



CREATION AND THE BEGINNING OF HUMAN HISTORY

#8 - The Cell Speaks of God's Wisdom Genesis 8:22-31

PICTURES NEEDED

- | | | | |
|-----|------------------------------|-----|-------------------|
| 8-1 | Smallest unit to plant chart | 7-2 | Bean growth chart |
| 8-2 | Picture of living cells | | |
| 8-3 | Model of a cell | | |

REVIEW (Before Teaching Lesson)

- **Journal Review:** Ask students to share an important truth that they learned from their journal readings at home that week. Share some of your own insights.
- **Previous Lesson Review:** (Use the visual from the last lesson to aid in review)
What had God created before he brought forth plants? What is the difference between the plants God created and what he had created before them? What do plants need to live and grow? How did God create the plants? What did God see about the plants?
- **The Big Question Review:** What does being rooted in the Lord do for us?
Let the students give their answers to the question.
- **Bible Verse Review:** Psalm 24:1-2
Being rooted in the Lord causes the righteous to flourish.

¹²The righteous will flourish like a palm tree, they will grow like a cedar of Lebanon;

¹³planted in the house of the LORD, they will flourish in the courts of our God.

LESSON CONTENT

Note: The Bible verses included in the lesson are from the NIV 1984 edition. The wording of the questions is derived from that version. If another version of the Bible is used, questions may need to be adapted.

At the beginning of this study in Genesis, we learned how creation speaks of God. It is important as we study God's creation that we listen carefully to what it has to say. On day three when God created vegetation, living things came into being. We need to stop and consider what that means and what the smallest unit of life has to say about God.

What is the smallest unit of matter? **(picture 8-1)** Remember that the smallest unit of recognizable matter is the atom. There are 90 naturally occurring elements or atoms that make up everything that exists. Atoms bind together to form molecules. All matter is made up of different types of molecules bound together.

What is the smallest unit that has life? **(picture 8-2)** In living things, different types of molecules have been brought together by God and designed to form cells. A cell is the smallest and most basic unit of life. All plants and animals are made up of living cells. Your body is made up of more than ten trillion living cells (10,000,000,000,000). Most cells are so small that about 500 of them could fit on the end of a pin. (Hold up a pin to demonstrate.)

Since all plants and all animals are made up of cells, we want to examine the nature of a cell to learn about the wisdom of God. Because cells are living, they do everything a larger living organism does.

What are the things living organisms like a human body do? Living organisms process food, take in gas from the air, get rid of waste, grow, reproduce and eventually die. A cell is living and does those things, too. It is like a tiny factory processing food and oxygen to produce the energy it needs to live, grow and divide.

(Use the visual of the growing bean plant from last lesson.) **(picture 7-2)** Think about a sprouting seed. A seed starts originally as a single cell in the flower of a plant. It is fertilized, divides into more cells and develops into a seed. Under the right conditions, the cells in the seed come to life.

Where does the seed get the ability to do this? This information about life has been programmed by God into the seed. The seed contains all the material and information it needs to develop into a living plant. The DNA or genetic information in a seed will cause the cells to grow and reproduce and develop into the different parts of the plant.

How do the different parts of a plant develop? The cells in the seed will divide and specialize to become different parts of the plant. Some cells will divide and specialize to become the different types of cells that make up the stem or leaves or roots. It is truly amazing that the little seed contains all the instructions for a plant to grow and develop. Each plant does that just the way God intended and designed.

When we consider a cell and a seed and just how wondrous both are in their function and development, it should cause us to reflect on the majesty of who God is.

Only God had the wisdom and power to bring forth life. Only God understands the complete design of all he has created.

God has given us a mind in part so we are able to discover wonderful things about God's creation, like the working of a cell. What does God want us to do with the mind he has given us? He wants us to know and seek him. The more we acknowledge and seek God, the more we gain understanding of him and his great power and majesty.

Why is it sometimes hard to understand who God is? Because God is a supernatural spirit and of a completely different nature than people, it makes it difficult for us to understand fully all that he is and has done. To rightly relate to God we have to believe that God himself is the source of wisdom and understanding.

