HOLY CROSS COLLEGE
Life to the Full

IW-14

YEAR 7 SCIENCE
EARTH & SPACE SCIENCES (MODIFIED)
TEST 1 - THE EARTH AND MOON

NAME: SOLUTIONS **CLASS:** _____ **Mark:** ___/24

Achievement standards being tested
Predictable phenomena on Earth, including seasons and eclipses, are caused by the relative positions of the Sun, Earth and the Moon.

Mark	ND	NW	C	HC	O
Mark Range	0-4	5-9	10-13	14-17	18-24

Multiple Choice **Write the answer to each question in the appropriate box at right.**

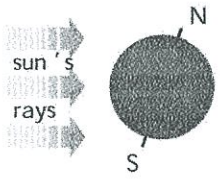
QUESTION	ANSWER
1	A
2	C
3	D
4	B
5	C
6	C
7	C

1. The main cause of day and night is:

   A rotation of the Earth.
   B revolution of the Earth.
   C orbit of the Earth.
   D the tilt of the Earth on its axis.

2. The diagram below relates to which season in Australia?

   A Winter
   B Spring
   C Summer
   D Autumn



3. The moon, stars, planets and the sun all rise in the:

   A west.
   B north.
   C south.
   D east.

4. The different shapes of the moon as seen from Earth are called:

   A stages.
   B phases.
   C fractions.
   D crescents.

5. The time taken for the Moon to orbit the Earth once is closest to:

   A 24 hours.
   B 14 days.
   C 27 days.
   D 365 days.

6. Which of these has the greatest effect on the tides on Earth?

A Mars
B Venus
C The Moon
D The Sun

7. In which months does Australia have winter?

A December, January, February.
B March, April, May.
C June, July, August.
D September, October, November.

Short Answer **Write the answer to the questions in the spaces provided.**

1. Complete the following sentences using the following words.

orbiting, rotation, tides, Moon, tilted, 23.5°, Northern, Southern, gravitational, Hemispheres, spinning, orbit, equator, leap.

(a) Sunrise and sunset are caused by the Earth's rotation.

(b) The Earth takes 1 year to orbit the sun once. The orbit is actually 365.24 days in length, which is why most years have 365 days and a leap year has 366 days.

(c) The gravitational pull from the moon causes tides.

(d) A solar eclipse is caused when light from the sun is blocked by the Moon.

(e) The seasons are caused by the Earth orbiting the Sun and being tilted at an angle of approximately 23.5°.

(f) Day and night are caused by the Earth spinning on its axis.

(g) The top and bottom halves of the Earth are called the Northern and Southern Hemisphere.

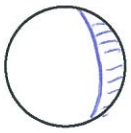
(h) The imaginary line around the middle of the Earth is called the equator.

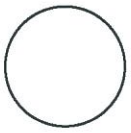
(i) The gravitational pull of the moon is one-sixth that of the Earth.

[½ mark each] (7)

2. Sketch the shape of:

(a) a crescent moon 

(b) a gibbous moon 

(c) a full moon. 

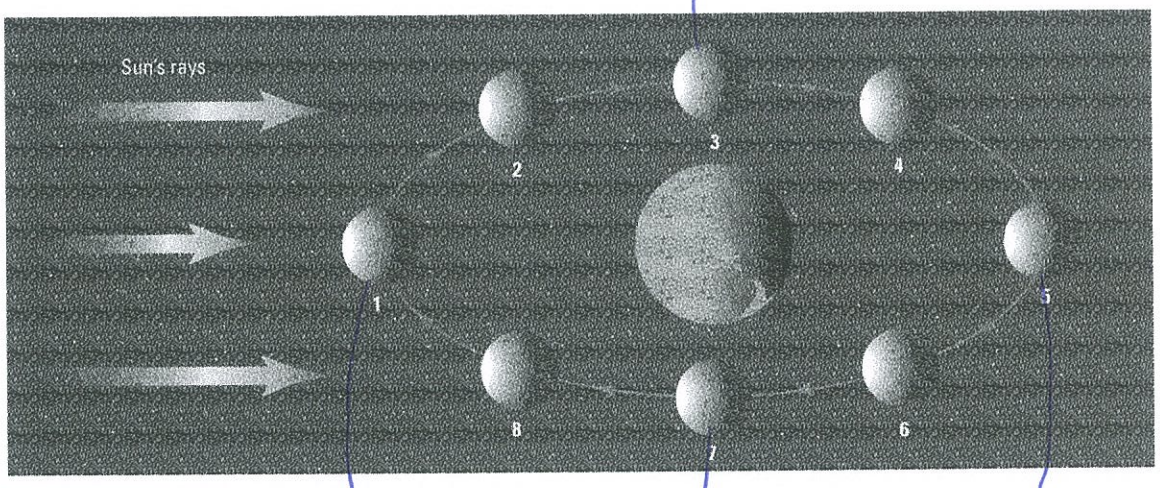
[1 mark each]

(3)

3. On the diagram below, label where a ***full moon, new moon , the first-quarter and third-quarter moons*** occur.

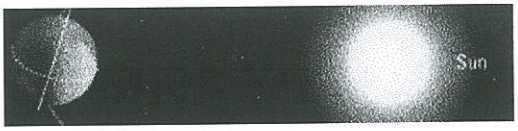
(2)

[½ mark each]



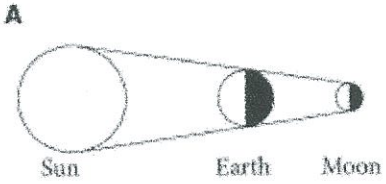
4. Identify which of the pictures below represents ***summer*** in Australia and which represents ***winter***.

A 

B 

Summer (½) Winter (½) (1)

5. Look at the diagram below.



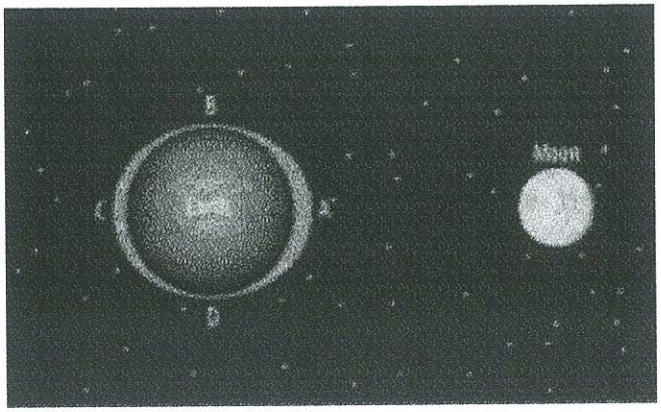
(a) Is this a ***lunar eclipse*** or a ***solar eclipse***? Lunar (1)

(b) Explain why you chose this answer.

• Moon has moved into Earth's shadow. (1)

(1)

6. In the diagram below, show whether points A, B, C and D are examples of ***high tide or low tide***.



A: High B: Low

C: High D: Low (2)

[½ mark each]