

The background of the cover is a photograph of a cave interior. The walls and ceiling are covered in various types of rock formations, including long, thin stalactites hanging from the ceiling and shorter, thicker stalagmites growing from the floor. The lighting is warm and yellowish, highlighting the textures and colors of the rock. On the left side, there is a vertical purple band with faint white circular patterns and a small globe icon.

# Pioneers of **Earth Science**

Lynn Van Gorp

# Earth and Space Science Readers: Pioneers of Earth Science

## Publishing Credits

**Editorial Director**

Dona Herweck Rice

**Associate Editor**

Joshua BishopRoby

**Editor-in-Chief**

Sharon Coan, M.S.Ed.

**Creative Director**

Lee Aucoin

**Illustration Manager**

Timothy J. Bradley

**Publisher**

Rachelle Cracchiolo, M.S.Ed.

**Science Contributor**

Sally Ride Science

**Science Consultants**

Nancy McKeown,

Planetary Geologist

William B. Rice,

Engineering Geologist

## *Teacher Created Materials*

5301 Oceanus Drive

Huntington Beach, CA 92649-1030

<http://www.tcmpub.com>

ISBN 978-0-7439-0558-9

ePUB ISBN 978-1-5457-1119-4

© 2007 Teacher Created Materials, Inc.

# Table of Contents

---

|                                  |    |
|----------------------------------|----|
| Maps and Globes.....             | 4  |
| Making the Way .....             | 8  |
| Changing the Map.....            | 18 |
| Protecting Nature’s Beauty ..... | 22 |
| Geologist: Diane Evans .....     | 26 |
| Appendices .....                 | 28 |
| Lab: Earth Movement.....         | 28 |
| Glossary .....                   | 30 |
| Index .....                      | 31 |
| Sally Ride Science.....          | 32 |
| Image Credits .....              | 32 |

# Maps and Globes

Mapmaking is an art form. The first maps were made thousands of years ago. Maps are one of the best ways for people to know the land. They are very important to scientists who study the earth.

Gerardus Mercator is one of the best known mapmakers of all time. He was born in 1512, in Belgium. He was interested in **geography**.

Although Mercator was an engraver of brass plates, he found a way to use his interest in geography to make a living. He worked with two other men to make a **globe**. He then worked alone to make a map of Palestine and then one of the world. They were called **map projections**. The world map showed the globe spread out to a flat surface.

There is one problem with a Mercator projection map. The size and shape of the land near the poles is not correct. Europe and North America look much bigger than Africa. In fact, Africa is much bigger than both of them!

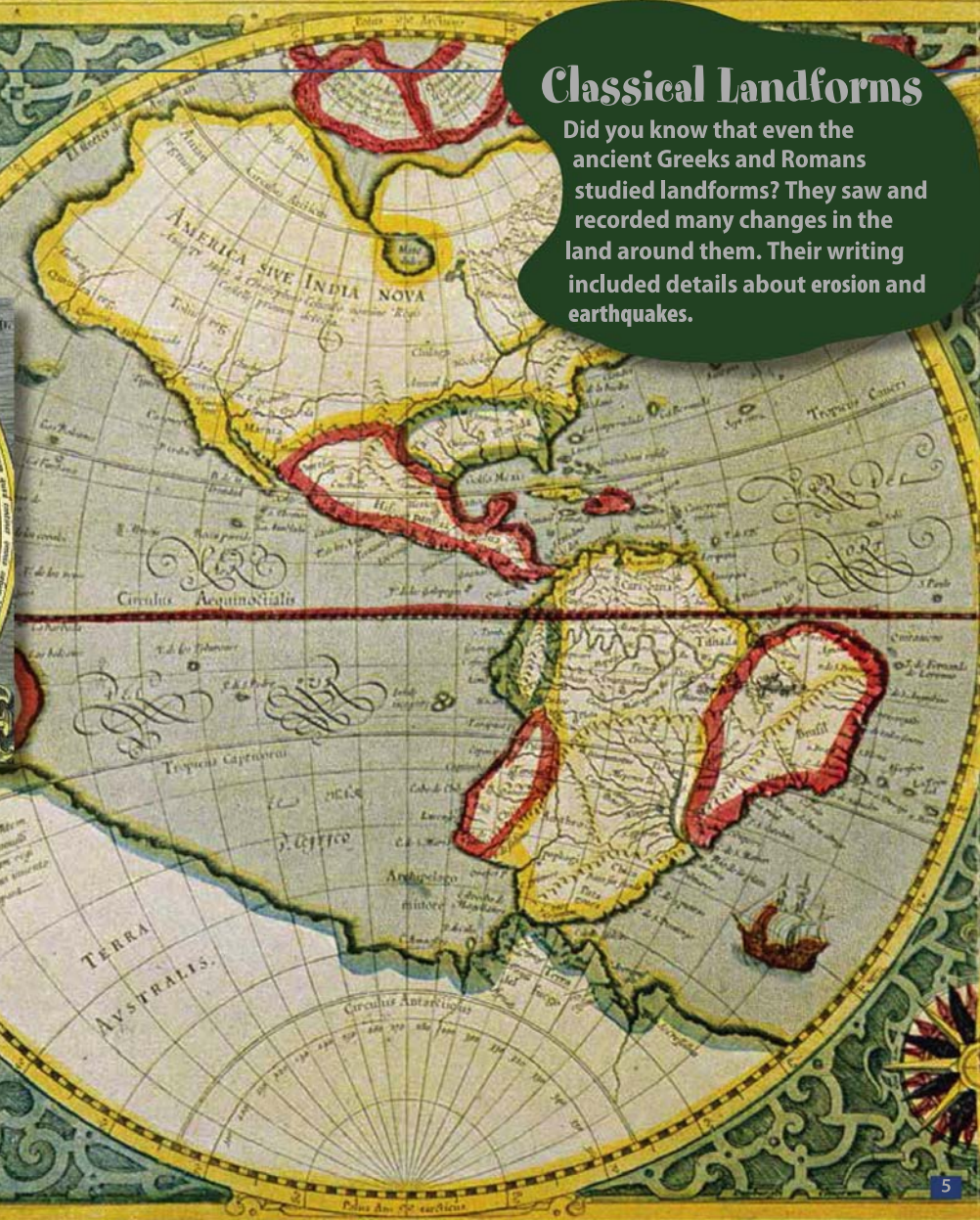


➤ Gerardus Mercator

an early projection map ➔

## Classical Landforms

Did you know that even the ancient Greeks and Romans studied landforms? They saw and recorded many changes in the land around them. Their writing included details about erosion and earthquakes.



**You've Just Finished your Free Sample**

**Enjoyed the preview?**

**Buy: <http://www.ebooks2go.com>**