What did God know before he created something? He knew what he wanted to accomplish before he created anything. Before anything came into existence, it first was an idea in God's mind. He knew the design of each and every plant and animal before he gave them life.

What did God design the earth for? God wanted the earth to be a home for and support life. That's why he designed and created water, air and light. He thought out the plan or DNA for each living thing before he created it. Without these things and the information and life that come from God, the earth would be an empty planet just like the other planets in the solar system.

Proverbs 8:22-31 speaks of wisdom and says, *22"THE LORD brought me forth as the first of his works, before his deeds of old; 23I was appointed from eternity, from the beginning, before the world began. 24When there were no oceans, I was given birth, when there were no springs abounding with water; 25before the mountains were settled in place, before the hills, I was given birth, 26before he made the earth or its fields or any of the dust of the world. 27I was there when he set the heavens in place, when he marked out the horizon on the face of the deep, 28when he established the clouds above and fixed securely the fountains of the deep, 29when he gave the sea its boundary so the waters would not overstep his command, and when he marked out the foundations of the earth. 30 Then I was the craftsman at his side. I was filled with delight day after day, rejoicing always in his presence, 31rejoicing in his whole world and delighting in mankind.*

What is wisdom? Wisdom is knowledge and understanding of how things work and what is the right thing to do and then acting on that knowledge.

What does it mean that wisdom is the first of God's works? The understanding that brought everything into being existed before God created anything physical.

Why is wisdom inseparable from God? Wisdom has its origin in God. Only God has all knowledge and understanding of how things work and what is right do. Only from gaining God's understanding and doing things the way God says we should will we be wise.

Why would nothing exist without wisdom? Wisdom comes from God and it can't be separated from God. If there were no wisdom, there would be no God. There would be no intelligent being to put things in place.

What you remember what the Law of Biogenesis is? The Law of Biogenesis states that non-living matter can't give rise to life.

What do you remember about the First Law of Thermodynamics? The first law states that matter and energy cannot be created or destroyed.

What do these two laws show there needs to be? There must be a supernatural being who has the wisdom and power to have brought the material world into existence. The marvelous things God created couldn't come into being on their own. God and his wisdom have always existed and through his wisdom came the material world; all that we can see and touch was created by God and for God.

We are reminded that all of creation came out of God's wisdom. Proverbs 8:22-23 says, ²²"The LORD brought me (wisdom) forth as the first of his works, before his deeds of old; ²³I (wisdom) was appointed from eternity, from the beginning, before the world began.

LESSON WRAP-UP

- **Overview Questions:** What is the smallest unit of matter? What do atoms form when they join together? What is the smallest unit of life? What are cells made up of? What do cells divide into and become? How are they able to do that?
- **Thought Questions:** What is a craftsman? What does it mean that wisdom was the craftsman at God's side? Why would wisdom have been filled with delight as God created things? Why can't anyone be truly wise without seeking after God? How can we gain understanding of God through studying his creation?
- **Prayer:** Thank God that he is the designer and creator of life. Pray that you would recognize more of the majesty of who he is and the depth of his wisdom. Pray that you would grow in wisdom and understanding and appreciation of who he is and what he has designed.
- **The Big Question:** What comes from God's wisdom?
Let the students give their answers to the question. Share the memory verse. Ask how it answers the question.
- **Memory Verse:** Proverbs 8:22-23

God's creation comes out of God's wisdom.

²²"The LORD brought me forth as the first of his works, before his deeds of old; ²³I was appointed from eternity, from the beginning, before the world began.

Questions: How long has God's wisdom existed? What does that mean? What is the result of God's wisdom?

ACTIVITIES (Completed after the lesson)

Any age appropriate activity can be included which fits into the class time. The activities with a star are included on the class notes.

- ★ **Lesson Notes:** Ask the students to summarize in one sentence what the lesson was about. Then have them give three main points covered in the lesson. An example is below.

Theme: Because God is the source of wisdom and understanding he was able to design and create living things.

