587 B.C., God raised up an adversary against rebellious Israel, King Nebuchadnezzar of Babylon. Zedekiah, King of Judah, rejected God’s instruction to agree with his adversary, fearing instead the mocking of rebellious Israel.

When the king fled, he was captured. His sons were killed before his eyes; he was blinded and spent the rest of his days in prison. (See Jeremiah 37–39.)

What American colony was founded by those who were cast into debtors’ prison?

James Oglethorpe 1696–1785

In 1733, James Oglethorpe established a colony in America for imprisoned debtors. It was named “Georgia” for King George II, who granted them the charter for the colony.

John Wesley, whose father spent time in a debtors’ prison, came to Georgia as a missionary.
How does a nuclear reactor illustrate the need to agree quickly with an adversary?

Like conflicts among people which “heat up” over little matters, so a nuclear reactor produces a great amount of energy with a small amount of fuel.

If an over-heated reactor is not cooled down quickly by properly inserting control rods, it will melt down.

1. Legal battles consume huge amounts of time—our most valuable resource.
2. Judges and juries can be very unpredictable—cases can be lost on technicalities.
3. Physical and emotional strain damages health—our most important asset.
4. Hidden costs for lawyers and other expenses must be paid—even if the case is won.

When is not agreeing with an adversary not agreeing with God?

Three times in the first six verses of Romans 13, every government official is called “the minister of God.” Each one is “ordained of God” to punish evil and promote good. Thus, God called Nebuchadnezzar “My servant.” (See Jeremiah 25:9.)

By not agreeing with an adversary who has the law on his side, we resist God “and receive to (ourselves) damnation.”

“. . . For this cause pay ye tribute . . .” (Romans 13:6).
How many of these questions can you answer before studying the resources?

**HOW DO WE AGREE WITH AN ADVERSARY?**

- What four things can we agree to quickly with every adversary?  
  1015
- How does royalty relate to courtesy?  
  1016
- How can you agree if the charge is partly false?  
  1019
- What if our adversary is totally wrong?  
  1022

**HOW SHOULD WE AGREE WITH OUR ADVERSARY THE DEVIL?**

- How does Satan use God's Word to accuse Christians?  
  1023
- When will disagreeing with Satan cause us to pay the uttermost farthing?  
  1024

**HOW DID DEBTORS' PRISONS REQUIRE THE "UTTERMOST FARTHING"?**

- Why were English debtors in greater jeopardy than criminals?  
  1025
- Why did death often come to a debtor's family?  
  1026
- How were English debtors who agreed with adversaries given a second chance?  
  1027
- How does God's Law deal with debtors?  
  1028

**HOW DO REACTORS TEACH US TO AGREE?**

- What are uncontrolled chain reactions?  
  1029
- What are unstable atoms?  
  1030
- How did the "fat man" become world famous?  
  1031
- How do rods control chain reactions?  
  1033

**WHAT IS THE "UTTERMOST FARTHING" IN LAW?**

- What is a farthing?  
  1043
- What are the two major court systems in our country?  
  1044
- What are the four types of court sentences?  
  1047
- In what three ways can a sentence be fulfilled?  
  1048

**IS PAYING TAXES ALWAYS RIGHT?**

- In what year did the Supreme Court rule that income taxes were unconstitutional?  
  1051
- Why should Christians pay taxes to a corrupt government?  
  1052
- How should we respond to unjust taxes?  
  1056

**HOW CAN "DUE PROCESS" BE USED IN CHURCH?**

- What are the basic parts of due process?  
  1059
- Who should carry out due process in the church?  
  1061
- How can a church judgment be enforced?  
  1066

**WHEN IS MEDICAL AID LEAST PAINFUL?**

- What turns off pain?  
  1067
- What are the ABCs of first aid?  
  1073
- What are eight benefits of agreeing with an adversary quickly?  
  1074
LEARN WORDS WHICH DEFINE HOW WE CAN AGREE WITH OUR ADVERSARY QUICKLY.

The challenges and far-reaching results of agreements are illustrated in the 1626 treaty at Fort Amsterdam between Peter Minuet and the Indians. That little trading post is now New York City, and the road along the walls of the fort is known throughout the world as Wall Street.

The adversaries with whom we are to agree quickly are those who have a legitimate claim against us. They are individuals who can take their grievances to a court of law and receive judicial relief from the injuries or losses which they have suffered because of our words, actions, or neglect.

It is in these situations that we are instructed to come to an agreement quickly. The goal of our agreement must go beyond a settlement of the dispute. It must have as its final object the restoration of fellowship with each other and with the Lord.

Quick agreement must be more precise than simply affirming whatever charges an adversary brings against us. It must include the following aspects:

1. **What does it mean to be approachable?**

   The word *approachable* comes from the French word *proche*, meaning “near.” This French word is taken from the Latin word *proximus*, from which we get our English word *proximity*. To be approachable means “to communicate a spirit of warmth and openness which invites others to come near us.”

2. **How does being approachable help you agree with an adversary?**

   By being approachable you encourage your adversary to bring his full complaint directly to you rather than give you only part of it or tell it to others.

3. **What signs might cause people to think you are unapproachable?**

   - Wearing a frown or a stern facial expression
   - Cutting people off in conversation
   - Ignoring questions
   - Moving so quickly people think you have no time for them
   - Demonstrating a defensive attitude
   - Appearing to be distracted or aloof
   - Standing or sitting with rigid body posture
How can you learn to be more approachable?

1. Take the signs of being unapproachable and list what their opposites would be; e.g., wear a smile.
2. Ask a family member to rate you on a scale of 1 to 10 on each of the items on your list.

Inattentiveness can be communicated in many painful ways.

What does it mean to be attentive?

The word attentive comes from the Latin words *ad*, meaning "to," and *tendo*, meaning "stretch" or "strain." Someone who is attentive literally stretches his ear toward a sound to hear it accurately. This type of deliberate effort can also be applied to being attentive with the eye.

How does being attentive help you agree with an adversary?

Being attentive allows you to hear the real complaint of your adversary, and it allows him to know that you are sincerely interested in coming to an agreement.

What would cause people to think you are inattentive?

- Looking around during the conversation
- Letting your mind wander
- Fidgeting with your hands or feet
- Asking questions they have already answered
- Looking at your watch

How can you learn to be more attentive?

- Practice good eye contact.
- Nod your head at appropriate times.
- Take notes if appropriate.
- Lean forward.

Observe the people around you during the next worship service you attend to see what signs they give of attentiveness or inattentiveness.

What does it mean to be courteous?

The word courteous comes from the Saxon root for *court*, curt, meaning "a circle or enclosure," such as a yard. In French and Spanish, this word is associated with a royal court or a closed circle of people. Courtesy, then, is literally treating people as you would treat royalty, making them feel special.

A gesture of courtesy is shown to Queen Elizabeth as she crosses a muddy spot in the street.

How does being courteous help you agree with an adversary?

When you realize that your adversary is one whom Christ made and for whom Christ died, it is very easy to treat him as somebody who is very important. If your adversary is a Christian, we have the further understanding that he is a child of the King of Kings; therefore, in a very real sense he is royalty and should be treated as such.
What would cause people to think you are rude?
Rudeness is meeting your own needs at the expense of someone else, whereas courtesy is meeting the needs of another at your own expense. List at least five examples of rudeness which would hinder you from being able to agree with an adversary.

What does it mean to be cooperative?
Cooperative comes from the Latin co, meaning “together,” and operor, meaning “work.” This word literally means “working together” or “giving mutual efforts to produce a common goal.”

How does being cooperative help you agree with an adversary?
Agreement requires a spirit of working together. When that attitude is missing, there will not be the desire or the ability to agree with an adversary.
The very spirit of cooperation is a sense of teamwork in which you willingly sacrifice for the benefit of God’s higher purposes.

What would cause people to think you are uncooperative?
☐ Refusing to talk with an adversary
☐ Focusing on the failures of your adversary
☐ Ignoring the counsel of your friends
☐ Demanding that things be done your way

How can you learn to be cooperative?
Write out God’s goals for your adversary. Determine how agreeing with your adversary will allow God to achieve His purposes in your adversary’s life. Then ask God for the grace to do what you know is right, even though it means humbling yourself and possibly losing some temporal benefits.

SECOND STEP OF AGREEMENT
AGREE WITH YOUR ADVERSARY ABOUT THE COMPLAINT.
It is difficult to reason in the face of emotion. Very often an adversary will say one thing when he or she actually means something else. Not only do words have different meanings and associations for various people, but when they are used in an emotionally charged way, they can be misunderstood even further.
For these reasons, the second step of agreement must be to restate the adversary’s position to him so he can confirm that you understood what he said and that you will both be working on the same problem.
You will need to be characterized by the following words to carry out this step successfully.

☐ Exact
☐ Thorough
☐ Serious
☐ Objective

The judge in a courtroom proceeding will require the exactness, thoroughness, seriousness, and objectivity which should have been exercised before the case got as far as his court.

What does it mean to be exact?
The term exact comes from two Latin words, ex, meaning “out,” and agere, meaning “to drive.” The literal meaning of the verb form of exact is “to drive, to urge, or to press.” The descriptive form of the word takes on the connotation “the quality of forcing or demanding accuracy.”

How does being exact help you agree with your adversary?
It is impossible to agree with a nebulous or confusing accusation. Help your adversary to be
exact in describing his complaints, and be exact in repeating the complaint back to him. Thus, not only will you enable him to think through the facts of the problem more clearly, but also you will better know what you can and cannot agree to.

6 What does it mean to be thorough?

The word thorough comes from the Saxon root *thurh*, which simply means “a door,” thus signifying “a passage through.” A person who is thorough is one who “passes through” all obstacles to reach the completion of a project or study.

How does being thorough help you agree with your adversary?

Thoroughness is required in asking the right questions to obtain a full statement of the complaint. By “going through all the doors” of your adversary’s thoughts, you will probably discover factors which will help you understand and appreciate the adversary as well as the complaints he has toward you.

7 What does it mean to be serious?

The adjective serious comes from a Shemitic root which means “to stretch or strain” and carries the connotation of giving earnest attention to a matter by “stretching” all one’s faculties to fulfill the obligations involved. Seriousness includes recognizing the proper weight or gravity of a situation. Seriousness eliminates all joking, trifling, or frivolity.

How does being serious help you agree with an adversary?

A serious attitude assures your adversary that you understand the importance of what he is trying to say to you. It also puts you in the proper frame of mind to deal with the situation wisely and quickly.

The rich counsel and comfort of Psalms and Proverbs are designed for the serious person who is facing adversarial situations. On the other hand, a frivolous attitude will cause more reaction and compound the problem.

Only as you see an adversary from God’s perspective will you be able to have a proper attitude of seriousness.
What does it mean to be objective?

The word objective comes from the French form objectif, which means "the object alone." Thus, the literal definition of this word is "considering only what is actually in the object itself, without adding personal evaluation or feelings."

How does being objective help you agree with your adversary?

Adding your emotional response to the complaint your adversary shares with you will cause you to misunderstand the message God is giving to you through him. Impartial justice demands an impersonal hearing on your part. Your accuracy in restating the accusations to your adversary will be directly proportional to your ability to be objective.

PROJECT

Let us suppose you borrowed five hundred dollars from a friend ten years ago and you have not yet paid it back. A wall has come between you and the friend, and you desire to clear up the debt quickly so that you can restore fellowship. How would each of the four attitudes defined in this section apply to this situation?

THIRD STEP OF AGREEMENT

AGREE TO INVESTIGATE THE ALLEGATIONS OF YOUR ADVERSARY.

The instruction to agree with your adversary quickly does not rule out a thorough investigation of the facts. "He that answereth a matter before he heareth it, it is folly and shame unto him" (Proverbs 18:13).

Investigating the allegations of an adversary will involve the following procedures.

- Research
- Analyze
- Clarify
- Certify

What does it mean to research the facts?

The word research comes from the Latin prefix re, meaning "again," added to the French word chercher, meaning "to seek." It includes the idea of rambling everywhere in search of something. Thus, researching the facts calls for a careful examination of all the possibilities to ensure an accurate report.

How does researching the facts help you agree with your adversary?

By committing yourself to seeking everywhere in order to ensure a truthful report of the facts, you demonstrate to your adversary that resolving the matter he shared with you has a high priority in your life. Careful research will also give you direction for the solution because root causes of misunderstandings will become evident to you.

What does it mean to clarify the facts?

The word clarify comes from two Latin words, clarus, meaning "clear," and facio, meaning "to make." Clarus was a derivative of the Latin word lux, which means "light." Thus, the connotation of clarify includes "to add light to something so that it shows more clearly." One of its definitions is "to purify from error or misunderstanding."

How does clarifying the facts help you agree with your adversary?

Most conflicts involve surface issues and root problems. The root problems must be clarified in order for the surface issues to be understood properly and dealt with wisely.
What does it mean to analyze the facts?

The word analyze comes from the Greek word ἀναλύω (ah-nah-LOO-oh), which means "loosing or resolving." The process pictured in the Greek is loosing the parts from the whole so that each can be scrutinized in detail.

How does analyzing the facts help you agree with an adversary?

Most controversies involve several issues. Each party may be correct about some of the issues but incorrect about others. When this is the case, a party tends to concentrate on the points about which it is right and to blame the adversary for the points where it is wrong.

With our own faults blocked out of our minds, we tend to solicit sympathy from others outside the case by sharing an inaccurate report of the conflict. When we isolate the facts and deal with them individually, we can make significant progress in coming to an agreement quickly.

Sir Alexander Fleming accidentally discovered penicillin while analyzing green molds and observing that a certain kind killed bacteria.

What does it mean to certify the facts?

Certify comes from the combination of two Latin words, certus, meaning "certain," and facio, meaning "to make." Thus, the English word literally means "to make certain" or "to establish the verity of a fact."

How does certifying the facts help you agree with your adversary?

The entire basis of agreeing with your adversary will come from certifying the facts.

Statements which are not true cannot be certified and, therefore, cannot be agreed to.

The apostles reasoning with the people

PROJECT

A conflict arose between two different ethnic groups in the early church, concerning the care of their widows. The apostles were able not only to resolve the problem, but also to use it as a means of expanding the outreach of the church. Read the account in Acts 6:1–7, and explain how each of the four procedures defined in this step was used.

FOURTH STEP OF AGREEMENT

AGREE TO TAKE PROPER ACTION BASED ON THE FACTS.

When guilt has been established, it must be dealt with quickly and wisely. To delay in acknowledging wrong, asking forgiveness, making restitution, and rebuilding relationships is only to cause bitter animosity in an adversary.

Therefore, at this point the instruction of the Lord Jesus Christ must be carried out. "Agree with thine adversary quickly, whiles thou art in the way with him; lest at any time the adversary deliver thee to the judge..." (Matthew 5:25).

Four responses constitute final agreement with an adversary:

- ☐ Relent
- ☐ Repay
- ☐ Reply
- ☐ Rebuild
13 What does it mean to relent toward your adversary?

Relent comes from the Latin, re, meaning “again,” and lentus, meaning “gentle, soft, or pliable.” The primary sense of this word is “to soften in temper; to become more compassionate or yielding.” Its connotation includes “giving in” or “capitulating.”

How does relenting help you agree with your adversary quickly?

Your adversary is often more hurt by attitudes than by actions. For this reason he wants to see a genuine spirit of repentance in you. He needs to know that you realize how hurtful your offenses have been. Without the remorse that comes from relenting, your actions of reconciliation may not be appreciated or accepted.

PROJECT

Relive an offense which you have committed toward another through his eyes and his feelings. Compare your need to relent toward him with the forgiveness God has given you through Christ.

14 What does it mean to reply to your adversary?

The word reply comes from the Latin, re, meaning “again,” and plicare, meaning “to fold.” The picture of these words is that of turning or sending back. To reply is “to make a return in words or writing to something that is said or written by another.”

Reply also has a legal usage in “to answer a defendant’s plea.” The defendant pleads in a bar to the plaintiff’s declaration; the plaintiff replies to the defendant’s plea in a bar.

How does replying help you agree with your adversary quickly?

No agreement can be expressed without a reply on your part. That reply must answer each of your adversary’s concerns with special emphasis on his major points.

