inquisitive

GRADE 1 · EARTH AND SPACE SCIENCES · FAST PATH

Unit: Space Systems: Patterns and Cycles

Lessons in unit: 4 · 12 teaching sessions · up to 30 min per session · 345 min total · ↳ Time-saving teaching move · ★ Checkpoint

1. The Sun Is Out

PHENOMENON QUESTION
Is the sun always in the same place in the sky?

OUTCOME
I can show where the sun will be in the sky in the morning and in the evening.

TIME
3 sessions · up to 30 min
90 min total

DAY 1 · 30 MIN

SCHEDULE Activity 2: use 10 min for the outdoor visit and window marker, then 5 min to check it later the same day. SAFETY: Never look directly at the sun.

5 MIN — Activity 1
↳ Watch the video, then partners share experiences instead of rotating through an inside–outside circle.

15 MIN — Activity 2

10 MIN — Activity 3
↳ Partners answer all three questions and show the sun's path with their arms; take one class response per question.

DAY 2 · 30 MIN

15 MIN — Activity 4

15 MIN — Activity 5

DAY 3 · 30 MIN

20 MIN — Activity 6 ★

5 MIN — Activity 7
↳ Partners compare sunrise and sunset; teacher records a class Venn diagram instead of individual drawings.

5 MIN — Activity 10

2. Bright Moon

PHENOMENON QUESTION
When can we see the moon?

OUTCOME
I can draw how the moon's shape changes over time.

TIME
3 sessions · up to 30 min
80 min total

DAY 4 · 30 MIN

10 MIN — Activity 1

20 MIN — Activity 2

DAY 5 · 30 MIN

PREP Have the flashlight ready and a space that can be darkened.

10 MIN — Activity 3

10 MIN — Activity 4

10 MIN — Activity 5
↳ Build one class pattern; partners explain the arrows and the first and last moons.

DAY 6 · 20 MIN

15 MIN — Activity 6 ★

5 MIN — Activity 9

3. Starry, Starry Night

PHENOMENON QUESTION
How do we see stars?

OUTCOME
I can tell why it's easier to see stars in the night sky rather than during the day.

TIME
3 sessions · up to 30 min
85 min total

DAY 7 · 30 MIN

PREP Set out paper cups, pencils and flashlights for pairs. Use a room that can be darkened.

10 MIN — Activity 1

20 MIN — Activity 2

DAY 8 · 25 MIN

15 MIN — Activity 3

10 MIN — Activity 4

DAY 9 · 30 MIN

20 MIN — Activity 5 ★

8 MIN — Activity 6
↳ Partners each share a fact and a wonder; teacher records questions instead of individual writing.

2 MIN — Activity 9
↳ Define the word together; partners give an example.

4. Daylight and Nighttime

PHENOMENON QUESTION
Why go to bed when it's not dark?

OUTCOME
I can explain how the hours of daylight and nighttime in summer and winter are different.

TIME
3 sessions · up to 30 min
90 min total
Assessment: Anchor Maps and Autogradable Summative Assessments are not included within this pacing guide.

DAY 10 · 30 MIN

5 MIN — Activity 1
↳ Partners compare both bedtime pictures and answer both questions; take two brief class responses.

15 MIN — Activity 2

10 MIN — Activity 3

DAY 11 · 30 MIN

5 MIN — Activity 4

25 MIN — Activity 5

DAY 12 · 30 MIN

15 MIN — Activity 6 ★

10 MIN — Activity 7
↳ Partners each choose daylight or nighttime and give a reason; compare two reasons as a class.

5 MIN — Activity 10