1. God's wisdom existed from eternity, before he created anything.
2. Out of God's wisdom came the design for all things.
3. God's design for his creation is a good design because it follows his plan. Like wisdom we should rejoice in God's good design for life.

- ★ **Memory Verse:** Read the memory verse on the cover of the class notes and then have the students fill in the blanks in the verse.

- ★ **Activity Page:** Crossword Puzzle

Instructions: Fill in the crossword puzzle with words related to creation.

Worship – The honor we should give to God

Wisdom – The first of God's works

Atom – The smallest unit of matter

Molecules – What all matter is made up of

Cell – The smallest unit of a living thing

Design – The order and purpose seen in creation that points to God

Information – What God has programmed into all living things

Creation – All that God has made

- ★ **Further Understanding:** Investigation/Reasoning Skills

The Living Cell

The tiny, living cell is the basic unit of all living organisms. **(picture 8-3)** Each cell is a complete and self-contained unit and in some ways resembles the human body, as it does the same kind of things the body does. As we examine the parts of the cell we will compare each to a body part or system that performs a similar function. Remember that all these complex functions are happening inside a cell that is so tiny it can't be seen with the human eye.

- A cell has a membrane surrounding it that holds it together. (What is that similar to?) Skin
- A plant cell has a cell wall which provides support for and gives form to the cell. (What is that similar to?) skeleton
- A cell has a nucleus that directs the functions of the cell. (What is that similar to?) brain

- The inside of the cell, except for the nucleus, is called cytoplasm and contains organelles that perform special functions. (What is that similar to?) internal body organs
- In the cytoplasm of a plant cell are chloroplasts where the process of photosynthesis takes place. (What is that similar to?) There is no similar structure in an animal cell since animals can't produce their own food.
- In the cytoplasm are vacuoles that store food. (What are they similar to?) fat cells or liver which stores glycogen
- In the cytoplasm are mitochondria that break down food and process it and oxygen to provide energy for the cell. (What are they similar to?) stomach/lungs, digestive/respiratory system
- In the cytoplasm is the endoplasmic reticulum that is made up of little channels and tubes that move materials from the cytoplasm to the cell membrane. (What is that similar to?) blood vessels, circulatory system
- In the cytoplasm is ribosome which breaks down food and makes it useful for the plant. (What is that similar to?) stomach, digestive system
- In the cytoplasm is a centrosome which is involved in producing new cells. (What is that similar to?) a woman having a baby
- In the cytoplasm is a Golgi body which stores and transports materials and which breaks down material the cell uses or processes. (What is it similar to?) digestive system

Discussion: What would happen to the function of the cell if any part of the cell were missing? (Review and name each part for the students to explain.) What would happen to a plant if its cells didn't function properly? How does the cell demonstrate design? What can be learned about God through the study of the cell?

JOURNAL

The journal is passed out at the end of class for the students to complete at home. It has six readings that answer a digging deeper question. It would be beneficial for the teacher to work through the journal readings also.

Digging Deeper: What will God's wisdom do for us?

Reading 1: Proverbs 3:13-20 The one who finds wisdom is blessed.

What will wisdom do for a person? Why is that more profitable than having gold or silver? What did God do by wisdom?

Reading 2: Proverbs 3:21-26 Wisdom brings protection.

How does wisdom bring protection?

Reading 3: Proverbs 8:1-11 Having wisdom is more valuable than jewels.

What does wisdom want to give us? Why is having wisdom more valuable than having jewels?

Reading 4: Proverbs 8:12-21 With wisdom comes enduring wealth and prosperity.

What is prudence? What is discretion? How do prudence and discretion dwell with wisdom? What is the fruit of having wisdom?

Reading 5: Proverbs 8:32-36 Whoever finds wisdom finds life.

How do we find wisdom? What is the result of finding wisdom? What happens to the person who fails to find wisdom? Why?

Reading 6: Jeremiah 10:11-16 Examining the design of a plant

Pull up a weed from your yard and examine its parts. Think through the design and function of each part of the plant and how it shows the wisdom of God. Contemplate how amazing it is that all the information needed for the weed to grow started as a single cell in the mother plant and was contained in the little seed that it grew from.