

Moon Time Detectives

Observe the Moon in a light and a dark sky, then show the times.

SC.K.E.5.4 "Observe that sometimes the Moon can be seen at night and sometimes during the day."

NAME _____

DATE _____

Teacher: this page is run aloud. The script and answers are on the guide page.

1 MOON CLUES

a	NIGHT	BOTH	DAY
b	NIGHT	DAY	BOTH
c	DAY	BOTH	NIGHT

2 TIME WORDS

DAY
NIGHT

HOW TO RUN THIS PAGE

Before the lesson, arrange one adult-supervised daylight Moon sighting and one after-dark sighting; precheck visibility and safe locations. Alternatively, supply your own two genuine dated Moon photographs taken from Earth, one in daylight and one after dark, with date, local time and sky condition recorded. Display both actual photographs clearly if weather or access prevents direct sightings; do not merely describe imagined scenes. Never have children look at the Sun or use daytime binoculars. Each child points to the observed Moon and describes the light/dark sky; adult records date/time and direct view or photograph. On extra paper children draw both observations and dictate DAY or NIGHT. Then run the original choices and tracing aloud.

Students never read directions on this sheet. Read each part's script aloud, then each prompt, giving think time before students mark.

PART 1 • MOON CLUES

SAY “First look at the actual Moon views I arranged, one in a light sky and one in a dark sky. Point to the Moon in each and tell me what you notice about the sky. Draw each view on extra paper; I will record the real date and time and whether we looked outside or at a photograph. Now listen to each Moon clue and circle the matching word.”

ROW	SAY	STUDENTS CIRCLE
a	A child saw the Moon at recess. The sky was light. Is that NIGHT, BOTH, or DAY?	DAY
b	A child saw the Moon after the sky got dark. Is that NIGHT, DAY, or BOTH?	NIGHT
c	The Moon can sometimes be seen in the day and sometimes at night. Is that DAY, BOTH, or NIGHT?	BOTH

PART 2 • TIME WORDS

SAY “Look at the gray word in each box. Trace the letters to make the time word.”

- Box 1: **DAY**
- Box 2: **NIGHT**

WHAT TO ACCEPT

Circle row answers are DAY, NIGHT, and BOTH. Accept reasonably traced DAY and NIGHT letters, including letters traced over the gray models. Require both actual observation records with drawings or accessible descriptions, not only the named-choice answers. No sighting is guaranteed on an arbitrary date; precheck and reschedule or use the prepared genuine day/night photographs. A not-seen record is honest but does not itself show a visible Moon; complete the visible comparison with the photographs. Children may point or speak while an adult scribes. NASA Moon Phases explains that daytime visibility depends on phase, season and location: <https://science.nasa.gov/moon/moon-phases/> .