

LESSON ACTIVITIES

✓ **Further Understanding:** Investigation/Reasoning Skills

The Big Bang Theory

Astronomers, the people who study the heavens, agree that the universe had a beginning; it hasn't always existed. According to the Bible, in the beginning God had a plan and then he spoke all things into existence. This is called creation and means that the universe and all physical things had a beginning and a supernatural cause – God. God is of a different nature than his creation which is why he was able to bring things into being.

Those who believe in evolution have to explain the origin of the universe by natural, rather than supernatural, causes. The current theory is called “the big bang.” The belief is that about 15 billion years ago all the material that makes up all the objects in the universe was packed into one incredibly hot, dense mass. Somehow there was a massive cosmic explosion that spewed matter out into space. That matter slowly, over billions of years, condensed into stars and planets and organized itself into galaxies and solar systems.

Some questions to consider about the Big Bang Theory are: Where did the matter that exploded come from in the first place? How did atoms and molecules form? What would have caused the matter to explode? How does an explosion create order? If everything came from the same matter, why are the planets in our solar system made up of different substances and why are they different from the sun? How would galaxies and solar systems order themselves? How could complex life, like that which exists in the cell, come out of nothing? Why is earth the only planet capable of supporting life? The questions go on and on and on.

You have to determine for yourself what you think is the most reasonable explanation for the order, complexity, intricacy and majesty of the earth, solar system, and universe. Are they the result of a random explosion or do they reflect order and design that must have their genesis (origin) in the mind of an intelligent designer who is capable of bringing them into existence?

Currently, people in the media and academia ridicule as foolish and ignorant people who believe in God as the creator. However, at some point in time people will look back and consider evolution a foolish and ignorant belief because it doesn't fit reality (the way things really are). There is just too much evidence of intelligent design. In Colossians 2:8 the Bible says, *See to it that no one takes you captive through hollow and deceptive philosophy, which depends on human tradition and the basic principles of this world rather than on Christ.*

You have to decide if you will stand on the side of God's truth against the ideas of the world or if you will take on the world's ideas in order to be accepted by people. In considering your decision, remember that you are an eternal being and what you decide to believe and follow will affect not only your life on earth but also your eternal destiny. The rejection of God as creator causes men to also reject God's truth. When men reject God and his truth they follow their own foolish ideas which put them on a purposeless and destructive path.

In the Beginning 11 – Activities

Open your eyes, examine the world, and determine what you think is the most reasonable explanation for the existence of the universe: God or no God.

✓ **Investigation Activity - Why do planets orbit the sun?**

1. Tie a washer to the end of a piece of string 3 feet long.
2. Hold the string about midpoint and twirl it in a circle. Discuss how the movement is similar to the movement of the earth around the sun and how it is different. (The string keeps the washer moving in an orbit. Gravitational force in a similar sense ties the earth to the sun and keeps it in orbit.)
3. Count the number of seconds it takes for the washer to make a complete orbit. Make the string shorter and count. Make the string longer and count. Discuss how this would relate to the speed of a planet's orbit and the length of time it would take for a planet to orbit the sun.

✓ **Discovery Activity:** Planet size comparison

Show visual to show size of planets compared to that of the sun.

✓ **Craft:** Tissue Paper Sun

As a reminder that the sun is the center of our solar system and is designed to support life on earth, make a tissue paper sun.

Materials: white cardstock paper, yellow tissue paper, pencils, glue, string, hole punch

Preparation:

1. Draw a sun on the card stock paper and cut it out. Write the week's memory verse on the back of the sun
2. Punch out a hole and tie a string through it.
3. Cut lots of 1" squares of yellow tissue paper.

Instructions: To make the sun take a piece of tissue paper and wrap it around the eraser end of a pencil. The end with the tissue is dipped in glue and then placed on the side of the sun without the verse. The whole surface of the sun should be covered with the pieces of tissue paper. Another option is to roll the pieces into balls and glue them on the sun.

✓ **Game:** Spin Out

As a reminder that the gravitational pull of the sun keeps the planets in orbit and keeps them from spinning out into space, play "Spin Out".

Instructions: This should be played on a grassy or sandy area or a soft carpet. One child is the sun. He grabs hold of the hand of another child and spins that child around. At some point, he lets go of the child's hand and the child falls away. The child must stay in the position that he fell into. After every child has been spun out, have the sun choose which one landed in the most interesting position.

Size Comparison