PROJECT

After Gideon conquered the Midianites, he faced the hostility of his own countrymen who accused him of not calling them to the battle.

Read about the conflict which Gideon had with men of Ephraim in Judges 7:24–8:3. How did Gideon’s reply avert a new outbreak of warfare?

15 What does it mean to repay your adversary?

The word repay comes from the Latin prefix re, meaning “again” or “back,” and the Latin
pacare, meaning "to satisfy." Pacare comes from the Latin word pax, which means "peace." Thus, the literal meaning of repay is to compensate for a loss in order to make peace with the offended party.

How does repaying help you agree with your adversary quickly?

After repentance and confession there must be restitution for any damage or loss which has resulted from the offense. The restitution is so basic to the process of agreement that without it, the matter cannot be put to rest.

PROJECT

Based on God's Law of restitution in Exodus 22:7-9, how much should you repay a store owner if you stole ten dollars' worth of merchandise?

16 What does it mean to rebuild a relationship with your adversary?

The word rebuild comes from two words, the Latin prefix re, meaning "again," and the Saxon root byldan, meaning "to confirm." The primary sense of the Saxon word is "to set, fix, or make firm."

Rebuilding literally involves renewing a structure or constructing what has been demolished. With regard to relationships, this process would include strengthening by cementing or knitting together.

How does agreeing with your adversary quickly help you rebuild a relationship with him?

The longer an offense is allowed to continue, the more danger there is of its turning to bitterness.

Therefore, Paul counseled, "... Let not the sun go down upon your wrath" (Ephesians 4:26).

Quick agreement means keeping short accounts. Where there is bitterness, it may take a long time to rebuild since "a brother offended is harder to be won than a strong city..." (Proverbs 18:19).

PROJECT

On a sheet of paper, list all the consequences of agreeing with your adversary. Then weigh these consequences against the eternal benefits which would come to you if through your actions you could win your adversary to Christ or restore him to fellowship in the Lord.

WHAT ARE WE TO LEARN FROM CHRISTIAN MARTYRS ABOUT AGREEING WITH OUR ADVERSARIES?

Those who would ask us to agree with false teachings or wrong actions are not our adversaries but God's. In these situations God wants us to agree with His Word and be willing to suffer for it as a testimony for His glory.

Date completed __________ Evaluation __________
HOW DOES THE GREEK WORD FOR "ADVERSARY" IDENTIFY THE MOST CRUCIAL ENEMY A CHRISTIAN HAS?

Peter describes the devil as an adversary who walks about as a roaring lion "seeking whom he may devour."

WHAT IS THE GREEK WORD FOR ADVERSARY?

ἀντίδικος (ahn-TIH-dih-koss)

Its primary meaning is "an opponent in a lawsuit." It is made up of two words: ἀντί, meaning "against," and δίκη, meaning "justice." It denotes an opponent or enemy who has taken his case to the court, hence, one who initiates legal action in a dispute.

HOW OFTEN IS THIS WORD USED IN SCRIPTURE?

The Greek word ἀντίδικος appears only five times in the New Testament. It occurs three times in Gospel accounts of the Sermon on the Mount (Matthew 5:25 [twice] and Luke 12:58), once in Christ's discourse on prayer (Luke 18:3), and once in Peter's instruction to elders (1 Peter 5:8).

WHAT IS THE SIGNIFICANCE OF THE USE OF THE WORD "ADVERSARY" IN 1 PETER 5:8?

"Be sober, be vigilant; because your adversary the devil, as a roaring lion, walketh about, seeking whom he may devour" (1 Peter 5:8).

The devil is the archenemy of God and an adversary of every Christian. His adversarial function is defined in the very meaning of his name:

διάβολος (dih-AH-baw-loss)

The English derivative of διάβολος is "the Devil." It is used 34 times in the New Testament for Satan, and it means "an accuser."

Revelation 12:10 describes his activity: "And I heard a loud voice saying in heaven, Now is come salvation, and strength, and the kingdom of our God, and the power of his Christ: for the accuser of our brethren is cast down, which accused them before our God day and night."

The word for accuser is:

κατήγορος (kah-TAY-gaw-ross)

It means "to speak against in the assembly, to be a plaintiff, i.e., to charge with some offense against the law."

HOW DOES SATAN USE THE LAW TO BE AN ADVERSARY TO CHRISTIANS?

Satan is very familiar with the Law of God. He debated God's Word with Eve, he demonstrated an understanding of it while accusing Job, and he quoted it in tempting Jesus.

Satan knows that when a Christian violates God's Law, consequences of justice will follow. In fact, God often allows him to personally carry out these consequences in the life of a believer.

Paul affirmed this when he gave his instructions to the Corinthian church concerning the immoral man in their midst: "...Deliver such an one unto Satan for the destruction of the flesh, that the spirit may be saved in the day of the Lord Jesus" (1 Corinthians 5:5).
HOW SHOULD A CHRISTIAN AGREE WITH HIS ADVERSARY THE DEVIL?

A Christian can agree only with statements which are Scripturally true. Unfortunately, the accuser of our souls has many true accusations which he can level at every Christian. Consider the following examples.

SATAN'S ACCUSATION: This person is not worthy of salvation.

AGREEMENT: This statement is true. Nothing I have done or can do will make me worthy of salvation. All my righteousness is as filthy rags. (See Isaiah 64:6.)

"As it is written, There is none righteous, no, not one" (Romans 3:10).

SATAN'S ACCUSATION: This believer is too weak to overcome temptation.

AGREEMENT: I do not have the ability to overcome temptation in my own strength. "For I know that in me (that is, in my flesh,) dwelleth no good thing: for to will is present with me; but how to perform that which is good I find not" (Romans 7:18).

HOW DOES AGREEING WITH OUR ADVERSARY FREE US TO AGREE WITH GOD?

If we simply agree with Satan, we will be condemned. If we, however, take his accusation into the “courtroom” of God’s presence, we are able to give a clear Scriptural response.

In this setting, the Lord Jesus Christ becomes our advocate, and the Holy Spirit intercedes for us. “. . . And if any man sin, we have an advocate with the Father, Jesus Christ the righteous” (I John 2:1).

ANSWER TO FIRST ACCUSATION: Even though I am unworthy, “… God commendeth his love toward us [me], in that, while we [I] were yet sinners, Christ died for us [me]. Much more then, being now justified by his blood, we [I] shall be saved from wrath through him. “For if, when we [I] were enemies, we [I] were reconciled to God by the death of his Son, much more, being reconciled, we [I] shall be saved by his life” (Romans 5:8–10).

ANSWER TO SECOND ACCUSATION: Since I cannot overcome temptation in my own strength, “… God is faithful, who will not suffer you [me] to be tempted above that ye [I] are able; but will with the temptation also make a way to escape, that ye [I] may be able to bear it” (I Corinthians 10:13).

HOW WILL REFUSING TO AGREE WITH OUR ADVERSARY, THE DEVIL, FORCE US TO PAY THE "UTTERMOST FARTHING"?

If we refuse to agree that we are unworthy of salvation and set about to establish our own righteousness, we will be required to keep the whole Law, since it is written in Scripture, “For whosoever shall keep the whole law, and yet offend in one point, he is guilty of all” (James 2:10).

If we think we have the ability to overcome temptation by our own efforts, we lay the groundwork for failure. We are warned in Scripture, “Wherefore let him that thinketh he standeth take heed lest he fall” (I Corinthians 10:12).

PROJECT

List three other accusations Satan could bring against you. What words would express your agreement with him? What Scriptural response can you give him?

Date completed ___________________ Evaluation ___________________
In eighteenth century England, men who could not pay their creditors were hauled off to debtors' prison, causing great hardship to their families.

As the western world departed from the principles of Scripture, man experienced the sufferings of war, the ravages of the Black Death, and the rise of debtors' prisons. During the seventeenth and eighteenth centuries, the largest and most notorious of these prisons was established in England.

Because the English prisons were primarily places where people could be held while awaiting trial or physical punishment, little effort was made to ensure sanitary conditions or proper supervision. Debtors, however, were not held temporarily, for they had to satisfy their creditors before being released.

Men, women, and even children were taken to prison. Here they experienced a vicious cycle; they could not work to produce an income while they were being held in prison, and they could not be released until they paid both their bills and their maintenance fee in the prison.

A debtor who had strong family ties or close friendships could be spared the misery of a debtors' prison. However, those who failed to maintain such relationships and who did not quickly agree with their adversaries were subjected to the cruel consequences of uncaring confinement.

Even though Parliament exercised some control over the prisons through regulation, many abuses occurred because half the prisons in England were privately owned. Bribery, extortion, and the selling of special privileges brought the owners many sources of increased revenue.

In 1773, John Howard, a land owner from Bedfordshire, became High Sheriff of that county. One of his duties was supervising the "gaol" or jail.

He was so horrified by all that he witnessed during his term in office that he published an exhaustive work calling for prison reform entitled, The State of Prisons in England and Wales. The following description of his experience is reported in Christopher Hibbert's book, The Roots of Evil.

"Payment for 'easement of irons' was, in fact, common to many gaols [jails] and this was only the first of the fees which the new prisoner was expected to pay. He had not only to pay to avoid being tortured, he often had to pay even to exist, for in many gaols [jails] prisoners were given nothing to eat, and charitable contributions of food, confiscated in the markets as unfit for human consumption or of light weight, soon fell into the hands of the prison bullies."
At Exeter the debtors’ ward was called the ‘shew’ because the inmates begged for food by letting down a shoe from the window; other prisoners were marched through the streets of the town to beg. In some prisons, even when food was provided, it did not amount to much more than a bowl of ‘bread boiled in mere water.’

In 1729 a Parliamentary Committee found that more than three hundred fifty prisoners were dying of starvation in Marshalsea prison, and that in only three months of a previous year, the death toll had reached three hundred. The sight of men and women in many other prisons fighting with rats in damp cellars for the scraps of food ‘thrown to them through a trap-door’ was not uncommon.

A man took his dog into Knaresborough jail with him to defend him from vermin, but the dog was soon destroyed and the prisoner’s face much disfigured by them. These terrifying cellars were ‘often damp and noisome,’ half a foot deep in water, or with an open sewer running through the centre of the floor. They had no chimneys, no fireplace, no barrack beds; the wretched inmates huddled together for warmth upon heaps of filthy rags and bundles of rotten straw reeking with foul exhalations...and all manner of indescribable nastiness.

Frequently the daily ration of water was not enough for washing, and in one prison John Howard found that even this had to be bought. With insufficient water and ventilation, with vermin and insects crawling everywhere, without proper food or light or sanitation, shivering half (clothed) in the winter and suffocating in the summer heat, most prisoners lived out the days and nights in utterable misery.

Drunken and hardened inmates who were oblivious to their desperate conditions often responded to the good work of John and Charles Wesley with ridicule.

Others who could afford it got drunk and stayed drunk, oblivious to the stumbling lunatics, to women giving birth to babies who were left to die on the piles of filthy straw, to rats burrowing in the dirt and excrement, to fellow prisoners suffering from gaol [jail] fever, that virulent form of typhus which killed a high proportion of prisoners every year."

An English mother doing washing in her humble cottage. Her whole day’s labor would bring only a few pence.

Families of the men who languished in the debtors’ prisons faced incredible hardships as well unless they had the support of caring relatives, church members, or friends.

Mothers became the sole source of the family income, often doing an entire day’s washing for a few pence. This was not sufficient to purchase the day’s food for the children, let alone provide for their clothing needs.

As the family circumstances grew even more desperate, whatever items might bring any money were pawned to ruthless brokers, who often took advantage of the debtor’s family.

The ravages of this type of existence often brought illness and death to the members of the family. If the mother died, the orphaned children were sent to the workhouses of England for their
Here they learned the ways of the street unless they had strong Christian training. Many of them became thieves and murderers.

In these cases, the cycle of devastation was completed as bitter and rebellious sons and daughters served their own sentences in England’s prisons.

Ruthless pawnbrokers gave only small pittances for the “valuables” of the poor.

Charles Dickens alerted the English public to the abuses of the workhouses in several of his novels. Above are two boys from a workhouse teaching a newcomer to pick the pockets of the wealthy.

**HOW WERE DEBTORS WHO AGREED WITH THEIR ADVERSARIES GIVEN A SECOND CHANCE?**

A young soldier briskly made his way through the swirling English mist on his way to the debtors prison. He hoped to visit his close friend, Robert Castell, a promising architect who had fallen on hard times.

As the jailer carelessly fumbled through his official records, the young officer stared in disbelief at the ragged beggars and pitiful drunkards that inhabited the filthy courtyard. Finally, the jailer hesitated and looked up from his list apologetically.

“I’m sorry, governor. Your friend Mr. Castell died of the smallpox three weeks ago.” The tragedy of that moment stirred James Oglethorpe to persuade his fellow members of Parliament to carefully investigate the plight of English debtors.

A deep sense of sadness and charity welled up in the heart of the twenty-six-year-old politician as he personally led the government inquiry. His findings revealed the desperate needs of the debtors and resulted in an appeal to King George II.

The royal petition requested a charter for a province to be located southwest of South Carolina where English men and women would have an opportunity for a fresh start in life.

Public support for the project was incredible. Mr. Oglethorpe raised fifteen thousand pounds, and Parliament added ten thousand pounds in cash and supplies. Merchants donated rare roots, seeds, and vines. Military leaders contributed guns and powder, and clergymen supplied Bibles.

Finally, the trustees of the new colony began to choose candidates for the frontier experiment. Mr. Oglethorpe himself described the ideal prospective colonists as “gentlemen of decayed circumstances, men of good families and some education, who had fallen on evil days; some undone by guardians, some by lawsuits, some by accidents in commerce, some by stocks and bubbles, and some by suretyships.”

Candidates for the new colony were carefully chosen. The references of each applicant were checked thoroughly, and no person in debt was considered unless he had a permission letter from his creditors which gave him the right to leave the country.

A pastoral letter testifying of a prospective colonist’s sound mind and morals allowed that person to have preference over others in the selection process. A solid allegiance to the king was also required.
In October, 1732, the galley Anne set sail from Gravesend with thirty-five families made up of one hundred twenty-five people. Accommodations were rugged, and the passage of two months was quite turbulent.

James Edward Oglethorpe traveled to the new colony with this first group. When the weather was good, he brought all the men on deck and drilled them in the use of arms so that they would be able to defend the borders of the colony adequately upon their arrival.

On January 13, 1733, the Anne dropped anchor off the coast of Charleston. The authorities of South Carolina were so grateful for these prospective armed citizens who would be living between them and the Indians that they gave them gifts of breeding cows and bulls and offered transportation and protection for their journey to Georgia.

By 1750, five thousand people sponsored by Mr. Oglethorpe's charter had come to Georgia. Six hundred forty-six of them were debtors who had received permission from their creditors to build a new life in the new land.

James Oglethorpe made peace with the Indians and established trade with them as he founded a colony in Georgia.

**PROJECT**

Study the contrast between the English debtors' prisons and God's way of dealing with debtors.

**Why were the debtors' prisons unsuccessful in resolving debt?**

- Debtors' prisons failed to provide any means of restitution to the lender.
- Debtors' prisons ignored the principle of personal responsibility for debt.
- In an attempt to punish the debtor, the debtors' prisons removed the individual from a constructive way of life.
- Conditions within the debtors' prisons were degrading.
- Discipline within the debtors' prisons was corrupt and inconsistent.

**How does God's Law deal with debtors?**

According to God's Law, those who unwisely fell into debt had to repay their creditors as bond servants. God's bond servant system provided full restitution for the lender and legal safeguards for the debtor during his period of bondage. What specific guidelines did God establish to satisfy the lender and protect the debtor?

- After a maximum of six years of service, a bond servant had to be set free during the sabbatical year. (See Exodus 21:1–4.)
- The sabbath day was a day of rest for the bond servant. (See Exodus 20:10.)
- A bond servant was allowed to participate in religious worship. (See Deuteronomy 12:12.)
- A master could not kill his bond servant. (See Exodus 21:20–21.)
- If a master harmed his servant, he was required to free him. (See Exodus 21:26–27.)
- All servants were released during the Year of Jubilee, which took place every fifty years. (See Leviticus 25:10.)
- A bond servant could voluntarily remain with his master after six years. This motivated a master to treat his servant with kindness. (See Exodus 21:5–6.)
- When a bond servant earned his freedom, his master was instructed to liberally furnish him with supplies as a memorial of God's deliverance out of Egypt. (See Deuteronomy 15:13–15.)

