Lower Elementary – Level 3



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

PICTURES NEEDED

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

7-2 Bean growth chart

REVIEW (Before Teaching Lesson)

- <u>Journal Review:</u> Ask students to share an important truth that they learned from their journal readings at home that week. Share some of your own insights.
- <u>Previous Lesson Review:</u> (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?
- <u>The Big Question Review:</u> What does being rooted in the Lord do for us? Let the students give their answers to the question.
- <u>Bible Verse Review:</u> 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.

<u>What is wisdom?</u> 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

- <u>Overview Questions:</u> 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?
- <u>Thought Questions:</u> 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?
- <u>Prayer:</u> 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.

<u>Questions:</u> 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: Have the children answer the two questions individually or as a group.

What did you learn from this lesson? How can you put into practice what you learned?

- ★ <u>Memory Verse</u>: 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

★ <u>This Week's Big Question:</u> Have the students fill in the blanks for the way the memory verse answers the big question.

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

- ★ Coloring Page: Color the lesson picture.
- Craft: Cell Puzzle

As a reminder that plants are made up of tiny cells that divide and produce all the parts of the plant, cut up a picture of a cell into a tangram puzzle.

<u>Materials:</u> cover stock paper, crayons or color pencils, scissors, envelopes.

Preparation: Run off Craft 8 on cover stock paper.

Instructions:

- 1. Color the picture of the cell and then cut it apart along the lines to make puzzle pieces.
- 2. Put the pieces of the puzzle back together again.
- 3. Turn the puzzle over and use the pieces to make designs that look like plants or other living things.
- 4. Store the pieces in an envelope or sandwich baggie.

- <u>Investigation Activity:</u> Examine a Cell <u>Instructions:</u> Examine the thin, dry outer skin of an onion under a microscope to see the cells or scrape off cells from the inside of your mouth to examine them.
- <u>Game:</u> Put Together a Plant
 As a reminder that plants are made up of different parts, which are necessary for the plant to function, put together a plant.

<u>Instructions:</u> Print off pictures of different plants from the Internet. Cut the pictures into pieces and hide the pieces. Give each team a copy of the picture of one of the plants. Each team then needs to find the pieces that make up its particular plant. The first team to get all the pieces to a complete plant wins.

JOURNAL

The journal is passed out at the end of class for the students to complete at home. It has six poetic readings and related Bible verses. It would be beneficial for the teacher to read through and be familiar with its content.