GRADE 1

EPSD Unit 1: Patterns of Change in the Sky First Marking Period

Overview: In this unit children observe, describe, and predict some patterns in the movement of objects in the sky. The cross-cutting concept of patterns is called out as an organizing concept for the disciplinary core ideas. Students are expected to demonstrate grade appropriate proficiency in planning and carrying out investigations and analyzing and interpreting data. Students are also expected to use these practices to demonstrate understanding of the core ideas.

observations of the sun, moon, and stars to describe patterns that can be predicted. (1-ESS1-2) Make observations at different times of the year to relate the amount of daylight to the time of year.

Instructional Days: 15-20

HMH Science Dimensions Program Resources

Unit 6: Objects and Patterns in the Sky

Unit Video (the moon's phases); Unit Overview p. 275; Vocabulary p. 277 Connecting with NGSS 277H; Unit Project p. 277I; Unit Performance Task pp. 312-313; Unit Review pp. 314-316

Standard for all Units: Interactive Glossary (D); Leveled Readers (D); Beginning-of-Year Test (D/P); Unit Pretest (D/P); Lesson Quizzes (D/P); Unit Test (D/P)

Note: Refer to the Curriculum Alignment Common Language (CACL) Guide to decipher acronyms.

Lesson 1: How Do Objects in the Sky Seem to Change? pp. 278-295

D/P- CYEI (video) Daytime and nighttime sky p. 279

D/P- CYEI How do objects in the sky seem to change? p. 279
D/P- The Daytime Sky (Students watch video to explore more about the daytime sky.) p. 280

Lesson 2: What are Patterns of Daylight? pp. 296-311

D/P- CYEI (video) Changes that happen throughout the year p. 297

D/P- CYEI You want to plant flowers in seasons with the most daylight. Which seasons would you choose? p. 297

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Objective: Students will use observations of the sun, moon, and stars to describe patterns that can be predicted.

Topics: Earth's Place in the Universe Twenty-First Century Themes and Skills include: Environmental Literacy • The Four C's

Essential Questions: What patterns of change can be predicted when observing the sun, moon, and stars? What is the relationship between the amount of daylight and the time of year?

P- AWYK (ENB) Students work with a partner to talk about what they know about the sun in the daytime sky. Students write sentences in their ENB. p. 280

D/P- Patterns in the Daytime Sky (Students view video to find out more about how the sun appears to move across the daytime sky.) pp. 281-282 D/P- HO Activity Observe the Pattern of the Sun (Students explore the sun's apparent movement across the daytime sky.) pp. 283-284

P- AWYK HO Activity Students work with a partner to make a model of the sun in the daytime sky. p. 285

D/P- The Nighttime Sky (Students explore digital pictures relating to the nighttime sky and respond to questions.) pp. 286-287

P- AWYK HO Activity Students work with a group of students and make a picture dictionary about the nighttime sky. p 287 D/P- Patterns in the Sky (Students explore online the pattern of the moon in the nighttime sky and the pattern of the stars in the sky.) pp. 288-289 D/P- DTM Students draw an X on the phase of the moon that looks like a whole circle. p. 289 P- AWYK (ENB) Students work with a group and make a model of the phases of

D/P- The Four Seasons (Students explore to find out about each season and seasonal patterns.) p. 298 P- AWYK Students make a collage that show a season, label the collage and write sentences about the collage. p. 298 D/P- Spring and Summer (Students view digital pictures and video to learn more about spring and summer.) pp. 299-300 D/P- Fall and Winter (Students view digital pictures and video to learn more about fall and winter.) pp. 301-302 D/P- DTM Students solve a word problem using information from a chart p. 303 P- AWYK (ENB) Why do you think the weather changes throughout the year? p. 303

D/P- Patterns of Daylight (Students describe a pattern of daylight.) p. 304 P- AWYK (ENB) Students work with a partner and use evidence to explain the patterns of daylight during the year; students record answers in their ENB. p. 304

D/P- AWYK HO Activity Observe Patterns of Sunset (Students compare what time the sun seems to set in three different seasons.) pp. 305-306

D/P- TIF (enrich) Careers in Science and Engineering: Circadian Biologist; The Midnight Sun pp. 307-308

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the moon. Students use model to tell about the pattern of the phases of the moon and how the moon seems to change. Students should record evidence in their ENB. p. 290

D/P- TIF (enrich) People in Science and Engineering: Dr. Sarah Ballard; Space Technology pp. 291-292

D/P- Lesson Check p. 294 D/P- Self Check pp. 294-295

D- Lesson Quiz

P- DI (ELL/RTI) p. 277G

P-Extension p. 277G

P-COLLAB p. 278H

P- Connecting with NGSS p. 278H

D- Science Safety HB

D- CCC-HB

D- ELA-HB

D- M- HB

D-SEP-HB

D- ScienceSarurs Reference HB

D- YSI Simulation Eyes on the Sky

D/P- Lesson Check p. 309 D/P- Self Check pp. 310-311

D- Lesson Quiz

P- DI (ELL/RTI) p. 277G

P-Extension p. 277G

P- COLLAB p. 278H

P- Connecting with NGSS p. 278H

D- Science Safety HB

D- CCC-HB

D- FLA-HB

D- M- HB

D- SEP-HB

D- ScienceSarurs Reference HB

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Curriculum Alignment Common Language (CACL) Guide K-5

Acronym	Word/Phrase	Description
AWYK	Apply What You Know	Hands on opportunities for students to apply learning.
CER	Claims Evidence Reasoning	Students make a claim and gather evidence along the way (during EXPLORATORY activities) to support claim.
CYEI	Can You Explain It	Lesson phenomenon used to ENGAGE students in learning at the beginning of the lesson.
CYSI	Can You Solve It	Lesson phenomenon used to ENGAGE students in learning at the beginning of the lesson.
D	Digital	Program resources and features in interactive digital form.
DI (ELL/RTI) Extension COLLAB Connections to Science	Differentiated Instruction (English Language Learner/Response to Intervention) Collaboration Connections to Science	A page that lists all learning activities used to differentiate learning, engage students in collaborative activities and connect learning to other subjects.
DTM	Do the Math	Integrated subject learning.

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ENB	Evidence Notebook (prompt)	Student notebook or journal used to gather evidence during EXPLORATORY learning activities to support their claims.
ENGIT	Engineer It	Integrated subject learning.
НВ	Handbooks	
ССС-НВ	Crosscutting Concepts	Students who need extra support in grasping concepts or to refresh student knowledge of skills.
ELA-HB	English Language Arts	
М-НВ	Math	
SEP-HB	Science and Engineering Practices	
НО	Hands-On (Activity)	Student collaboration activities.
LS	Language Smarts	Integrated subject learning.
Р	Print	Program resources and features in print form.
TIF	Take It Further (enrich)	Enrichment activities for students in print or digital.
YSI	You Solve It (Simulation)	Open-ended simulation-based learning with multiple answer options.