The bond servant statutes that the Lord established were based on the premise that both servant and master feared the Lord. The Law went to great lengths to protect both parties. God's methods proved to be much more equitable and humane than man's attempts to deal with debtors.

*Date completed __________  Evaluation __________*
HOW DO UNCONTROLLED NUCLEAR REACTIONS CONFIRM THE NEED TO AGREE WITH AN ADVERSARY QUICKLY?

The atomic explosion pictured above was an uncontrolled nuclear chain reaction.

WHAT ARE CHAIN REACTIONS?

A chain reaction is a sequence of events in which the result of one event triggers the beginning of another. Each event is attached to the next event just like links in a real chain.

Some chain reactions are simple. A single event may be repeated over and over again in a never-ending series. Other reactions are more complex. They may require a dozen or more steps before the chain is repeated.

A burning candle is an example of a simple chain reaction. It can burn quietly for hours without needing to be relit. The chain reaction continues on its own until it uses up all its fuel or someone blows out the candle flame.

Many chain reactions are very beneficial. However, they can also be very dangerous. As one event leads to others, a reaction can multiply rapidly. A burning candle set too close to a drapery may ignite the drapery and begin a destructive chain reaction which can spread throughout a house in just minutes.

To demonstrate an explosive chain reaction, place a piece of modeling clay or pie dough on a cookie sheet or other nonflammable surface. Arrange twenty-eight wooden matches as shown, one in the first row, two in the second, three in the third, etc. Now stand back and light one of the corner matches. Notice how quickly a chain reaction can erupt into violence.

The most powerful of all chain reactions are those involving the nuclei of atoms. A nuclear chain reaction occurs more quickly and releases more energy than even the most powerful dynamite. Atomic bombs, for example, are simply uncontrolled nuclear chain reactions.

There are at least ten analogies between uncontrolled nuclear reactions and unsatisfied adversaries. Understanding these comparisons should greatly increase our motivation to agree with an adversary quickly.
INNER INSTABILITY CAUSES AN ATOM TO SUPPORT A NUCLEAR CHAIN REACTION.

The nucleus is a compact arrangement of neutrons and protons located at the very center of an atom. Surrounding the nucleus is a cloud of electrons which determines the chemical properties of the atom.

Each element has a different combination of these atomic particles. The simplest atom is hydrogen. It has only one proton and one electron. One of the most complex atoms is uranium. It is composed of a combination of 92 protons, 92 electrons, and 146 neutrons.

All the atoms of a particular element contain an equal number of electrons and protons. But some atoms contain irregular numbers of neutrons. These atoms are called isotopes. Isotopes are the atoms which support nuclear chain reactions. They fly apart easily and release neutrons which provoke other irregular atoms to split apart also.

For example, uranium has fourteen isotopes. The most common form (99 percent of all uranium) is referred to as U238 because its 92 protons and 146 neutrons add up to 238 (92 + 146 = 238).

Uranium 235 is the next most common form. It makes up less than 1 percent of all uranium. U235 has 92 protons and only 143 neutrons. Because of its irregular arrangement of neutrons, it breaks apart easily enough to support chain reactions.

The element plutonium also has a number of isotopes. Pu239, however, is the only one that is unstable enough to be used as a fuel for nuclear chain reactions. It has 94 protons and 145 neutrons (94 + 145 = 239).

Atoms which are more stable do not support chain reactions. They do not split easily, nor do they release the excess neutrons which a nuclear reaction requires to keep a chain reaction going.

When an uncontrolled chain reaction occurs, most of the neutrons released in fission cause fission in other atoms and release more neutrons.

TWO UNSTABLE ATOMS WHICH ARE CLOSE TO EACH OTHER TRIGGER A CHAIN REACTION.

The amount of uranium or plutonium required to support a chain reaction is called critical mass. Critical mass is reached when atoms of U235 or Pu239 are concentrated closely enough together so that one reaction triggers another. If the distance
between atoms is too great, each reaction is an isolated event which does not trigger new reactions.

Only about twenty pounds of fuel is necessary to produce a nuclear bomb. However, that fuel must be super-enriched to 95–97 percent pure U235 or Pu239. Purification increases the concentration of the radioactive materials so that once a chain reaction starts, it multiplies with explosive force.

The two atomic bombs which were dropped on Japan at the end of the second World War were named “Little Boy” and “Fat Man.” Each one used a different design to reach critical mass.

The “Little Boy” design used two separate pieces of U235. Neither piece was large enough to have critical mass by itself. The bomb was detonated by “shooting” a wedge-shaped piece of U235 into a sphere from which a corresponding wedge of U235 was missing. The combined masses were large enough to support a chain reaction, and the bomb exploded.

The “Fat Man” design for an atomic bomb used a conventional bomb to crush a hollow shell of plutonium. As the plutonium collapsed inward it was compacted and concentrated. When it reached critical mass, the plutonium exploded.

The concentration of fuel in nuclear reactors is only about 3 percent. That is enough to sustain a chain reaction, but not enough to cause a nuclear explosion.

Enriched uranium ore is crushed and formed into small pellets about the size of a pencil eraser. Each tiny pellet produces about the same amount of heat as 1,780 pounds of coal, 149 gallons of oil, or 15,500 cubic feet of natural gas.
Second system drives the turbines which generate electricity.

An advantage of this system is that the radioactive water which cools the reactor never leaves the reactor building. Only fresh, non-radioactive water is used to drive the plant's turbines.

Pressurized Water Reactor

In a BOILING WATER REACTOR (BWR), both the temperature and the pressure are greatly reduced. These factors greatly diminish the safety hazards resulting from high-pressure leaks. However, water boils in the reactor vessel itself, and the steam is piped directly to the plant's generating turbines. These turbines become contaminated with radioactivity and make maintenance of the system more dangerous.

GAS COOLED REACTORS (GCR) operate at very high temperatures but are the most efficient producers of electricity. They use super hot helium instead of water to cool the reactor. After helium leaves the reactor, fans circulate it through heat exchangers which convert the heat into steam. This steam drives generating turbines as other designs do.

HEAVY WATER REACTORS (HWR) use water which contains a heavy isotope of hydrogen called deuterium. Normal hydrogen contains only one proton in its nucleus. Deuterium has both a neutron and a proton and, thus, weighs twice as much as hydrogen.

Reactors cooled by "heavy water" require much lower-grade fuels than "light water" reactors. This feature cuts the cost of operation considerably.
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Pellets of nuclear fuel

Despite this great concentration of energy, one pellet alone cannot sustain a chain reaction. A typical reactor must contain thousands of these fuel pellets before it reaches a "critical mass."

Zirconium is a corrosion-resistant metal which does not melt at normal reactor temperatures.

Fuel rods are grouped together in rigid fuel assemblies. A fuel assembly may contain as many as two hundred fuel rods, and a nuclear reactor may have more than two hundred fuel assemblies in its core. That is a total of more than forty thousand fuel rods.

Most reactors require several tons of U235 fuel before a chain reaction will begin. Otherwise, critical mass neutrons are able to escape without splitting other atoms. It is only when a number of fuel assemblies are brought close together that an atom is able to trigger one reaction after another.

The entire reactor core containing fuel assemblies and control rods is closed in a heavy, stainless steel reactor vessel.
3 UNCONTROLLED CHAIN REACTIONS CAN BE AVOIDED ONLY BY CONTROL RODS.

Nuclear chain reactions are governed by long, thin rods of silver, cadmium, and indium. These rods are called control rods because they control the rate at which a chain reaction proceeds.

Control rods are arranged in a nuclear reactor so that they separate the nuclear fuel and absorb neutrons which are released by the splitting atoms.

In emergencies, control rods must be inserted into a reactor in less than one second.

When control rods are fully inserted into the vacant holes of a fuel assembly, they absorb so many neutrons that no chain reaction is possible. As engineers carefully and slowly withdraw the rods, fewer neutrons are absorbed, and the chain reaction begins to grow. The magnitude of the reaction is governed by simply raising or lowering the control rods.

Most control rods are formed in the shape of a cross. A cross is the most efficient shape to absorb neutrons.

4 DESTRUCTIVE CHAIN REACTION CAN BE CONVERTED INTO POWERFUL SOURCES OF PRODUCTIVE ENERGY.

If carefully controlled, nuclear chain reactions can be used to generate electricity. Nuclear reactions produce electricity by capturing the tremendous heat given off by a reaction and converting the heat to steam. The steam is then used to turn the wheels and turbines which generate electricity.

A reactor vessel being lowered into place at the construction site of a nuclear power plant

While no two nuclear power plants are exactly alike, most fall into one of five categories.

- PRESSURIZED WATER REACTORS—PWR
- BOILING WATER REACTORS—BWR
- HEAVY WATER REACTORS—HWR
- GAS COOLED REACTORS—GCR
- LIQUID METAL FAST BREEDER REACTORS—LMFBR

In 1980, nuclear power plants produced 272,674 million kilowatt-hours of electricity. That is more than a third of the total world production of electrical power. All together, about 235 nuclear power plants operate worldwide.

A PRESSURIZED WATER REACTOR (PWR) operates under more than 2,250 pounds of pressure per square inch. The high pressure allows the water which cools the reactor core to reach temperatures as high as 600°F without boiling.

Pressurized pumps force the water into heat exchangers which heat a completely separate system of water. The steam which is produced in the...
second system drives the turbines which generate electricity.

An advantage of this system is that the radioactive water which cools the reactor never leaves the reactor building. Only fresh, non-radioactive water is used to drive the plant's turbines.

Pressurized Water Reactor

In a BOILING WATER REACTOR (BWR), both the temperature and the pressure are greatly reduced. These factors greatly diminish the safety hazards resulting from high-pressure leaks. However, water boils in the reactor vessel itself, and the steam is piped directly to the plant's generating turbines. These turbines become contaminated with radioactivity and make maintenance of the system more dangerous.

Boiling Water Reactor

LIQUID METAL FAST BREEDER REACTORS (LMFBR) offer the potential for an inexhaustible source of power which produces new fuel as it generates electricity.

By surrounding the fuel core of a LMFBR with spent fuel from BWR- and PWR-type reactors, the fuel can be "renewed" and used over and over again. Neutrons from the breeder's core convert atoms of U238 into atoms of the highly radioactive isotope Pu239. This design allows a breeder reactor to form eleven to thirteen fuel atoms for every ten which it uses up. At that rate, there would theoretically be an inexhaustible supply of nuclear fuel for centuries.

Breeder reactors are called "fast" because they require neutrons which travel at a speed of 12,000 miles per second (43,200,000 miles per hour). Water cannot be used as a coolant because it slows neutrons to a mere one mile per second. Fast reactors must be cooled by liquid sodium, which has little effect on the speed of neutrons.

A breeder reactor operates at about 900°-1,000°F. That is about 300° hotter than a PWR. Water boils at those temperatures even under high pressure, but sodium remains a liquid up to 1,624°F even without increasing the pressure.

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Reactors cooled by "heavy water" require much lower-grade fuels than "light water" reactors. This feature cuts the cost of operation considerably.
Isotopes are atoms of the same element which have different numbers of neutrons.

**5 EVEN BENEFICIAL NUCLEAR REACTIONS CAN DO DAMAGE UNLESS THEY ARE PROPERLY COOLED DOWN.**

The steam which drives a power plant's turbines must condense back to water before it can be recycled. This liquification is done by large condensers which circulate cool water around the steam. Many nuclear plants take this water from nearby lakes or streams. In the process of cooling the steam, lakes and streams themselves become warmer.

This rise in temperature is called *thermal pollution*. Thermal pollution kills fish, promotes the growth of unwanted plants, and may even change weather patterns.

A nuclear-fueled electric power plant with cooling towers

To prevent thermal pollution, nuclear plants pump the warm water through large cooling towers which allow some of the water to evaporate. This evaporation cools the remaining water so that it can be returned to its source at the same temperature at which it was pumped out.

**6 WARNING SIGNS USUALLY PRECEDE AN UNCONTROLLED NUCLEAR CHAIN REACTION.**

The control room of a nuclear reactor is filled with gauges, dials, and meters. Each instrument measures the condition of a different aspect of the nuclear reactor. Some gauges monitor temperature, pressure, radiation, coolant flow and the amount of electricity being generated. Other dials and lights indicate the position of control rods and the status of open and closed valves.

These gauges, lights, and dials serve as warning signals. They reveal seven dangerous situations which have the potential to create a disaster.

**Warning signs of a nuclear reactor**

- A **short circuit** which disrupts the connections between the reactor and the control room can cause faulty readings on the instruments which monitor a reactor. This may prevent the control room from correcting conditions in the reactor which are out of balance.
- **Improper pressure** may cause a reactor to operate at less than optimum efficiency. A drop in pressure usually signals a leak. Leaks not only reduce the efficiency of a reactor, but they also allow the escape of radioactive material which could contaminate the area with dangerous radiation.
- A **faulty valve** which fails to open or close jeopardizes the safety of a reactor. Each valve has
Alpha particles can be stopped by just a piece of paper.

Beta particles have a negative charge. They are actually free electrons and have the power to penetrate only thin sheets of aluminum or not more than an inch of wood. Most homes provide complete protection from alpha and beta radiation.

Gamma rays, on the other hand, are extremely powerful and are stopped only by heavy shielding such as several inches of lead or several feet of concrete. Gamma rays are a form of high-frequency light which our eyes cannot see.

Amounts of radiation are measured in units called rads. However, some types of radiation are far more dangerous than others. To correct for these differences, scientists have created a measure of "potential damage" called a rem. One-thousandth (\(\frac{1}{1,000}\)) of a rem is called a millirem. Millirems are abbreviated as mrem.

Natural radiation from the sun and from radioactive elements in the earth's crust add up to about 100–180 mrem per year. Some areas, however, receive as much as 3,000 mrem per year without apparent adverse effects.

The radiation from an X ray ranges from 10 mrem for chest X rays to 1,500 mrem for barium X rays. Federal standards allow 5,000 mrem for uranium mine workers, but limit the radiation for neighbors of uranium mines to less than 25 mrem per year. Neighbors of nuclear power plants are limited to 5 mrem per year.

Scientists estimate that there are no observable effects from radiation of less than 10,000 mrem. However, the effects of radiation are cumulative. Each dose builds on previous doses so that frequent exposures to small doses are just as harmful as a single exposure to a large dose of radiation. Cumulative doses of 100,000 mrem cause severe illness, and doses of 400,000 mrem are usually fatal.

10 FAILING TO ACT QUICKLY CAN RESULT IN FOUR TYPES OF DEATH FROM A DESTRUCTIVE REACTION.

Doctors estimate that a single dose of 600,000 mrem would kill 99 percent of all those exposed to it in less than one month. A 300,000 mrem dose would likely kill 25 percent and leave 90 percent of the others seriously ill. High doses of radiation kill in four ways.

Those who die first are usually victims of central nervous system death. Massive doses of radiation damage the nerves and blood vessels which connect the brain and the heart with the rest of the body. The result is deep shock, paralysis, poor muscle coordination, and death within thirty-six hours.

A second form of death kills most of its victims within a week. These individuals suffer bone marrow damage. Bone marrow is responsible for producing white blood cells which fight infection, blood platelets which prevent bleeding, and red blood cells which carry oxygen throughout the body.

The first sensations of bone marrow contamination are sudden nausea, bleeding, and vomiting. This usually occurs within 30 to 120 minutes after exposure. After a week those who survive begin to feel better. However, they are not free from the effects of the radiation.

Because white blood cells have been damaged, a victim's body is wide open to infection. Many victims die of pneumonia, influenza, and even common colds.
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- **A faulty valve** which fails to open or close jeopardizes the safety of a reactor. Each valve has
a specific role to play in the overall reactor design. That design is only as good as each of its component parts. If one part fails, an entire system may fail to function properly.

