

SUBJECT: Natural Science and E.E	GRADE:	FG	G	T	1	2	3	4	DATE:
		5	6	7	8	9	10	11	
STUDENT:		TEACHER: Mrs. Carol Ximena Bolaños Prieto & Ms. Megan Laurel Atkin							
FORMAL ASSESSMENT <input checked="" type="checkbox"/>		NON FORMAL ASSESSMENT <input type="checkbox"/>							

RUBRIC No. 1

Highest Level of Learning: **5Pb1** Explore, through modelling that the Sun does not move; its apparent movement is caused by the Earth spinning on its axis **5Pb2** Know that the Earth spins on its axis once in every 24 hours - **5Eo1** Make a relevant observations **5Eo5** Decide whether results support predictions **5Eo6** Begin to evaluate repeated results - **5Ep2** Use observation and measurements to test predictions and make links

FOR THIS GUIDE YOU HAVE 50 MINUTES TO ANSWER AND 10 MINUTES TO CHECK (60 MINUTES).

SUN AND MOON

PART 1 – The Sun

▲ In this picture, a photograph of the Sun was taken every 30 minutes and the images were put together to show the way in which the Sun rises and appears to move across the sky from east to west.



Today, we still say that the Sun 'rises' at a time that we call sunrise. And we say that the Sun 'sets' at a time that we call sunset, even though we know that it is really the Earth that moves and not the Sun. The Sun rises in the east and sets in the west.

1. Why does the Sun appear to move across the sky?

2. Where does the Sun go at night?

3. If it is daytime where you live, is your part of the Earth facing the Sun or facing away from the Sun?

4. Ai lives in Beijing. Her cousin Hang lives in San Francisco. San Francisco is nine hours ahead of Beijing.

a. Complete the table

Time in Beijing	Time in San Francisco
8 a.m.	5 p.m.
10 a.m.	7 p.m.
12 p.m.	
2 p.m.	
4 p.m.	
6 p.m.	
8 p.m.	

b. What time will it be in San Francisco when it is 9 p.m. in Beijing? _____

c. Ai wants to phone Hang. What time of day would be best for her to make the phone call? _____

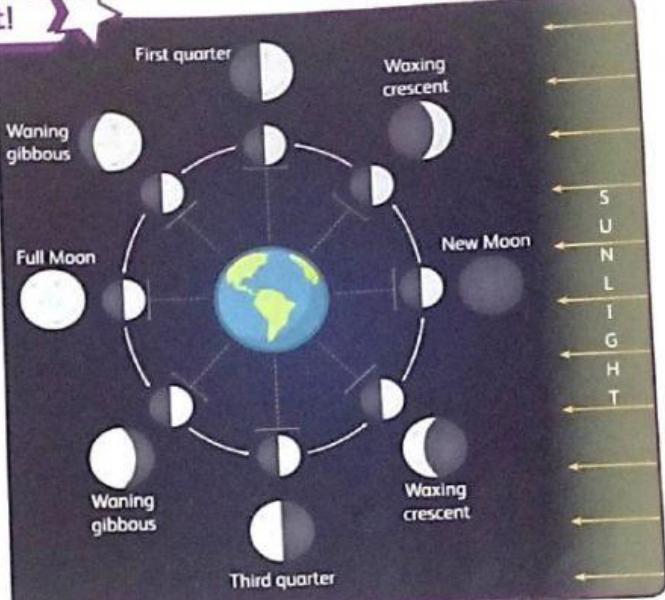
d. Explain your answer you gave to the question C. _____

PART 2 – The Moon

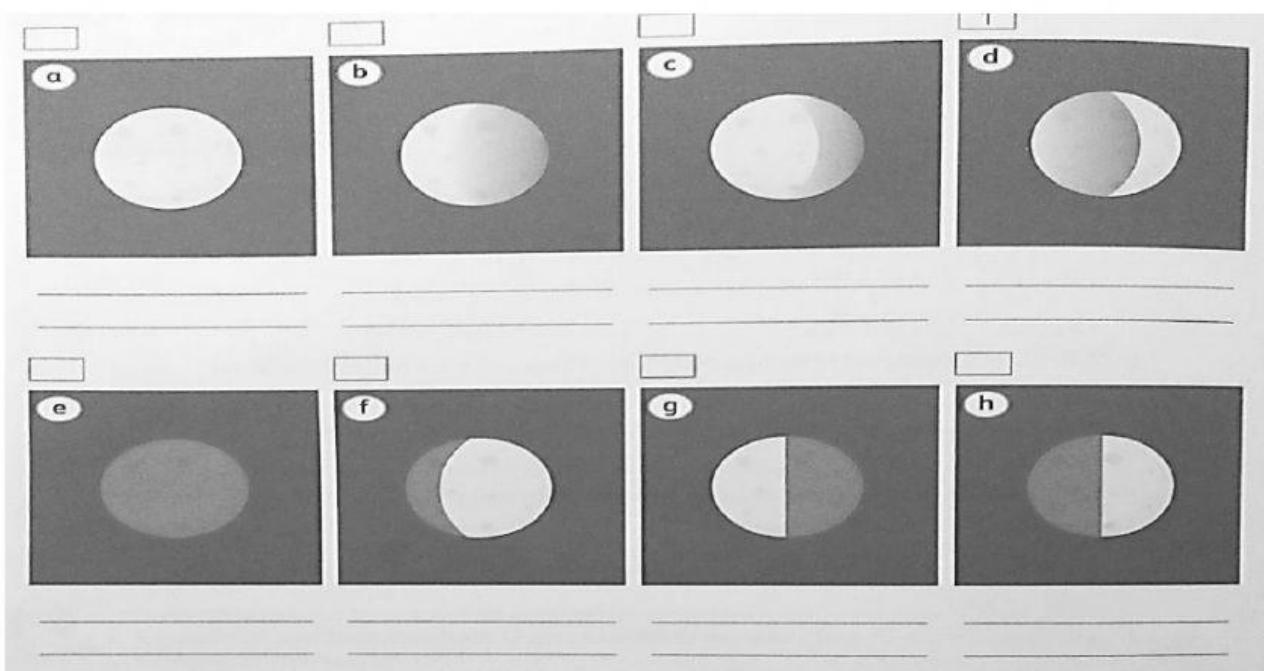
Phases of the Moon

Think like a scientist!

As the Moon orbits the Earth, it spins slowly. This is why the same side of the Moon always faces the Earth. When viewed from Earth, the Moon appears to change shape. These apparent changes in shape are called **phases**. We can only see the sunlit side of the Moon. In different places in the Moon's orbit around the Earth, different amounts of the Moon's sunlit side are facing the Earth.



5. Order the phases of the Moon. Write the numbers 1 to 8 in the boxes. Number 1 has been done for you.



a. Label the phases of the Moon above. Write one of these labels below each picture.

first quarter

full

new

last quarter

waning crescent

waning gibbous

waxing crescent

waxing gibbous

6. About how long does it take the Moon to complete one orbit around the Earth?

How do you Know?

7. Describe the Moon characteristics.

8. Which is the effect of Moon on tide?
