

Weather & Water





God's Design® for Heaven & Earth is a complete earth science curriculum for grades 3–8. The books in this series are designed for use in the Christian school and homeschool, and provide easy-to-use lessons that will encourage children to see God's hand in everything around them.

Printed January 2016

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ISBN: 978-1-62691-448-3

Published by Answers in Genesis, 2800 Bullittsburg Church Rd., Petersburg KY 41080

Book designer: Diane King Editor: Gary Vaterlaus

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Printed in China



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You are about to start an exciting series of

lessons on Earth science. God's Design® for Heaven and Earth consists of three books: Our Universe, Our Planet Earth, and Our Weather and Water. Each of these books will give you insight into how God designed and created our world and the universe in which we live.

No matter what grade you are in, third through eighth grade, you can use this book.

3rd-5th grade

Read the lesson.



Do the activity in the light blue box (worksheets will be provided by your teacher).



Test your knowledge by answering the **What** did we learn? questions.



Assess your understanding by answering the **Taking it further** questions.

Be sure to read the special features and do the final project.

There are also unit quizzes and a final test to take.

6th-8th grade

Read the lesson.



Do the activity in the light blue box (worksheets will be provided by your teacher).



Test your knowledge by answering the **What** did we learn? questions.



Assess your understanding by answering the **Taking it further** questions.



Do the Challenge section in the light green box. This part of the lesson will challenge you to do more advanced activities and learn additional interesting information.

Be sure to read the special features and do the final project.

There are also unit quizzes and a final test to take.

When you truly understand how God has designed everything in our universe to work together, then you will enjoy the world around you even more. So let's get started!



Atmosphere & Meteorology

- 1 A Christian View of Weather 8
- 2 Structure of the Atmosphere 10
- 3 The Weight of Air 13
- 4 The Study of Weather 17
- Oescribe three major events that have shaped the earth we see today.
- ♦ Identify and describe the layers of Earth's atmosphere.
- Describe the five atmospheric conditions studied by meteorologists.





A Christian View of Weather

What does the Bible say?



What events in history have affected our weather?

Is there a Christian view of weather? Isn't

weather just what happens outside? How can there be a Christian or non-Christian view of precipitation? Many people believe that you can separate your beliefs about God from your understanding of science. However, what you believe about God affects how you approach everything in life, so it even affects your understanding of weather. If you believe what the Bible says, then you know God sends the rain (see Jeremiah 5:24 and Jeremiah 14:22) and withholds the rain (see Amos 4:7). God controls storms (see Matthew 8:23–27). But most importantly, God created the earth and everything in it. He set up the way the weather operates, and He can work within the natural laws He has established as well as outside those laws to accomplish His purposes.

The planet that we live on has been affected by three major events in history. The first was the creation. In the beginning, everything was very good. But man rebelled against God and as a result God cursed the earth. Later, because of man's continual sin, God destroyed all of the people, except those in Noah's

family, by sending a worldwide flood. This Flood had a tremendous effect on the planet, including changing the weather. We will look at the weather before and after the Flood in later lessons.

Our belief about God determines whether we recognize the weather patterns as random changes of nature or as a lovely system with an intelligent designer. Do we recognize the water cycle as a gift from God or just a random happening? If we view the planet Earth and its weather from a Christian perspective, we will know that it was supernaturally created, it is designed by God, it is relatively young (about 6,000 years), it was created in perfection, and it was created for mankind to show God's love and provision for us. If we recognize these things when we study weather, we will see God's hand and understand Him more clearly.

What did we learn?

- · Is there a Christian view of weather?
- What three events described in the Bible have greatly affected the weather on Earth?
- List three things you can learn about the weather from a newspaper weather report.

Taking it further

- Why is it important to have a Christian view of weather?
- What are some geographical or physical characteristics that affect the weather in a particular area?

Weather reports

Look at a weather report from your local newspaper or an Internet site. Most likely you will find information on the temperature and precipitation that your town received yesterday as well as a prediction for the weather conditions for today and several days in the future. What other information does your weather report give? Local weather can be affected by many factors, making it difficult to accurately predict. Do you live near the ocean or a large lake? That will affect the weather. Do you live near the mountains? That will affect your weather too. The amount of humidity and the wind will affect how you feel when you are outside.

Your weather report probably includes information on the weather across your state, as well as across the country. If your newspaper does not have this information, you can find it on the internet.

Purpose: To compare weather across the country

Materials: weather report from newspaper or Internet, "Weather Across the Country" worksheet

Procedure:

- Enter your city or town on the first line of the chart and enter the weather conditions for your home town.
- Enter the predicted weather conditions for each of the cities listed.

Ouestions:

- How does the weather in your town compare to the weather in other cities across the country?
- · Why do you think the weather is so different from one city to another?

Conclusion: You will begin to understand the complexities of weather and how difficult it is to predict the weather as we go through the lessons in this book.



Bible-believing scientists

Today, many people say that if you believe that God created everything you cannot be a good scientist. But is this true? Of course not! Many great scientists in the past believed the Bible. Sir Isaac Newton, considered by many to be one the greatest scientists of all time, believed in God and was a creationist. Sir Francis Bacon, credited with developing the scientific method, recognized God's hand in the world around him. This is why he believed that you could test your hypotheses to see if you were right, because God had created an orderly universe just waiting for us to discover the wonders that He had placed there.

Today, many scientists believe the Bible and are contributing to scientific research. If you are interested in meteorology and weather, you can be a good scientist, too. If you believe the Bible and recognize that God designed our weather system, you can contribute to a better understanding of our world by being a Biblebelieving scientist.

Choose a Christian scientist from the past and research his contributions to science. Write a short report on what you learned and share it with your class or family. You can be encouraged by knowing that many of the greatest scientists have believed that God created this world and not that it evolved by chance. Below is a list of scientists you can choose from.

- Sir Isaac Newton (physics)
- Lord Kelvin (thermodynamics)
- Blaise Pascal (hydrostatics)
- Johannes Kepler (astronomy)
- Carl Linneaus (biology)
- Robert Boyle (chemistry)
- Charles Babbage (computers)
- Joseph Lister (surgery)
- David Brewster (mineralogy)
- Louis Pasteur (bacteriology)
- James Clerk Maxwell (electronics)
- Dr. Raymond Damadian (inventor of the MRI)