- **Radiation leaks** are detected by Geiger counters. They warn of dangers which cannot be seen or felt by human senses. Radiation may spread quickly throughout an entire plant and may prevent workers from entering contaminated areas to make repairs.

- The **electrical output** of a nuclear power plant is also monitored continuously. A constant flow of electricity is a good indication that all is well within a reactor. A sudden drop in power, however, signals that something is wrong.

- Engineers must renew a reactor's fuel about every three years. Usually one-third of the total is replaced every year so that a reactor never runs low. Low fuel levels indicate that something is critically wrong inside a reactor.

- The **temperature** inside a reactor indicates whether a reactor is gaining power or losing power. Under ideal conditions, the temperature should remain constant. A cold reactor is little threat, and a hot reactor is most likely performing perfectly. A lukewarm reactor, however, indicates that the reactor is in trouble.

7 UNCONTROLLED CHAIN REACTIONS CAN ESCALATE AND EXPLODE IN A MATTER OF SECONDS.

When an atom of uranium splits, it separates into smaller atoms of krypton (Kr) and barium (Ba). The process is called nuclear fission. The word fission comes from the Latin word *fissus*, which means “to split or divide.”

During a fission reaction a uranium atom gives off tremendous amounts of heat and radiation, as well as two tiny neutrons. These tiny neutrons act like “bullets” which bump into two other uranium atoms, causing them to split apart. They in turn release more heat, more radiation, and four additional neutrons.

Because each uranium atom causes two other atoms to split, the reaction doubles with every generation. Within just five generations, one atom of uranium can split 62 other atoms. \(2 + 4 + 8 + 16 + 32 = 62\)

Plutonium fuels react even faster than uranium. Each plutonium atom releases three neutrons instead of uranium's two. This means that a plutonium reaction triples after each generation. A simple plutonium atom can produce 363 fission reactions in just five generations. \(3 + 9 + 27 + 81 + 243 = 363\). This makes plutonium about six times more explosive than uranium.

Since the time between reactions is only \(\frac{1}{1,000,000,000,000}\) (one-billionth) of a second, there can be as many as \(2,000,000,000,000,000,000,000\) (two trillion trillion) atoms split in less time than it takes to blink an eye. In that short time, enough heat is released to raise the temperature of the fuel several million degrees. The result is an explosion which has the power to destroy everything in its path for miles around.

The nuclear chain reaction which destroyed Hiroshima exploded with a force of twenty-six million pounds of TNT.
Nuclear reactors do not have the same explosive power as atomic bombs because they are not fueled with pure uranium or plutonium. They contain only enough radioactive material to support a limited chain reaction. Yet even nuclear reactors have the potential to self-destruct in a matter of seconds.

Uranium melts at about 5,000°F. That is 1,500°F hotter than a steel-producing blast furnace. If a reactor suddenly loses its coolant while it is at full power, it can reach that temperature in less than twenty seconds. Even if engineers shut down a reactor to only 1 percent of its original power, the radiation which remains produces enough “after heat” to melt a reactor core in only twenty minutes.

Once a fuel core melts, there is nothing to stop it from melting its way through the walls of its reactor vessel. An accident of this type is called a China Syndrome because of the old saying that one can “dig a hole to China” from North America. There is a possibility that the liquid core might melt through the floor of its containment building and bury itself deep in the earth’s crust before it finally cools.

A China Syndrome meltdown would not only destroy a nuclear plant, it would also contaminate the ground water for hundreds of square miles.

Although it is impossible for a nuclear fuel core to explode like an atomic bomb, there remains a potential for an explosion of hydrogen gas. Hydrogen is produced by a chemical reaction between a fuel assembly’s zirconium alloy walls and water. Normally, zirconium reacts with water only at temperatures above 2,000°F. Unfortunately, an uncontrolled reaction can reach that temperature in less than six seconds.

Quick Action is Vital to Avert a Destructive Nuclear Chain Reaction.

In an emergency, engineers must be able to shut down a nuclear reactor in less than one second. They insert emergency control rods into the reactor core at the first warning signs. These control rods absorb neutrons instantly and prevent one atom from triggering any further reactions. Thus, the chain reaction is broken, and the reactor is shut down.

Without any neutrons, a nuclear chain reaction cannot continue.

An emergency cooling system also stands by to flood a reactor with high concentrations of dissolved borax in water. Borax effectively absorbs neutrons, and the water removes excess heat which remains in the reactor even after its chain reaction has been broken.

Three Types of Shields Are Needed to Protect a Person From Destructive Fallout.

Radiation is released from nuclear reactions in the form of alpha, beta, and gamma radiation.

Alpha particles consist of two neutrons and two protons. They have a positive charge but are not very powerful.
Alpha particles can be stopped by just a piece of paper.

Beta particles have a negative charge. They are actually free electrons and have the power to penetrate only thin sheets of aluminum or not more than an inch of wood. Most homes provide complete protection from alpha and beta radiation.

Gamma rays, on the other hand, are extremely powerful and are stopped only by heavy shielding such as several inches of lead or several feet of concrete. Gamma rays are a form of high-frequency light which our eyes cannot see.

Amounts of radiation are measured in units called rads. However, some types of radiation are far more dangerous than others. To correct for these differences, scientists have created a measure of "potential damage" called a rem. One-thousandth (\( \frac{1}{1000} \)) of a rem is called a millirem. Millirems are abbreviated as mrem.

Natural radiation from the sun and from radioactive elements in the earth's crust add up to about 100-180 mrem per year. Some areas, however, receive as much as 3,000 mrem per year without apparent adverse effects.

The radiation from an X ray ranges from 10 mrem for chest X rays to 1,500 mrem for barium X rays. Federal standards allow 5,000 mrem for uranium mine workers, but limit the radiation for neighbors of uranium mines to less than 25 mrem per year. Neighbors of nuclear power plants are limited to 5 mrem per year.

Scientists estimate that there are no observable effects from radiation of less than 10,000 mrem. However, the effects of radiation are cumulative. Each dose builds on previous doses so that frequent exposures to small doses are just as harmful as a single exposure to a large dose of radiation. Cumulative doses of 100,000 mrem cause severe illness, and doses of 400,000 mrem are usually fatal.

10 Failing to act quickly can result in four types of death from a destructive reaction.

Doctors estimate that a single dose of 600,000 mrem would kill 99 percent of all those exposed to it in less than one month. A 300,000 mrem dose would likely kill 25 percent and leave 90 percent of the others seriously ill. High doses of radiation kill in four ways.

Those who die first are usually victims of central nervous system death. Massive doses of radiation damage the nerves and blood vessels which connect the brain and the heart with the rest of the body. The result is deep shock, paralysis, poor muscle coordination, and death within thirty-six hours.

A second form of death kills most of its victims within a week. These individuals suffer bone marrow damage. Bone marrow is responsible for producing white blood cells which fight infection, blood platelets which prevent bleeding, and red blood cells which carry oxygen throughout the body.

The first sensations of bone marrow contamination are sudden nausea, bleeding, and vomiting. This usually occurs within 30 to 120 minutes after exposure. After a week those who survive begin to feel better. However, they are not free from the effects of the radiation.

Because white blood cells have been damaged, a victim's body is wide open to infection. Many victims die of pneumonia, influenza, and even common colds.
Others die of exhaustion because their blood is so anemic that it cannot carry enough oxygen or nutrients to keep the body alive.

A lack of blood platelets also allows profuse bleeding, and even a small cut may continue to bleed until a victim dies from loss of blood.

A third fatal effect of radiation is known as intestinal death. Between the second and fourth week there is a general loss of appetite. Painful ulcers develop in the mouth, throat, and intestinal tract. These ulcers prevent food from being absorbed into the body and make eating very difficult.

Those who survive the first three forms of radiation sickness may yet succumb to a variety of cancers and have children with birth defects. After an initial illness, victims may appear to recover and lead normal lives. However, radiation alters the nucleus of cells which contains genetic instructions. Any changes in these instructions create hidden weaknesses which lead to cancers, cataracts of the eye, and severe birth defects.

PROJECT 1

Learn the following basic nuclear terms.

AFTER HEAT—The heat that is produced by a nuclear reactor's fuel core after a chain reaction has been shut down. The after heat results from the natural decay of radioactive elements in the fuel core. It may be equal to 7 percent of the heat generated at full power.

ALPHA PARTICLE—An alpha particle is made up of two protons and two neutrons. It is identical to the nucleus of a helium atom that has been stripped of its electrons. Alpha particles can be shielded by a thin piece of paper.

ATOMIC BOMB—There are two basic types of atomic bombs. The ones dropped on Hiroshima and Nagasaki were “fission” bombs. Energy was released when atoms of uranium 235 and plutonium 239 split apart. Hydrogen bombs are “fusion” bombs, produced by fusing two hydrogen atoms to create a single atom of helium. Hydrogen bombs require less than one millionth of a second to explode and may reach 27,000,000°F at their center.

ATOM NUMBER—The atomic number of an atom is the number of protons an atom has in its nucleus. Each atom of an element has the same number of protons. For example, all oxygen atoms have eight protons, carbon atoms have six protons, and uranium atoms have ninety-two protons.

BETA PARTICLE—Beta particles are high-speed electrons. They can be shielded by an inch of wood or a thin sheet of aluminum.

BOILING WATER REACTOR (BWR)—A nuclear reactor which operates at relatively low pressure. A BWR uses the steam that forms in the reactor vessel to drive the turbines that generate electricity.

CONTAINMENT BUILDING—A building made of concrete and reinforced with steel rods that surrounds the nuclear reactor vessel. The walls are two and one-half feet thick and have the strength to withstand an explosion of up to one thousand pounds of TNT. The containment building is intended to seal off any radiation leaks from the reactor vessel.

CONTROL RODS—Long, thin rods which are positioned between the reactor's fuel rods. Control rods are designed to absorb neutrons. When control rods are inserted deeper into the reactor, they absorb more neutrons and slow the nuclear chain reaction.

The explosion of a hydrogen bomb with a fireball three and one-half miles across
CHAIN REACTION—A continuing process in which one event triggers another. In a nuclear chain reaction, each fission reaction releases enough neutrons to trigger more reactions.

CRITICAL MASS—The smallest amount of fuel necessary to keep a chain reaction going. In fuel cores less than the size of a golf ball, too many neutrons escape from the core and not enough neutrons collide with other atoms to sustain a chain reaction. However, as larger amounts of fissionable material are packed closely together, the fuel reaches a point where the number of neutrons that trigger new reactions is sufficient to start a chain reaction. This amount of material is called the critical mass.

DEUTERIUM—All hydrogen atoms have one proton in the nucleus. However, some atoms of hydrogen have more neutrons than others. Normal hydrogen has no neutrons. Heavy hydrogen, called deuterium, has one neutron. Tritium has two neutrons. All three of these different forms of hydrogen can be found in water. When deuterium and tritium atoms are artificially concentrated in a sample of water, the water is called “heavy” water. Water that contains normal hydrogen is called “light” water.

ELECTRON—An electron is a negatively charged particle that has only \( \frac{1}{206} \) the mass of a proton. The number of electrons surrounding the nucleus of an atom determines the atom’s chemical properties.

EMERGENCY CORE COOLING SYSTEM (ECCS)—An emergency safety system designed to flood a reactor with thousands of gallons of water if the normal cooling system fails. If activated in time, the ECCS can cool the fuel core and prevent it from melting down.

FAST BREEDER REACTOR (FBR)—Breeder reactors use highly enriched uranium and plutonium fuels, fast-moving neutrons, and liquid sodium coolants. In addition to producing electricity, breeder reactors can convert the spent fuel of “light” water reactors into reusable nuclear fuel. A breeder reactor can actually produce more radioactive fuel than it consumes.

FISSION—Fission is the breaking apart of a heavy atom such as uranium or plutonium into two smaller atoms. When the larger atom splits, it releases tremendous amounts of heat energy, radiation, and several neutrons.

FISSION PRODUCTS—The splitting of uranium and plutonium results in about eight hundred different radioactive products. Most are highly unstable and last for only a few seconds. Some, however, last much longer. Iodine 129 has a half-life of 15.7 million years. Strontium 90’s half-life is 28.8 years. Half of krypton 85 decays every 10.7 years. Carbon 14 has a half-life of 5,700 years. Half of cesium 134 lasts 2.1 years.

FUEL RODS—Nuclear fuel is prepared in small pellets about the size of the eraser on the end of a wooden pencil. These pellets are stacked end on end inside a ten-foot hollow rod made out of zirconium. Up to 200 of these fuel rods are then bundled together with neutron-absorbing control rods to form a fuel “assembly.” When a reactor is ready to go into operation, as many as 120 fuel assemblies are lowered into the reactor’s fuel core. Each fuel assembly is designed to be just slightly smaller than the critical mass needed for a chain reaction. When the control rods are withdrawn, the combined mass of all the fuel assemblies becomes critical and a chain reaction begins.

FUSION—Fusion is the joining of two lighter atoms to form a single heavier atom. For example, the nuclei of two hydrogen atoms can be “fused” to form the nucleus of one helium atom. In a fusion reaction the mass of the helium is less than the combined mass of the two hydrogens. The difference in mass is converted into energy according to the formula \( E = mc^2 \).

GAMMA RAYS—Gamma rays are a form of light. However, they have a frequency much greater than that of visible light, and they are much more powerful. Gamma rays can penetrate nine inches of water, an inch of iron, or one-half inch of lead. Gamma rays are what give radiation its typical glow.

HALF-LIFE—A half-life is the amount of time required for one half of the atoms in a radioactive sample to “decay.” For example, uranium 238 decays as it releases an alpha particle and becomes thorium 234. Carbon 14 changes to nitrogen 14 after it loses a beta particle. To understand half-life, try tearing a piece of paper in half every thirty seconds. Start with a full sheet. After thirty seconds, tear it in half. Throw one half away. After another thirty seconds, tear the remaining half into two pieces. Throw one away. How much of the original sheet do you have left after three minutes? (The answer is \( \frac{3}{64} \).)
ISOTOPE—An isotope is an atom that has an irregular number of neutrons in its nucleus. Some elements may have several isotopes. Uranium has fourteen isotopes. Hydrogen has three. Carbon has seven. Each isotope has the same number of protons and electrons. The only difference is in the number of neutrons.

KILOWATT—A measure of electricity equal to 1,000 watts.

LIGHT WATER REACTOR (LWR)—Light water reactors use common water as a coolant. Heavy water reactors use water that contains the heavier isotopes of hydrogen, deuterium and tritium. An LWR may be either a boiling water-type or a pressurized water-type reactor. Fast breeder reactors use liquid sodium as a coolant.

MELTDOWN—The uranium oxide which fuels nuclear reactors melts at around 5,000°F. The heat of a steel-making blast furnace (3,500°F) cannot melt it. However, if a reactor loses its coolant and the nuclear chain reaction is allowed to continue, the fuel core can heat up faster than 200°F per second. At that rate, the core will melt in less than thirty seconds. Even if the chain reaction is shut down, the after heat alone can still melt the fuel core in four to twenty minutes. A meltdown of the core is referred to as the China Syndrome. The hot molten fuel could melt through the steel reactor vessel and through the floor of the containment building and bury itself deep in the earth’s crust.

MILLIREM—A rem is a measure of radiation. A millirem is one-thousandth of a rem. Federal standards suggest that a person can safely receive up to five hundred millirems of radiation each year. A plane trip at thirty thousand feet adds about one mrem of radiation per hour to the annual average of natural radiation.

MODERATOR—Neutrons normally travel at a speed of twelve thousand miles per second. These “fast neutrons” do not stay around long enough to perpetuate chain reactions in BWR and FBR reactors. Water acts as a moderator to slow neutrons to speeds of less than one mile per second. At these “slow” speeds neutrons become very effective at splitting other atoms. If a reactor loses its water coolant, neutrons are not “moderated” and the chain reaction quits abruptly. Low-grade nuclear fuels require very slow neutrons in order to sustain a chain reaction. High-grade fuels do not need such moderators.

NEUTRON—A neutron is an atomic particle that has no charge but is nearly equal in mass to a proton. Neutrons are the “bullets” which keep a chain reaction going.

