First Grade 2020 Science Unit # 6: Objects and Patterns in the Sky

| Science |
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| Science 1, Generic Course |
| Marking Period 4 |
| Approximately 6-8 weeks |
| Published |
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Established Goals/Standards

| CAEP.9.2.4.A.1 | Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals. |
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| CAEP.9.2.4.A.3 | Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes. |
| CAEP.9.2.4.A.4 | Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success. |
| 1-ESS1-1 | Use observations of the sun, moon, and stars to describe patterns that can be predicted. |
| 1-ESS1-2 | Make observations at different times of year to relate the amount of daylight to the time of year. |
| 1-ESS1-2.1 | Patterns. |
| 1-ESS1-2.1.1 | Patterns in the natural world can be observed, used to describe phenomena, and used as evidence. |
| 1-ESS1-1.ESS1.A.1 | Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted. |
| 1-ESS1-2.ESS1.B.1 | Seasonal patterns of sunrise and sunset can be observed, described, and predicted. |

Essential Questions

- How do objects in the sky seem to change?
- What are patterns of daylight?
- What are patterns of objects in the nighttime sky?
- What do you learn when you observe the patterns of the sun?

Enduring Understanding

• On many nights you can see the moon. The moon does not give off its own light. The moon reflects light from the sun. On a clear night, you can see many stars. Stars are balls of gases. These gases give off the light you see from stars at night. The shape of the moon is called phases. The phases are the moon's pattern of light and shadow that you see as the moon moves. The phases repeat each month.

- Some objects seem to move across the sky.
- The patterns of daylight change throughout the year. The amount of daylight and the seasons change throughout the year. The amount of daylight changes from season to season. The sun rises and sets at different times during the year. The pattern repeats each year.
- The sun seems to move across the sky. In the early morning the sun seems low in the sky. At noon the

sun seems to be directly above us. Later afternoon it seems to be low again, but on the other side of the sky. This pattern repeats each day.

Content

Student will be able to:

- identify and describe objects in the sky
- use evidence to describe predictable patterns of the sun, moon and stars
- observe and model paterns of the moon's phases
- use observations to describe characteristics of each season
- predict patterns of change that take place from season to season
- use observations to compare the amount of daylight from season to season
- explore how seasons affect people and animals

Assessment

End of Unit Assessment given by printed version or online version using the following:

teacher Assessment book

HMHCO.com online assessments

Also, assessments given throughout each unit using self checks, unit reviews at end of each unit in student workbooks, during labs.

Resources

HMC Science Dimensions Teacher's Guide

HMC Non-Fiction leveled readers

Science kits materials for Units 1-6

HMC Science Dimensions Student workbooks

HMC online component for students and teachers (ED) (HMHCO.com) which includes online version of units, videos, assessments, downloadable worksheets, projects, and hands-on aciivities.

Teacher Assessment Book (also on HMHCO.com)

Evidence Notebooks

You Tube

Mystery Science

Science Spin

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Non-Fiction Books from school library

Scholastic News First Grade Level

Mailbox Magazine activities

Teacher's Helper activities

weekly STEM activities