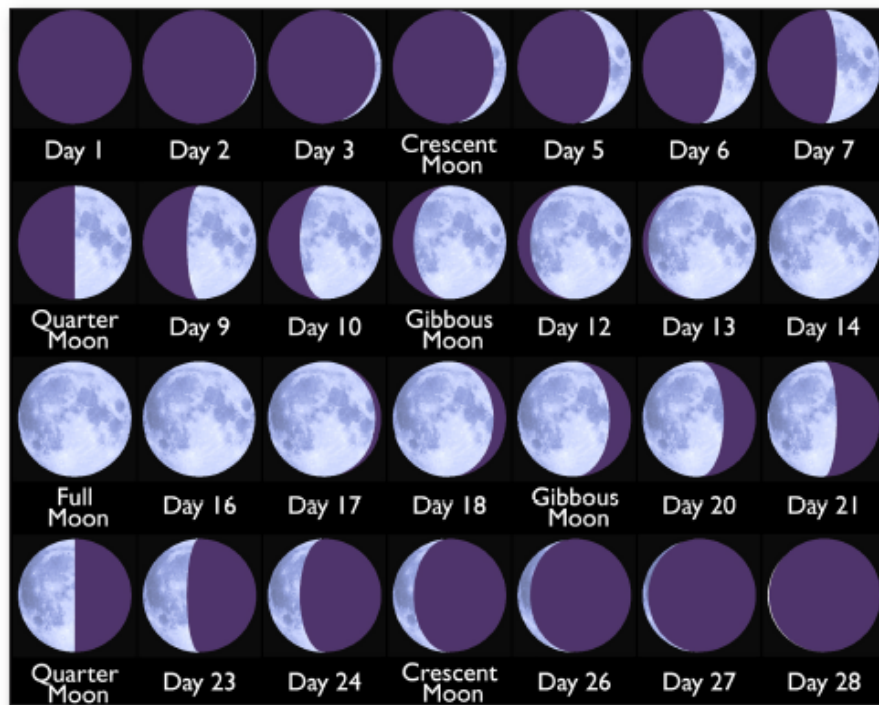


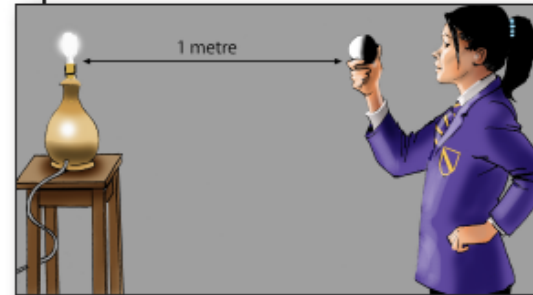
Shadows on the Moon

The Moon appears to change shape over a 28 day period (approximately one month). This is due to how much sunlight is reflected off the Moon's surface each evening. Study the shapes below and see if you can spot the pattern.



A crescent moon is when less than half of our Moon's face is lit. A gibbous moon is when more than half of our Moon's face is lit. A quarter moon is when half of our Moon's face is lit. This sounds strange, but you must remember that the rear of our Moon will also be in darkness, so in fact, only one quarter of the whole sphere is lit. A full moon is when the whole of the face of our Moon is lit.

Classroom Experiment



In a darkened room, use a bedside lamp to represent the Sun and a small white ball

to represent the Moon. Stand about 1 metre from the lamp. (Your head represents the Earth.) To see moon shadows, move the white ball around your head.

Shadows on the Moon

Section A

Choose the best word or group of words to fit the passage and put a ring around your choice.

The Moon appears to change shape over the course of one

1 day. week. month. year.

Day four is called a

2 quarter crescent gibbous full

moon. Day eleven is called a

3 quarter crescent gibbous full

moon. A quarter moon first appears on day

4 four. eight. eleven. fifteen.

A crescent moon is when less than

5 a quarter a half three quarters the whole

of our Moon's face is lit. A gibbous moon is when more than

6 a quarter a half three quarters the whole

of our Moon's face is lit.

Section B

1 Does the Moon change shape?

2 Over how many days does the change take place?

3 What is a full moon?

4 What represents the Sun in the classroom experiment?

5 What does the 'small white ball' represent in the classroom experiment?

6 How can you see 'moon shadows' in the classroom experiment?

7 What makes our Moon appear to change shape?

Section C

Write your own account telling how our Moon appears to change shape over the course of one month.