NUCLEAR REACTION—When a neutron splits an atom, two or more additional neutrons are released. These split other atoms which release even more neutrons. Control rods absorb some of these extra neutrons so that the chain reaction does not get out of hand. Controlled chain reactions balance the number of neutrons that are lost or absorbed against the number that split new atoms. A chain reaction will fizzle out if there are not enough neutrons. It may explode in one-millionth of a second if there are too many neutrons.

NUCLEUS—The nucleus is the central core of an atom. It is made up of neutrons and protons and contains more than 99.9 percent of an atom’s mass. The nucleus always has a positive charge.

PLUTONIUM—Plutonium is a man-made element. It results when an atom of U238 absorbs a neutron to become U239. After the U239 loses two beta particles it becomes Pu239. Plutonium is extremely radioactive and can be used in both nuclear reactors and atomic bombs.

PRESSURIZED WATER REACTOR (PWR)—A PWR heats water to 600°F but does not allow water to boil. Instead, the pressure builds to 150 times the normal atmospheric pressure. Because of this tremendous pressure, a heat exchanger must be used to transfer heat from the reactor to the electrical generators.
**PROTON**—A proton is a particle found in the nucleus of an atom. It has a mass 1,837 times that of an electron and always carries a positive electrical charge.

**RADIOACTIVITY**—Radioactivity is the process in which atoms emit energy in the form of rays or particles. Only about fifty kinds of naturally occurring atoms are radioactive. However, man has made more than 1,100 radioactive elements artificially. Energy is emitted because an atom is unstable. The release of radiation may take three major forms: alpha rays, beta rays, and gamma rays.

**RADIATION SICKNESS**—When high-speed radiation particles strike living cells, they produce heat and tear the cell’s molecules apart. Bone marrow, the linings of the digestive system, the nervous system, and the reproductive organs are the most sensitive. No observable effects result from dosages smaller than 10,000 millirems. However, a dosage of 400,000 millirems kills about half of those exposed to it. The other half suffer from nausea, diarrhea, baldness, loss of immunities, cancer, and genetic defects.

**REACTIVITY**—Reactivity is the rate at which a chain reaction “burns.” Factors such as the speed of neutrons, density of the fuel, temperature, and the presence of control rods affect the reactivity of a reactor.

**SCRAM**—Scram is the technical term for the automatic shutdown of a nuclear chain reaction. Emergency control rods are forced into the reactor vessel to absorb neutrons. Concentrated solutions of borax are used to cool the reactor and absorb any neutrons that the control rods miss.

**URANIUM 235 AND 238**—These are isotopes of uranium. U238 is the most common and is far less radioactive than U235. Most uranium contains less than one and a half U235. Light water reactors require at least three and a half U235 in order to sustain a chain reaction.

**ZIRCONIUM**—Fuel rods are made out of a metal alloy of zirconium. At normal reactor temperatures, zirconium is effective in withstanding the pressure and corrosive effects of a nuclear chain reaction. However, at temperatures above 2,000°F, it reacts chemically with water to form hydrogen. Hydrogen burns when exposed to oxygen and can explode violently.

**PROJECT 2**

**Identify analogies between nuclear reactions and alienated adversaries.**

Review each of the ten points on uncontrolled nuclear reactions, and identify at least one spiritual analogy for each one.

Example: As instability within an atom causes it to support a nuclear reaction, so an unresolved offense will cause another person to become an adversary.

**Learn what reaction is created within the people around us by the following six things:**

1. Hatred (Proverbs 10:12) __________
2. Pride (Proverbs 13:10) __________
3. Rebellion (Proverbs 17:19) __________
4. Foolish talk (Proverbs 18:7) __________
5. Contentiousness (Proverbs 21:19) __________
6. Anger (Proverbs 29:22) __________

Date completed __________ Evaluation __________
WHAT DOES IT MEAN TO PAY THE “UTTERMOST FARTHING” IN A COURT OF LAW?

The word *uttermost* means “the furthest or extreme.” A farthing, worth about $0.0375 today, is two mites, or one-fourth of a Roman cent. The phrase “uttermost farthing” means that a person who has broken the law and been found guilty will not be freed from the penalty of the law until he has fulfilled the absolute, extreme, last part of his judgment.

During the time of Christ, Roman law prescribed that if a person had a quarrel that could not be settled privately, he had the right to order his adversary to accompany him to the praetor (judge). If he refused, the prosecutor chose a witness by saying, “May I take you to witness?” If the person consented, he offered the tip of his ear, which the prosecutor touched. Accompanied by a witness, the plaintiff could then forcibly take the defendant to court. (See Matthew 18:28-31.)

If on the way to court the dispute was settled, no further legal steps were taken. Christ dealt with this type of disagreement by encouraging adversaries to agree quickly.

HOW ARE SENTENCES DETERMINED AND FULLFILLED IN A COURT OF LAW?

1 WHAT IS THE PURPOSE OF A SENTENCE IN A COURT OF LAW?

Our courts today impose sentences of death, imprisonment, probation or suspended sentences, and/or fines. The purpose of any sentence is:

- To convince the person found guilty not to break the law again;
- To prevent the person from breaking the law again by keeping him away from society;
- To rehabilitate the person so he can become part of society at a later time;
- To set an example to convince others not to break the law;
- To make a distinction between acceptable and unacceptable behavior by punishing unacceptable behavior;
- To punish the person who broke the law.
FEDERAL COURT SYSTEM

Congress writes the laws, and the Federal Court System determines the punishments for people found guilty of breaking the laws.

SUPREME COURT OF THE UNITED STATES
Washington, D.C.
Tries lawsuits between the states and those involving an ambassador or consul from a foreign nation. May review decisions made in U.S. Courts of Appeals or in the specialized federal courts. May review a decision by the highest court of a state if a constitutional question or federal law is involved.

U.S. COURTS OF APPEALS
Twelve courts sitting in each of eleven judicial circuits and in the District of Columbia
Hear appeals from federal District Courts in the United States and Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands. May hear appeals from decisions of bankruptcy courts and federal administrative agencies.

U.S. DISTRICT COURTS
Approximately ninety courts sitting in all parts of the United States and in Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands
Try both criminal and civil cases, including patent and admiralty cases. May review decisions of federal administrative agencies and bankruptcy courts.

U.S. TAX COURT
Hears cases involving disputes over whether taxpayers (including individuals, private foundations, public charities, and qualified pension plans) owe additional taxes.

U.S. TERRITORIAL COURTS
Take the place of District Courts for cases concerning the Federal law in the territories of Guam, the Panama Canal Zone, Virgin Islands, and the Northern Marianas.

DISTRICT OF COLUMBIA COURT OF APPEALS
Exercises jurisdiction over decisions and hears appeals from the Superior Court of D.C.

SUPERIOR COURT OF D.C.
Tries cases of local jurisdiction in Washington, D.C., and functions like a State Supreme Court.

U.S. COURT OF CLAIMS
Washington, D.C.
Hears suits against the U.S. government arising out of the Constitution, a federal law, any regulation by a federal administrative agency, or a government contract. May restore a person to his former position, order that records be corrected, or award monetary damages.

U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT
Presides over decisions made by the U.S. Court of International Trade, cases from the Secretary of Agriculture, appeals from the U.S. Patent Office and in specified appeals from the U.S. Tariff Commission on questions of law concerning unfair practices of import trade.

U.S. COURT OF INTERNATIONAL TRADE
New York, N.Y.
Hears cases involving persons who protest the amount of customs duties they must pay under federal tariff laws.

U.S. COURT OF MILITARY APPEALS
Hears appeals from court-martial convictions. There is no further appeal from the decisions of this court.

APPEALS FROM MILITARY TRIBUNALS
STATE COURT SYSTEM

Individual state legislatures write the laws, and the state court system determines the punishments for people found guilty of breaking the laws of the state. In the Federal and state systems, the courts are organized in layers, and appeals flow from the lower courts to the higher ones.

STATE SUPREME COURT
Washington, D.C.
Hears appeals from lower state courts. Its decisions cannot be appealed unless there is a constitutional question that may be reviewed by the Supreme Court of Errors, Supreme Judicial Court, or court of Appeals in some states.

INTERMEDIATE APPELLATE COURTS
In some states only
Hear appeals of decisions of state courts of general or special jurisdiction (authority). Usually must review decisions before appeal can be taken to highest state court.

COURTS OF GENERAL, OR UNLIMITED, JURISDICTION—TRIAL COURTS
County, Circuit, Superior, or District Courts, or courts of Common Pleas
Have general jurisdiction and hear both civil and criminal cases. May hear appeals from special courts in some states.

SPECIAL COURTS
Probate Courts, or Surrogate's Courts
Hear cases involving wills and inheritance. May also hear adoption, guardianship, and competency proceedings.
Juvenile Courts, or Family Courts
Hear cases involving delinquent or neglected children.
Criminal courts
Hear criminal cases. Do not exist as separate courts in all states.

COURTS OF LIMITED JURISDICTION—LOCAL COURTS
Hear cases involving lesser amounts of money or property of limited value or less severe violations of law than do courts of general jurisdiction. Usually do not keep records of proceedings.

Traffic Courts
Magistrate’s Courts
Justice Courts, or Justice of the Peace Courts
City Courts, or Municipal Courts
Police Courts
Small Claims Courts
2 HOW IS THE PUNISHMENT FOR BREAKING THE LAW DETERMINED?

When a law is broken, it is up to the maker of the law to determine guilt and render punishment.

In the United States there are two systems of courts—state and federal. Individual state legislatures write the laws and determine the punishments for people found guilty of breaking the laws of the state. The Congress of the United States writes the laws and determines the punishments for people found guilty of breaking the laws of the nation.

The Capitol Building in Washington, D.C., where Congress makes our federal laws

There are times when Congress or a state legislature allows another group to write certain laws. An example would be Congress’ authorizing the Internal Revenue Service to write some of the tax laws and to determine the punishment for breaking those laws. However, Congress still has authority over the Internal Revenue Service and the laws it makes.

Whether a person will be tried in a state or federal court is also decided by law. This is called a court’s jurisdiction.

JURISDICTION—the right to decide a defendant’s guilt or innocence and to determine the proper punishment

When a person has been found guilty of breaking the law, the judge of the court where the trial was held must set a sentence. The sentence is also set by law. State legislatures set the punishments for breaking state laws. The United States Congress sets the punishments for breaking our country’s laws.

For example, every state legislature has passed a law that sets the speed limit at 55 miles per hour (except on some rural interstates where the speed limit is 65). In the state of Wisconsin, the state has also passed a law that sets the punishment for breaking the speed limit. Anyone found guilty of going 1-9 miles over the speed limit must pay a fine of $44.50. According to the same law, anyone found guilty of going 10-15 miles over the speed limit must pay a fine of $56.00.

Congress allows each state to make its own traffic laws and to design its own traffic law enforcement system.

Similar laws (statutes) for punishment exist in every court, at every level—both state and federal. In Wisconsin, the maximum penalty for writing a worthless check is a fine of not more than $10,000, or imprisonment for not more than two years, or both. The maximum penalty for disorderly conduct is a fine of not more than $1,000, or imprisonment for not more than ninety days, or both.

Congress also allows each state to determine the penalty for deliberately writing a worthless check.

These are the maximum penalties a judge can impose for breaking these laws. Although a judge may show mercy and set a punishment that is less than what the law demands, he may not set a punishment that is more than the maximum allowed by law.
WHAT DETERMINES THE SEVERITY OF THE PUNITMENT?

For breaking some laws, there is a mandatory sentence. This means that a judge has no choice but to impose the exact sentence that is required by law. An example of this is the amount of the fine for a speeding violation.

However, for most violations, the laws governing sentencing set only a certain minimum and/or maximum penalty. It is up to the judge to decide the exact amount of the fine and/or number of days the defendant must spend in jail. This is called the judge's discretion.

MANDATORY SENTENCE—This sentence must be imposed; no adjustments may be made by the judge.
MAXIMUM SENTENCE—No sentence greater than this penalty may be imposed by the judge.
MINIMUM SENTENCE—No sentence less than this penalty may be imposed by the judge.
DISCRETION—Within the limits prescribed by law, the judge may decide the appropriate penalty.

During a trial, the judge learns about how the law was broken and how much the defendant was involved. When deciding on a proper punishment, the judge also considers the defendant’s past criminal record, his behavior and personality, the nature of the law that was broken, how the defendant behaved during the trial (whether he cooperated or not), and his educational and employment background.

If these things convince the judge that the defendant should have a lesser punishment, the judge will impose a fine and/or jail sentence close to the minimum penalty required by law.

If, after consideration, the judge determines that the defendant should have a more severe punishment, he will impose a fine and/or jail sentence closer to the maximum amount set by law.

HOW MUCH OF A SENTENCE MUST BE SERVED IN ORDER TO SATISFY THE JUDGMENT OF THE COURT?

The entire sentence must be served in order to satisfy the judgment of the court.

In the case of a fine, payment must be made immediately or according to a payment schedule set up by the judge. In either case, the entire fine must be paid before the judgment is satisfied.

If a prison term is part of the judgment, the person found guilty of breaking the law must account for every day of his prison term before the judgment is satisfied and he can be released.

However, a person sentenced to two years in jail may not actually have to spend every day of those two years in jail in order to satisfy the judgment of the court. Once he is admitted to jail, he comes under the authority of the prison officials for that prison. He may petition the prison officials to consider alternatives for time actually spent in jail. Some states have provisions to reduce the number of days in a sentence for good behavior. However, each day of the original sentence must be accounted for, either as time actually served or as time reduced for a certain reason before the judgment of the court is satisfied and the defendant can be released.

A person sentenced to imprisonment does not usually have to spend the entire time in jail.

Parole is the most widely used method of accounting for the required number of days a defendant must spend in jail. Under the laws for parole, a defendant must spend a certain portion of his sentence in jail before he can ask the parole board for an early release.

For example, if a defendant is required by law to serve a three-year jail term, he must serve one-fourth, one-third, or one-half of that time (depending on the laws of the state where he is jailed) before he is eligible for parole. He must then explain to the parole board why he should be released early. If the parole board agrees, he is released but kept under the authority of the board for the remainder of his three-year sentence.

A person on parole is still under the legal authority of the parole board and must comply with...
the conditions of his parole until the number of days of his original sentence are completed. He is still considered as being "in jail," even though he has partial freedom. If he breaks (violates) the rules for his parole, he must return to prison and stay there for the rest of his sentence.

When a judgment includes both a fine and time in jail, a defendant cannot be kept in jail for failing to pay the fine. When he has served the required number of days in jail, he must be released, even if he has made no payments at all.

When this happens, the defendant is usually put on probation. Although he cannot be jailed for failure to pay, he can be jailed for any violation of his probation, which can be extended until the entire judgment of the court is satisfied.

### Three Different Ways a Two-Year Sentence Might Be Fulfilled

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+ 365 days served in jail
+ 365 days served on probation
= 730 days fulfills the judgment of the court (2 years)

6 WHAT OTHER TYPES OF JUDGMENTS EXIST?

Sometimes a judge may choose to have a defendant make restitution in order to satisfy the judgment of the court. Restitution means that the defendant must pay for whatever damages resulted from his breaking the law. The more the damage, the higher the amount of restitution.

If, for example, an industrial plant illegally dumped waste material into a river, a judge could rule that the owners of the plant must pay for cleaning up the river and restocking it with fish.

A judge may also ask a defendant to pay court costs as a punishment. Court costs are what it cost the court to try the defendant's case. It would include the salary and travel expenses for any jury that was required, use of the courtroom, salaries for court clerks, bailiffs, and judge, and any other expenses involved in bringing the case before the court. These fees are fixed by law.

Forfeiture, the loss of property or personal possessions without being paid for them, is another type of judgment used by the court. In the state of Wisconsin, a person found guilty of shooting a deer without a license or out of season may have to "forfeit" his rifle. That is, the person must give his rifle to the state of Wisconsin as the penalty for...
Forfeiture of property such as a rifle would be part of the penalty in many states for shooting a deer out of hunting season.

There are times when a judge makes a sentence and then "suspends" it. Such a sentence is served without imprisonment and without supervision. A suspended sentence is usually served for a specified time under specified conditions.

For example, a judge may sentence a person to two years in jail and then suspend the sentence under the condition that the person spends fifteen hours each week helping at a nursing home for one year. At the end of the year, the judge will hold a hearing to determine if the person has fulfilled the conditions of his suspended sentence. If the conditions have been fulfilled, the judge will rule that the original two-year jail term has been satisfied, and the person has paid his "uttermost farthing."

PROJECTS

Many provisions are made by the government to protect the interests of its citizens. Find out how the following governmental agencies praise those who do well and correct those who do not do well. Determine how the payment of the "uttermost farthing" can be assessed for failure to comply with regulations in the following areas.

1 TAX COLLECTION

The Internal Revenue Service is an agency of the United States Department of the Treasury. Our government has authorized the Internal Revenue Service to collect tax payments, check tax returns, and issue refunds.

Research the requirements the Internal Revenue Service imposes on income payment and answer the following questions.

☐ Who must file a tax return?
☐ Who is exempt from filing an individual tax return?
☐ What is the annual deadline for filing tax returns?
☐ What is the penalty for failing to meet this deadline?
☐ What procedures must be followed in order to obtain an extension of the deadline?
☐ What penalties are imposed on delinquent tax payments?
☐ What is a tax audit?

2 TRAFFIC SAFETY

Each state in our country has the authority to set regulations which control the movement of traffic within that state and the licensure of those who are qualified to operate motor vehicles. A booklet describing the rules of the road can be obtained from the Secretary of State's office in the capital city of your state or from your local driver's license office.

Use of safety belts in cars has greatly reduced injuries and fatalities in accidents.
Obtain a copy for yourself and answer the following questions.

☐ Does your state have a seat belt law?
☐ If so, who is required to wear seat belts?
☐ Does your state specify that special car seats are necessary for infants and toddlers?
☐ If so, what age children are required to use them?
☐ What fines and penalties are imposed for infractions of these rules?
☐ How have traffic safety statistics been affected by the implementation of these rules?

3 ENVIRONMENTAL PROTECTION

The Environmental Protection Agency was established by the United States government in 1970. It was designed to be an independent agency which would monitor the now nine different federal acts dealing with pollution.

Manufacturers are responsible to dispose of waste materials properly.

Examine the responsibilities of this agency to determine these answers.

☐ What are the nine federal acts which are enforced by the Environmental Protection Agency?
☐ How does each one function to protect the environment from harmful pollutants?
☐ What kinds of penalties are imposed upon people or organizations who pollute the environment?
☐ How is liability assessed in these cases?

4 EMPLOYEE SAFETY

Investigate the organization OSHA and determine the following:

☐ What do the letters OSHA represent?
☐ Why was this organization established?
☐ What requirements to protect workers does OSHA impose on manufacturing plants in the use of machinery, for the elimination of fire hazards, and in the design and provision of protective gear?
☐ What penalties does a manufacturing plant face for failure to comply with OSHA regulations?
☐ Cite an example in which a company was sued because it failed to protect its workers according to OSHA regulations.

5 PENAL CORRECTIONS

Each state has its own system of penal corrections. When a person is convicted of a crime, he is normally assigned a sentence to fulfill. Investigate the provision for parole in your state to answer the following questions.

☐ What are the requirements for being paroled?
☐ What are some benefits of providing a parole system?
☐ What are some disadvantages of having a parole system?
☐ How much does it cost taxpayers to house one prisoner for a year?
☐ How does parole differ from probation?
☐ How does parole differ from pardon?
☐ What are the results if a paroled prisoner commits another crime?

Every state in the union has specific procedures whereby arrested criminals are tried, convicted, sentenced, and paroled.

☐ What are the requirements for being paroled?
☐ What are some benefits of providing a parole system?
☐ What are some disadvantages of having a parole system?
☐ How much does it cost taxpayers to house one prisoner for a year?
☐ How does parole differ from probation?
☐ How does parole differ from pardon?
☐ What are the results if a paroled prisoner commits another crime?
SHOULD CHRISTIANS AGREE TO PAY TAXES WHICH THEY BELIEVE ARE UNCONSTITUTIONAL?

The Boston Tea Party, December 16, 1773. Bostonians disguised as Indians boarded three British ships and threw overboard 340 chests of tea as a protest against the British attempt to tax American tea consumption.

A growing group of taxpayers in the United States has come to the conclusion that paying income tax is unconstitutional. They refer to themselves as modern day “patriots” and point to the Boston Tea Party and other Colonial struggles against British taxation as their justification to revolt against the Internal Revenue Service of today.

This conflict over taxation has been further aggravated through recent court decisions that for the first time permit taxing churches. The Social Security Ruling Amendments of 1983 (Public Law 98–21) have required churches and other non-profit organizations to pay Social Security tax on all their employees.

Many pastors decided this was wrong and they were willing to go to jail rather than pay the tax because they believed that in paying the tax they would be surrendering the control of the church to the government.

How should a Christian respond to these situations in light of Christ’s instruction to “Agree with thine adversary quickly . . .”?

THE HISTORY OF TAXATION IN THE UNITED STATES

The signing of the United States Constitution, September 17, 1787, at Independence Hall in Philadelphia. This document did not allow the government to collect income tax unless it was equally divided according to population.

When the United States was founded, there was widespread concern about the possible abuse of taxation. Most citizens were unwilling to pay taxes to support the government. Consequently the United States Constitution required any direct taxes (those
which the taxpayer pays directly to the government) to be apportioned (divided) among the states on the basis of population.

In 1894 a personal income tax law was passed. However, the next year the Supreme Court of the United States ruled that the law was unconstitutional because it was not designed to apportion the tax money according to population.

Eighteen years later the Sixteenth Amendment removed this provision and in the year 1913 the first Federal Income Tax in the United States went into effect.

THE SIXTEENTH AMENDMENT:

Article XVI

The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

In recent years a group of zealous citizens has claimed to do research which proves that "documents have now been uncovered in Washington, D.C., and in all the forty-eight states that voted on the Sixteenth Amendment in 1913, which prove conclusively that the Sixteenth Amendment was never legally ratified."

Armed with this information, they are urging others not to pay taxes. The logic of their argument is summarized in the following letter which was sent to us by a pastor in Nebraska.

THE LOGIC OF DISAGREEING WITH A TAX "ADVERSARY"

Dear Bill,

"I have no question that we are to obey the authorities over us. The question I have is, 'Who are they?'"

"As I remember my studies in U.S. History, the main authority in my life is the Constitution of the United States. This piece of paper tells me what I can and can't do. It lists certain freedoms that no one can abridge. Any elected or appointed official is in that office to uphold the Constitution. It seems to me that the one authority that I am obligated to obey is the Constitution.

"Does the Constitution tell me that I am obligated to pay income tax? It has never been made a law that I am aware of. Also, if someone wants you to do something contrary to the wishes of your authority, should we do it? The IRS is not even a governmental organism; it is a corporation hired by the government for collection only, which has no power in and of itself."

No doubt this pastor has been exposed to literature such as the following flier.

**MR. TAXPAYER, Do you feel that your hands are tied?**

**THEN YOU NEED TO KNOW THE TRUTH ABOUT THE 16th AMENDMENT...**

**"THE LAW THAT NEVER WAS"**

Your income tax is based on the 16th Amendment, and the 16th Amendment... is "The Law That Never Was." The 16th Amendment was never ratified by the required 3/4 States. The Government has been taxing citizens unlawfully since 1913.

**THE IRS DOES NOT HAVE A LAW!! THE 16th AMENDMENT IS NULL AND VOID!!**

Documents have now been uncovered in Washington, D.C. and in all the 48 States that voted on the 16th Amendment in 1913 which prove conclusively that the 16th Amendment was NEVER legally ratified... These documents (which have all been certified as true and authenticated records), prove that a CRIME, FRAUD, and DECEIT were perpetuated upon We The People of the United States.

- THIS NEW BOOK IS NOW AVAILABLE!
- HARDBACK FORM
- YOU MUST KNOW THE INCREDIBLE TRUTH ABOUT INCOME TAX!

Based on this information and the principles you have already studied from Scripture, how would you answer this pastor's letter?

**How this logic violates biblical teaching:**

1 OUR MAIN AUTHORITY IS THE WORD OF GOD.

While this pastor probably did not intend to communicate that the U.S. Constitution has a higher place of authority than Scripture, the fact remains that the Word of God must be the final authority for every Christian. Its inspired pages must tell us what we can and cannot do.

The point of authority is significant because Scripture is very clear about the matter of paying
taxes. Therefore, any type of legal rationale about the unconstitutionality of income tax, no matter how authoritative it may seem, has no bearing on the matter.

**GOD'S WORD GIVES GOVERNMENTS THE AUTHORITY TO COLLECT TAXES.**

God has established government officials as His ministers. These people carry out His will and require our support. This is the clear message of Romans 13:1–7:

"Let every soul be subject unto the higher powers. For there is no power but of God: the powers that be are ordained of God.

"Whosoever therefore resisteth the power, resisteth the ordinance of God: and they that resist shall receive to themselves damnation. . . .

"For he is the minister of God to thee for good. But if thou do that which is evil, be afraid; for he beareth not the sword in vain: for he is the minister of God, a revenger to execute wrath upon him that doeth evil.

"Wherefore ye must needs be subject, not only for wrath, but also for conscience sake.

"For ye are subjects for the same reason, whether of the one rulers or of the other. For there is no power but of God: the kings' authority is from God. It is prepared to give reward to good doers, and to destroy sinners. Therefore, you shall be subject to every government, not only for wrath, but also for conscience sake. For the kings are God's ministers, attending continually upon this very thing. "

"Render therefore to all their dues: tribute to whom tribute is due; custom to whom custom; fear to whom fear; honor to whom honor."

It is significant that this instruction was written at a time when many of the ones who obeyed it would be put to death by the very government who received their taxes.

However, the obedience of these Christians became such a powerful influence in the Roman Empire that tens of thousands were converted. This eventually caused Christianity to become the dominant religion in A.D. 313 during the reign of the Emperor Constantine.

Jesus Himself settled the question of paying taxes when He was asked by the Pharisees, "Tell us therefore, What thinkest thou? Is it lawful to give tribute unto Caesar, or not?"

Jesus asked for a coin of tribute money and then pointed out that Caesar's image was on the coin. Therefore, they were to "Render . . . unto Caesar the things which are Caesar's; and unto God the things that are God's." (See Matthew 22:15–21.)

A denarius bearing the image of the Caesar was equivalent to the daily wage of a laborer in Jesus' day. This was the "penny" which was brought to Jesus.
3 PETER WAS INSTRUCTED BY CHRIST TO PAY THE TAX.

During Christ's earthly ministry He came into Capernaum, and those who collected the tribute money came to Peter and asked, "Doth not your master pay tribute?"

Peter's immediate answer of "yes," affirmed the fact that Christ's message was never in opposition to paying taxes. In order to pay the required tax, Jesus sent Peter out to catch a fish, open its mouth, and find a coin inside. It is significant that Peter gained the tax money from his vocation of fishing. Thus, in a practical sense, this payment could be considered an "income tax." (See Matthew 17:24-27.)

Peter's occupation was fishing, and it was through this work that money was provided to pay his taxes.

4 GOD USED THE TAXATION OF HIS PEOPLE TO FULFILL PROPHECY.

The Old Testament prophet Micah foretold the birthplace of Christ—Bethlehem of Judea. In order for this event to take place in that city, God moved the heart of the Roman Emperor to call for worldwide registration and taxation.

There were anti-tax groups, (known as the Zealots), in those days, also. They were opposed to the wicked Roman rule and banded together in their purpose not to support this heathen government with any of their tax money. How different the Christmas story would have been had Joseph joined such a group!

"And it came to pass in those days, that there went out a decree from Caesar Augustus, that all the world should be taxed. (And this taxing was first made when Cyrenius was governor of Syria.)

"And all went to be taxed, every one into his own city. And Joseph also went up from Galilee, out of the city of Nazareth, into Judaea, unto the city of David, which is called Bethlehem; (because he was of the house and lineage of David;)

"To be taxed with Mary his espoused wife, being great with child. And so it was, that, while they were there, the days were accomplished that she should be delivered" (Luke 2:1-6).

A temple to the heathen god Jupiter built by Augustus, the Emperor who taxed Mary and Joseph at the time of Christ's birth
5 THE FREEDOMS OF CHRISTIANS ARE DEPENDENT UPON THEIR OBEDIENCE TO GOD'S WORD.

The pastor makes the assertion in his letter that the U.S. Constitution gives him "... certain freedoms that no one can abridge."

While the Constitution does say this, the presupposition is certainly contrary to the teaching and testimony of Scripture. God has consistently affirmed in both the Old and New Testaments that if His people turn from His laws, He will raise up adversaries to them, either among their own people or from other nations. These adversaries will bring them under the harsh disciplines of taxation and tyranny.

Deuteronomy 28:47-48 is but one reference: "Because thou servedst not the Lord thy God with joyfulness, and with gladness of heart, for the abundance of all things; Therefore shalt thou serve thine enemies which the Lord shall send against thee ... and he shall put a yoke of iron upon thy neck, until he have destroyed thee."

This judgment was carried out again and again in the history of Israel. During the days of the judges God delivered His people into the hands of the nations around them. These nations put such heavy restrictions and financial burdens upon the Israelites that they cried out to God for deliverance.

When King Jehoahaz "... did that which was evil in the sight of the Lord ..." Pharaoh-nechur "... put the land to a tribute of an hundred talents of silver, and a talent of gold. ... And Jehoiakim gave the silver and the gold to Pharaoh; but he taxed the land to give the money according to the commandment of Pharaoh ..." (II Kings 23:31-36).

When God's people failed to heed the warning of heavy taxation and rebelled against its payment, God gave their enemies the power to carry them out of the land in bondage.

Harsh government rule against Christians was affirmed by Jesus in the New Testament when He warned, "Ye are the salt of the earth: but if the salt have lost his savour, wherewith shall it be salted? it is thenceforth good for nothing, but to be cast out, and to be trodden under foot of men" (Matthew 5:13).

6 AGENTS WHO GATHER TAXES ARE TO BE HONORED AS GOD'S MINISTERS.

Somehow this pastor has been given the idea that "the IRS is not even a governmental organism; rather it is a corporation hired by the government for collection only, which has no power in and of itself."

Such a statement is certainly misleading. First of all, the IRS is an officially appointed organism of the government and as such falls within the scope of those that are appointed by government to carry out God's purposes.

"Submit yourselves to every ordinance of man for the Lord's sake: whether it be to the king, as supreme; Or unto governors, as unto them that are sent by him for the punishment of evildoers, and for the praise of them that do well" (I Peter 2:13-14).

Second, the statement that the IRS "has no power in and of itself ..." is an inaccurate reference to the structure of our government. Providentially we have a three-part balance of power: the legislative branch determines the taxes, the judicial branch determines their legality and enforces their collection, and the executive branch manages the funds that are collected.

There is an entire federal tax court system in our country which has immense power, and those who refuse to pay taxes are turned over to these courts for severe discipline.
7 TAXES WHICH ARE CONSIDERED UNJUST MAY BE APPEALED.

Because of the balance of power in our government and because we as a nation voluntarily choose to subject ourselves to taxation, there are legitimate circumstances in which appealing a tax may be necessary.

The voluntary nature of our tax system is that we as a people vote on the tax measures that are put before us, and we vote for those who represent us in government. Once a tax measure passes, the voluntary nature of paying it no longer exists, and those who refuse to pay taxes suffer severe penalties.

If a tax seems unjust, there are provisions and regulations by which an appeal can be made. However, this appeal usually requires that the tax under protest be paid first. Time, expense, and effect upon the cause of Christ must all be considered when appealing a tax.

A certain non-profit, tax-exempt, Christian ministry paid taxes on some of its buildings in order to establish good will in the community. On the other hand, they appealed another tax which put their ministry in the class of a privilege to be carried out under the state’s control.

After three years and $80,000 of litigation, the tax court ruled that this tax assessment was indeed illegal and unconstitutional. In the judge’s decision, he was careful to point out that because the ministry had paid the taxes under protest and had carefully followed every regulation, he was able to rule on the matter.

How did Jesus respond to an unjust tax?

When the tax collectors in Capernaum asked Peter, “Doth not your master pay tribute?” Peter quickly said, “Yes.” However, when Peter came into the house, Jesus stopped him and said, “... What thinkest thou, Simon? of whom do the kings of the earth take custom or tribute? of their own children, or of strangers?”

Peter replied, “... Of strangers.” Then Jesus confirmed to Peter, “... Then are the children free.”

By this discussion Jesus established the fact that He was not legally bound to pay this tax. However, He went on to say, “Notwithstanding, lest we should offend them, go ... find a piece of money: that take, and give unto them for me and thee.” (See Matthew 17:24–27.)

The implications of this account are extremely significant for all Christians in the matter of paying taxes. If Christ, the King of Kings, asked Peter to pay a tax for Him so as not to offend the people of Capernaum, how much more should Christians today be willing to agree with “a tax adversary” quickly so as not to damage the reputation of Christ.

8 TAXES MAY NOT BE WITHHELD ON THE BASIS THAT GOVERNMENTS DO IMMORAL THINGS.

Some Christians justify non-payment of taxes on the basis that their tax money may be used to carry out some immoral function, such as abortion. Such thinking is certainly not based on Scriptural teaching or Biblical precedent.

Nowhere in Scripture does God condition the payment of taxes to the godliness of those who receive it or use it. On the contrary, every tax or tribute that was paid went to a corrupt government or an apostate religious system. Even some of the money given by Jesus was stolen and misused by Judas.

The money that Joseph and Mary paid at the birth of Christ went to a government which two years
later slaughtered innocent children in an attempt to kill Jesus. (See Matthew 2:16.)

The massacre of Hebrew male children ordered by King Herod

The tax money that Peter paid for Christ and Himself was given either to a corrupt Roman government that later crucified Christ or to an apostate religious system that paid thirty pieces of silver to Judas to betray Christ.

The taxes that Paul commanded Christians to pay also went to the Roman government, which crucified Peter and burned and killed thousands of Christians.

Christians should be concerned about how their tax money will be spent and should make proper appeals when it is put to unscriptural uses. However, the responsibility for how taxes are used rests with government officials. On the day of judgment they will answer to God for how they carried out their responsibilities and used the resources that He entrusted to them.

9 THE SOVEREIGNTY OF GOD IS NOT SURRENDERED IF A CHURCH IS FORCED TO PAY TAXES.

Because Christians of our day have not been effective salt and light, the attitude of non-Christians toward the church is becoming more and more hostile.

One expression of this hostility is the government's requirement that churches pay taxes. Most churches view this alarming circumstance as an invasion of the government into the affairs of the church, and there is no question that this is true. Bewildered pastors ponder the following truisms:

"The power to tax is the power to destroy."
"There is no control without license and there is no license without control."

As true as these statements may be, they are very misleading by what they fail to communicate. God was just as Sovereign when He established the nation of Israel and directed the Tabernacle to be built as He was when He established New Testament Christianity and brought local churches into being.

The Ark of the Covenant was the place where God's glory resided, and it was kept within the Holy of Holies in the Tabernacle. As a warning to us, God allowed His Ark to be captured during a time of religious apostasy and the Tabernacle at Shiloh to be abandoned.

This same judgment came upon Solomon's Temple which had been filled with God's glory, and it also happened to the rebuilt Temple in which Christ ministered.
The fact that churches today are becoming subject to governmental taxation is a clear sign of religious apostasy and an evidence of God’s hand of discipline.

Rather than reacting to taxation, we should be on our faces before God. Only as we see how we have rebelled against His ways and then return to them, will He remove His judgment from among us.

To claim that the church organization and buildings are sovereign and cannot be taxed is to make a claim never made by God or demonstrated by His dealings with His people.

One Christian man in the Northwest had not paid taxes for over ten years. During those years he justified his non-payment on the assumption that taxation was constitutionally invalid.

As his pastor taught the principles of authority, this man was able to view taxation from God’s perspective. As a result he realized he had no Scriptural basis for his position, and he was in jeopardy of losing his ranch, his home and everything else he owned. After earnest prayer and fasting he initiated a contact with the IRS and explained the following to them.

“In past years I have operated on the basis that the government has no right to collect income tax from me, but I have now come to see the error of this thinking, and therefore, how wrong I have been in both my attitudes toward the authority of government and my non-payment of taxes. I have come to ask forgiveness and to make things right the best I can.”

That man openly explained his situation and said that he was prepared to pay the $100,000 in back taxes. He also explained that he did not have the funds to pay the penalties which he justly deserved. In this particular case, God caused the hearts of the IRS authorities to show leniency to him. They accepted the $100,000 as final payment and waived all the penalties.

Whatever the result, however, he could be certain that by getting under his God-given authorities, God would be free to work supernaturally.

**PROJECT**

Write a letter of appeal to the pastor who stated that his main authority in life was the Constitution. (See page 1052.) In a loving and clear way use the concepts of this resource to help him see taxation from God’s perspective.

*Date completed* __________  *Evaluation* __________
HOW SHOULD THE PRINCIPLE OF DUE PROCESS BE APPLIED TO AGREEING WITH AN ADVERSARY?

During times in which there were no legal procedures for settling disputes, suspects became victims of mob action.

WHAT IS DUE PROCESS OF LAW?

Due process is the means by which a case is administered through a court of justice. Due process involves rules and principles by which the powers of government can settle a dispute equitably. Due process provides safeguards for carrying out justice.

WHAT ARE THE ASPECTS OF DUE PROCESS?

The following factors are fundamental to the concept of due process of law:

1. The responsibility to properly inform a defendant that a matter is pending and to allow the defendant to make an informed response to the charge
2. The responsibility to allow for counsel and preparation for a trial
3. The responsibility to require all relevant documents to be produced
4. The responsibility to provide an impartial decision-making body
5. The responsibility to allow witnesses to be heard and cross-examined

WHAT IS THE SCRIPTURAL BASIS OF DUE PROCESS?

There are several clear Scripture references which establish the basis and scope of due process. The first is that two or three witnesses are required by God's Law in order to establish the guilt of an accused person.

In countries where witnesses are not required to prove guilt, torture can be used to extract confessions from the accused, whether he is guilty or innocent.

The due process provision that a man cannot testify against himself was designed to eliminate this cruel procedure.

The requirement of witnesses was confirmed several times in the New Testament.

"But if he will not hear thee, then take with thee one or two more, that in the mouth of two or three witnesses every word may be established" (Matthew 18:16).

"Against an elder receive not an accusation, but before two or three witnesses" (I Timothy 5:19).

The warning to go directly to the offending brother with a complaint and to "... discover not a secret to another" (Proverbs 25:9) upholds the written complaint required in due process.

The purpose of carefully searching out an accusation before judgment is given, which is the heart of the due process procedure, is also corroborated in Scripture.

"And the judges shall make diligent inquisition: and, behold, if the witness be a false witness, and hath testified falsely against his brother; Then shall ye do unto him, as he had thought to have done unto his brother: so shalt thou put the evil away from among you" (Deuteronomy 19:18-19).

WHAT IS THE HISTORY OF DUE PROCESS?

The Biblical principles of due process were incorporated into the Magna Carta, which King John of England was forced to sign in A.D. 1215.

The Magna Carta contained sixty-three articles. Among them was the article which stated that no free man in England shall be imprisoned, deprived of property, sent out of the country, or destroyed, except by the lawful judgment of his peers or by the law of the land.

Due process demands that the accused be viewed as innocent until proven guilty beyond a reasonable doubt.
King John of England signed the Magna Carta, which guaranteed some of the rights of due process.

The first Ten Amendments of the United States Constitution are known as the Bill of Rights. The Constitution with the Bill of Rights was ratified on December 15, 1791. The fifth and sixth amendments are directly related to due process; they read as follows:

**AMENDMENT 5**
Rights in Criminal Cases

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia, when in actual service in time of war or public danger; nor shall any person be subject for the same offense to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

**AMENDMENT 6**
Rights to a Fair Trial

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the assistance of counsel for his defense.

In 1868, the fourteenth amendment, which also has a direct bearing on due process, was ratified. It applies to the state level what the first ten amendments apply to the federal level.

**AMENDMENT 14**
Civil Rights

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 shall abridge 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.

Section 2. Representatives shall be apportioned among the several states according to their respective numbers, counting the whole number of persons in each state, (excluding Indians not taxed). But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, representatives in Congress, the executive and judicial officers of a state, or the members of the legislature thereof, is denied to any of the male inhabitants of such state, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such state.

Section 3. No person shall be a senator or representative in Congress, or elector of President and Vice-President, or hold any office, civil or military, under the United States, or under any state, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any state legislature, or as an executive or judicial officer of any state, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

Section 4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any state shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.
The secular authority of the court system

THE ASPECTS OF DUE PROCESS IN THE COURTS

God requires justice in the land for everyone, including the fatherless, the widows, the poor, and the strangers. Failure to provide an equitable court system to carry this out will bring God’s discipline upon a nation.

“Thou shalt not pervert the judgment of the stranger, nor of the fatherless; nor take a widow’s raiment to pledge” (Deuteronomy 24:17).

1. The responsibility of the court to properly inform a defendant that a matter is pending and to allow a defendant to make an informed response to the charge

STEP 1
A FORMAL, WRITTEN COMPLAINT AT LAW

The due process of a court is initiated when one who has been offended (the plaintiff, from

Law Resource G Booklet 23

1061
the French, plaintiff, meaning “mournful; making complaint”) prepares a written complaint according to the specifications of the court.

In this complaint the plaintiff names the one or ones he is accusing (defendant, from the Latin defendere, meaning “to ward off”).

The complaint contains the following:

• THE COURT (The building hall or room in which cases are determined)
• THE COMPLAINT AT LAW (An initial statement identifying the plaintiff and the defendant)
• THE PARTIES (More specific identification and residences of the plaintiff[s] and defendant[s])
• THE JURISDICTION (A statement by the plaintiff establishing the basis by which he believes that the court has the legal responsibility to hear the case)
• THE VENUE (The location in which the dispute should be heard)
• FACTUAL ALLEGATIONS (The history and specifics of the case which are background to the actual charges)
• THE COUNTS OF THE COMPLAINT (The specific charges)
• THE PRAYER FOR RELIEF (The request for compensation due to the injury or damage which has been claimed)
• THE EXHIBITS (Any supporting documents which relate to the counts of the complaint)

**STEP 2**

**DELIVERY OF THE COMPLAINT**

An officer of the court in which the complaint is filed is responsible to serve (deliver) the complaint.

God’s requirement that all things be done decently and in order will be fulfilled. (See I Corinthians 14:40.)

The adversary in this case should have already fulfilled the first two steps of Matthew 18:15–16 by going to the accused privately and then going with two or three witnesses.

The written complaint should contain the following:

• NAME OF CHURCH (In accordance with the instruction of I Corinthians 6:1–7)
• THE COMPLAINT (An initial statement identifying the accuser and the accused)
• THE PARTIES (Specific identification and residences of the accuser and the accused)
• THE JURISDICTION (A statement by the accuser establishing the Scriptural basis by which he believes the Church has the responsibility to hear the case)
• THE VENUE (The location in the church or other building in which the dispute will be heard)
• FACTUAL ALLEGATIONS (The history and specifics of the case which are background to the actual charges)
• THE COUNTS OF THE COMPLAINT (The specific charges)
• THE PRAYER FOR RELIEF (The request for compensation due to the injury or damage which has been claimed)
• THE EXHIBITS (Any supporting documents which relate to the counts of the complaint)

**STEP 2**

**DELIVERY OF THE COMPLAINT**

An officially appointed representative of the church in which a complaint exists is responsible
to the defendant. The service of the summons is verified.

**STEP 3**  
**WRITTEN ANSWER TO THE COMPLAINT**

Upon receiving the complaint at law, the defendant has a given number of days to answer it (usually thirty). If he fails to respond within that period, a judgment by default will be rendered against him by the judge in relief demanded in the complaint.

This initial answer is simply an agreement or a denial of each of the allegations in the complaint. It is not a detailed defense.

2 The responsibility of the court to allow for counsel and preparation for a trial

2 The responsibility of the church to allow for counsel and preparation for a trial

**STEP 4**  
**CONSENT TO AN ASSIGNMENT**

In accordance with the provisions of 1 Corinthians 6:1–8, we hereby voluntarily waive our rights to proceed before a judge of the United States court system and consent to have the case assigned to a church council to conduct any and all further proceedings in the case, including trial and the entry of final judgment.

Signed ____________________ Date ____________________

The accused should be notified that his use of the church council is voluntary. However, rejecting the assistance of the church officials in hearing the dispute does not eliminate the need for the accused to respond to the complaint.

If a sum of money is being disputed, that amount should be placed by the accused in escrow as an action of good faith and to ensure that he will fulfill the terms of this consent.
STEP 5
STATUS REPORT HEARING

In the first status report hearing, the assigned judge meets with the legal counsel of both parties to schedule the pre-trial hearing.

STEP 6
DISCOVERY OF FACTS

Discovery places upon the accuser the obligation to provide for the accused all documents.
which substantiate the allegations. Documents include all written or graphic matters of any kind or description, however produced, reproduced, or transcribed, whether draft, revision, or final, original or reproduction.

Discovery also involves depositions. A notice of deposition can be sent by the counsel of either party to the other. The party giving the deposition is able to ask questions and have them answered under oath and transcribed by a court reporter.

4 The responsibility of the court to provide an impartial decision-making body

STEP 7
THE TRIAL PROCEDURE

Whether the case is tried in a court of law or before a church council, it is carried out in the presence of God and requires total honesty with serious consequences for perjury.

Every person testifying in a trial takes an oath that he will "tell the truth, the whole truth, and nothing but the truth, so help me God."

A trial, whether civil or criminal, generally follows a prescribed outline of events. First, the lawyer representing the plaintiff states his case. Then statements he has made. Specific documents which are pertinent to the case can be requested by either party and must be turned over prior to the hearing.

Carrying out this step fulfills the counsel of Scripture to make diligent inquiry into the truth of a matter.

"He that is first in his own cause seemeth just; but his neighbour cometh and searcheth him" (Proverbs 18:17).

4 The responsibility of the church to provide an impartial decision-making body

STEP 7
THE TRIAL PROCEDURE

The requirements which God established for the New Testament church prepare church leaders for such matters as dealing with disputes among members. In fact, the spiritual maturity of a leader is determined by his ability to restore an offending brother. (See Galatians 6:1.)

The qualifications for a spiritual leader are listed in 1 Timothy 3 and Titus 1.

"A bishop then must be blameless, the husband of one wife, vigilant, sober, of good behaviour, given to hospitality, apt to teach; Not given to wine, no striker, not greedy of filthy lucre; but patient, not a brawler, not covetous; One that ruleth well his own house, having his children in subjection with all gravity; (For if a man know not how to rule his own house, how shall he take care of the church of God?) Not a novice, lest being lifted up with pride he fall into the condemnation of the devil. Moreover he must have a good report of them which are without; lest he fall into reproach and the snare of the devil. Likewise must the deacons be grave, not double-tongued, not given to much wine, not greedy of filthy lucre; Holding the mystery of the faith in a pure conscience.

"And let these also first be proved; then let them use the office of a deacon, being found blameless. "Even so must their wives be grave, not slanderers, sober, faithful in all things. Let the
the defense attorney responds. Each lawyer states what he intends to prove during the trial.

After the evidence is presented, the proceedings are concluded with each lawyer summarizing his case and giving a charge to the decision-making body, usually a jury.

Abraham Lincoln's ability to cross-examine witnesses is described in the resource, "The Ten Cardinal Rules of Cross-Examination." (See Wisdom Booklet 4.)

Abraham Lincoln's ability to cross-examine witnesses is described in the resource, "The Ten Cardinal Rules of Cross-Examination." (See Wisdom Booklet 4.)

The responsibility of the court to allow witnesses to be heard and cross-examined

**STEP 8**

**PRESENTATION OF EVIDENCE**

Most of the evidence in a trial is presented by the testimony of witnesses who give their information in response to well-designed questions asked by one of the attorneys. The opposing attorney usually cross-examines the witnesses to uncover mistakes in the testimony. Evidence may be presented in a trial only if it is relevant and firsthand.

The由于过程程序禁止强迫指控人作证。相反，需要两名或三名证人来建立有罪的事实。

The need for two or three witnesses is emphasized in the procedure which Christ gave to deal with an offending Christian, "... that in the mouth of two or three witnesses every word may be established" (Matthew 18:16).

**STEP 9**

**THE RENDERING OF A JUDGMENT**

If an accused person is judged to be guilty by a church council, and he refuses to comply with the judgment, Jesus said, "... Let him be unto thee as an heathen man and a publican" (Matthew 18:17).

**PROJECT**

Discuss the consequences of allowing a dispute to continue to the point of each of the above steps.

Date completed __________________________ Evaluation __________________________

Law Resource G  Booklet 23
HOW IS PROMPT ATTENTION TO MEDICAL INJURIES LIKE QUICK AGREEMENT WITH ADVERSARIES?

A wounded Marine is given prompt medical attention during the battle of Iwo Jima.

When it comes to a physical injury, infection is a serious adversary which must be dealt with immediately. The longer the time lapse between the injury and the assistance, the greater the danger of destructive consequences.

When a person is injured, he goes through three stages of recovery. In the first stage, the body signals all its members that resources are needed in the injured area for healing to begin. After this first stage, the body begins cleansing the wound and binding it together.

The final stage is one of restoration to normal functioning. Failure to act quickly will hinder all three of these healing stages.

Although in many cases the body is capable of naturally healing itself, it benefits in at least eight definite ways when prompt medical attention is given.

1 PROMPT ATTENTION TO AN INJURY MINIMIZES PAIN.

Pain alerts the brain that an injury has occurred and focuses attention on the exact point of the wound. Pain acts as an early warning signal which forces a person to seek immediate attention.

Seconds after an injury occurs, the brain triggers the release of a substance called endomorphine. Endomorphine acts temporarily to “turn off” a wound’s alarm system of pain so that a person can respond to the emergency without being “immobilized” by pain.

The initial release of endomorphine lasts for about twenty minutes. If a broken bone is set during this short “grace” period while the pain is blocked, the treatment is relatively painless. Cuts which are cleansed and stitched immediately also benefit from the body’s own anesthetic.

Prompt attention in the first few minutes after the injury may prevent the initial pain from ever returning, even after the body’s natural anesthetic wears off.

However, if treatment is delayed beyond the “grace” period, pain returns. Broken bones and wounds begin to throb and ache again. As the brain’s endomorphine wears off, the pain is often worse than it was immediately after the injury.
PROMPT ATTENTION TO AN INJURY REDUCES THE LOSS OF BLOOD.

Wounds and broken bones may sever blood vessels which carry life-giving oxygen and nutrients to all parts of the body. Without oxygen and nutrients, body cells die quickly. Brain cells, heart cells, and kidney cells, for example, die within four to six minutes. Skin and muscle tissue can survive without blood for longer periods, but they also die if the body loses too much blood.

If a major artery such as the brachial artery of the arm or the femoral artery of the leg is cut, blood may pour out at a rate of a pint per minute. This bleeding must be stopped quickly, or a person can bleed to death in less than twelve minutes.

Fibrin is the end-product of a dominoes-like series of chemical reactions in the blood, a process called coagulation (koe-ag-you-LAY-shun). Platelets are tiny particles in the blood which clump at the edges of a broken blood vessel and begin to block the flow of blood.

At any given time, more than eighty percent of the body's total blood supply is located in blood vessels. If a vessel is severed, blood volume can drop suddenly, resulting in shock or death.

To prevent a rapid loss of blood, the body releases a complex array of chemicals which shrink injured vessels and seal off their torn ends.

Damaged cells around a severed vessel also release a substance called thromboplastin, which, when combined with fibrin, platelets, and trapped red blood cells, forms a clot and stops the flow of blood.

In most minor injuries, bleeding usually stops in one to four minutes. This process preserves the rest of the body, but it sacrifices the living cells around a wound. These cells die as their own blood supply is cut off.
Red blood cells carry food and oxygen to all parts of the body. White blood cells enable the body to fight infection, and platelets stick to injured blood vessels, helping blood to clot.

If bleeding persists, it must be stopped artificially by means of applied pressure. Compressing a major artery at one of four pressure points can shut off the flow of blood to an entire arm or leg. This action gives the platelets and the fibrin time to seal off the severed vessel and stop the bleeding naturally.

One who gives first aid must know what the pressure points for blood circulation are.

Shock results from a dramatic drop in blood pressure. The skin becomes pale, cold, and clammy, and the heart beats so rapidly that it may seem to flutter. If not treated promptly, the victim may faint and his pulse may be undetectable. Some victims may die from shock rather than from the injury itself.

Injuries which cause dislocations of the elbow and hip can severely restrict the flow of blood. These injuries require prompt attention to restore circulation. As long as a limb remains out of joint, it blocks the flow of blood. If circulation is not restored promptly, there is serious risk of losing an entire arm or leg.

A dislocation results when a joint separates and does not return to its original position. If a ball slips out of its socket, as shown here, circulation may be cut off. Failure to restore a joint quickly to its proper position interferes with the healing process.

The sharp edges of broken bones damage large areas of muscle as they are bumped or twisted. This injured tissue blocks circulation and prevents the injured member from healing quickly. Splinting an arm and then placing a cast on it holds the broken bone in place so that it does not damage more tissue, and it allows the bone to heal properly.
After the injury has received attention, good circulation is still needed for proper healing to occur. Exercise is one important way to promote good circulation. Patients who remain motionless for long periods of time require extended periods of healing because of restricted blood flow to the injured area. Patients who exercise promptly after surgery or an accident show much more rapid rates of recovery.

Why circulation is essential for healing

The human body contains a vast network of blood vessels; if laid end to end they would reach 100,000 miles—that is equivalent to going around the world four times!

The “exchange system” between the blood and body cells takes place in the capillaries. In the capillaries food and oxygen are exchanged for waste materials. These waste materials are carried back to the heart and then to such organs as the liver, lungs, and kidneys, where they are removed.

4 Prompt Attention to an Injury Cleanses Away Infection.

When the skin is broken, the body loses its first line of defense against infection. Impurities which are normally unable to penetrate the skin’s protective shield then find an open invitation to enter the body.

Types of blood vessels in the circulatory system

Arteries carry the blood away from the heart, and veins bring the blood back to the heart. In the blood are life-giving substances which not only fight disease, but also strengthen the whole body.

Untreated wounds can lead to infections which may be more destructive than the wound itself.

As these invaders attack healthy tissue, they produce toxins which may prevent the wound from healing. If an infection is not cleansed quickly, it can spread to other parts of the body.

Damaged cells literally cry out for help by releasing a substance called histamine. Histamine attracts white blood cells which act as phagocytes.

Phago comes from the Greek word φαγεῖν (FAH-go), which means “to eat.” Cyte comes from the Greek κύτος (KOO-toss), which means “a vessel,” and is almost always used in reference to cells. Therefore, a phagocyte is “a cell that eats.” Phagocytes and other defensive elements in the blood are mobilized quickly and migrate to the injured areas within just a few minutes’ time.

Phagocytes act like soldiers who are engaged in a bitter conflict. They seek out, surround, and destroy their enemies by literally “eating” them. The enemy may be bacteria, injured or dying cells, bone chips, or clots of blood. In this process of “eating”
the enemy, many phagocytes sacrifice themselves and die and must be replaced. New recruits arrive by way of the bloodstream as those who have fallen on the field of battle are flushed away. As the phagocytes squeeze through the walls of blood vessels into damaged tissue, the wound swells and turns red. The process of inflammation is a very painful one, but it is very necessary, for it cleanses the wound and prepares it to be bound together.

After twelve to twenty-four hours, an infection which is not treated may be so great that the injury should not be closed at all. The wound must be left open so it can heal from the inside out. This healing requires weeks or months and usually leaves a large scar.

5 PROMPT ATTENTION TO AN INJURY BINDS BROKEN BONES, TORN TISSUES, AND SEVERED NERVES.

Fibrin seals and binds wounds. As fibrin leaves the bloodstream and enters a wound, it forms a tight network of fibers which knit themselves together to form a mesh like that of a bandage.

When these fibers are exposed to air, they harden and form a “scab.” Scabs gently bind wounds together and seal out dirt. They also seal in fluids which help in the healing process.

Artificial bandages serve the same purpose. They seal out dirt and bind the torn edges of a wound together.

Bandaging a wound immediately after cleansing it helps the body to reunite bones, muscles, and nerves.

In the case of broken bones, this same fibrin forms a large blood clot, called a fracture hematoma, around the two ends of a break. Within forty-eight hours after an injury, the bone begins to form new bone tissue, called callus.

Callus temporarily “knits” the two ends of a break together, and over a period of time it is converted into permanent bone.

Within a week’s time after a fracture, the callus is firmly in place. If the bone is not set before the callus forms, the callus must be broken before the bone can be set properly.

Restoration of a fractured right femur

Within 6–8 hours a fracture hematoma forms around the ends of a broken bone.

Within a week the two ends are knit together by callus.

After 6–8 weeks the broken bone is once again able to support itself.

6 PROMPT ATTENTION TO AN INJURY INCREASES HEALING POTENTIAL.

The purpose of healing is to restore the injured member to its original condition. Failure to respond quickly to an injury restricts the amount of restoration which is possible.

The healing of broken bones is controlled by stresses in the bone itself. Stresses on an injured bone cause cells called osteoblasts to build new bone cells where more strength is required. Bone cells called osteoclasts remove any bone cells which are not necessary. Together these two processes restore a broken bone to an exact duplicate of its original. In fact, healing is often so complete that even an X ray cannot detect any evidence of a break.
A break may be as obvious and clear-cut on an X ray as the ones pictured above. However, it may show up as only a thin white line which fades away as the break heals.

Nerve cells have much more limited powers of regeneration. Damage to the spinal cord and brain are permanent. However, healing can restore most of the motor and sensory nerves of the arms and legs.

A tube-like sheath called a myelin sheath protects motor nerves. If a surgeon can sew the severed ends of the myelin sheath together soon after an accident, the nerve is likely to work its way along the inside of the myelin sheath’s empty tube as it regenerates.

This process, however, is very slow. A nerve usually grows only about five-hundredths of an inch per day. Since some nerves may be two to three feet long, restoration can take a long time.

Without nerves to control and coordinate the movements of muscles, a person may be paralyzed or crippled. Without input from sensory receptors, a member is numb and has no way of identifying and avoiding more injury. This numbness may jeopardize the entire body.

**How peripheral nerve damage is repaired**

Not all members of the body can be completely restored. Some can only be repaired. Repairing binds and cleanses a wounded member, but it does not restore its function.

The difference between repair and restoration depends on the type of cells which replace a damaged area. If cells called stroma cells replace those which have been injured, there is no restoration of function. Stroma cells produce non-functional scar tissue. Stroma comes from a Greek word meaning “bed.” Stroma cells form the “bed” or framework which connects organs together and holds them in place. Their only function is to hold things in place.

Scar tissue is a form of stroma cells. Scar tissue binds injured tissue together, but it cannot perform the function of the cells it replaces.

Only those members of the body which can reproduce functional cells, call parenchymal cells, can be restored. The word parenchyma comes from a Greek word meaning “to pour in beside.” A parenchymal cell is “poured in beside” and is capable of all the functions of the original cells. Restoration not only heals, but it also renews a wounded area so it can fulfill its intended function.

Nerve cells, the liver, skin, and bone can reproduce parenchymal cells. These cells can be restored fully, or at least partially, in most instances.
However, organs such as the heart, kidneys, and brain, reproduce stroma cells. Once one of these organs is damaged by an injury, it can never return to its original condition.

How a damaged heart is repaired

A damaged heart is difficult to restore. Scar tissue (stroma cells) must be removed from the weakened heart.

Silk thread is then used to bind the heart together while it heals.

Once a heart has been wounded, as in a heart attack, it can never be fully restored. Scar tissue may bind the injured area together, but it does not restore the strength of the damaged muscles. Repeated heart attacks so weaken sections of the heart that nonfunctional scar tissue must be removed to allow healthy sections to be stitched back together.

7 PROMPT ATTENTION TO AN INJURY REDUCES THE TIME REQUIRED FOR HEALING.

To protect a bone from further injury while it is mending, a doctor often immobilizes it with a plaster cast. A cast holds the broken ends in position while they heal. It also bears the burdens of stress for a broken bone.

However, the longer a cast provides external support for a healing leg or arm, the more the muscles under the cast lose their strength. If the cast is left on too long, these muscles can atrophy to the point where they can never regain their original strength. A cast is usually necessary for a broken bone, but it is only temporary. It must be removed promptly when the break has mended.

Traction is needed to hold this patient’s right femur in place while it heals.

Any time a joint, muscle, or bone is immobilized, it begins to degenerate. Joints stiffen, muscles shrink, and bones become more brittle. Circulation to the injured member is also restricted. Doctors must carefully consider these consequences before prescribing prolonged traction or plaster casts.

8 PROMPT ATTENTION TO AN INJURY REDUCES PHYSICAL COSTS.

Proper first aid requires a quick, accurate, and complete assessment of a victim’s injuries. Life-threatening injuries demand immediate attention. Other, less critical injuries can be treated later.

One way to remember the proper order of first aid is to follow the “ABC’s.” “A” stands for “airway,” “B” stands for “bleeding,” and “C”
stands for “circulation.” Any of these three factors will cause death if not attended to; therefore, a swift response is essential.

**THE ABC’S OF FIRST AID**

**AIRWAY**
Check to be sure that the injured person is breathing and his airway open. If the person is not breathing, clear the airway and administer artificial resuscitation.

**BLEEDING**
Next, check for external bleeding. Elevate a bleeding limb unless a bone has been broken. Press a clean cloth firmly against the wound with a steady pressure. This should slow the bleeding enough for the natural defenses of the body to seal off the wound and stop the bleeding completely. A tourniquet is a dangerous device and should be used only as a last resort. It can save a life, but it can also destroy a limb if it is left on for more than thirty to forty-five minutes. Tourniquets cut off the flow of blood entirely and can cause healthy tissue to die, necessitating amputation.

**CIRCULATION**
Finally, examine the victim for signs of heart irregularities. A rapid pulse may indicate that the victim is going into shock. No pulse at all requires immediate CPR (cardiopulmonary resuscitation).
After caring for life-threatening injuries, proper first aid requires a secondary survey of the victim’s injuries. This survey can be easily remembered with the letters “E, F, and G.” “E” is for “eyes,” “F” is for “fractures,” and “G” is a reminder to “GET HELP.”

**THE EFG’S OF FIRST AID**

**EYES**
The victim’s pupils reveal brain and nerve damage if they are unequal in size or if they do not respond to light. Take care to protect the victim’s head, neck and back from any unnecessary movement.

**FRACTURES**
Check the entire body for signs of broken bones and torn ligaments. Beginning at the shoulders, gently press against each part of the body for signs of tenderness, swelling, discoloration, numbness, deformity, or inability to move a member. Be alert for painful breathing, which may indicate a fractured rib.

**GET HELP**
First aid is only the initial response to an injury. While prompt attention offers many benefits, it is only the beginning of the healing process.
Most communities have the emergency “911” phone number which can be used to summon professional help. In case of an emergency make sure someone has called for help. Do not assume it has already been done.

In most communities professional help is only minutes away.

**PROJECT**
Answer the following questions to clarify the analogy between the need for promptness in treating a physical injury and the need for quickness in agreeing with an adversary.

1. How does agreeing quickly with an adversary minimize the pain of reconciliation?
2. How does agreeing quickly with an adversary prevent additional loss?
3. How does agreeing quickly with an adversary promote faster restoration?
4. How does agreeing quickly with an adversary cleanse away bitterness?
5. How does agreeing quickly with an adversary bind broken relationships?
6. How does agreeing quickly with an adversary restore the full potential of a future working relationship?
7. How does agreeing quickly with an adversary reduce the time needed for restoration?
8. How does agreeing quickly with an adversary reduce the cost of conflicts?