**Science Homework – Class 5 – Bamburgh – 22.1.24 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Q1.**

**Sun and Light**

          In daytime it is light.

          At night it is dark.

          Give two reasons why this happens.

          Write your answer **OR** draw it using the diagram below.

          WRITE HERE

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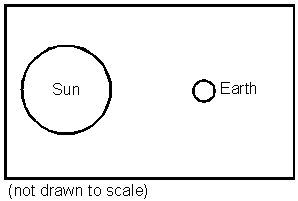


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2 marks

OR DRAW HERE



**Q2.**

**Sun**



(a)     The Sun is shining.

Its position early in the morning is shown in the picture.

Draw a Sun on each of the other dotted lines in the picture to show its height at the times given.

1 mark

(b)     Why does the stick form a shadow when the Sun shines?

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1 mark

(c)     At what time would the shadow of the stick be shortest?

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1 mark

(d)     Explain why the shadow is shortest at that time.

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1 mark

(e)     Why does the Sun appear to move across the sky?

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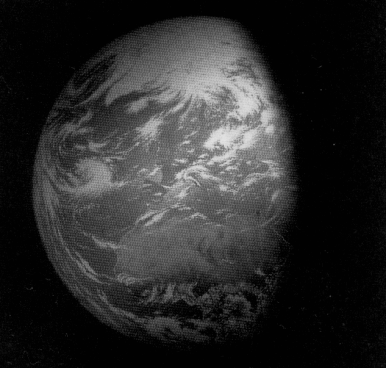


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1 mark

**Q3.**

**The Earth**



Complete the following sentences.

  The Earth spins on its axis once every .............................. hours.



1 mark

The half of the Earth facing away from the Sun is in .............................

1 mark

It takes about 365 days for the Earth to orbit the ................................. .

1 mark

**Q4.**

**Orbits**

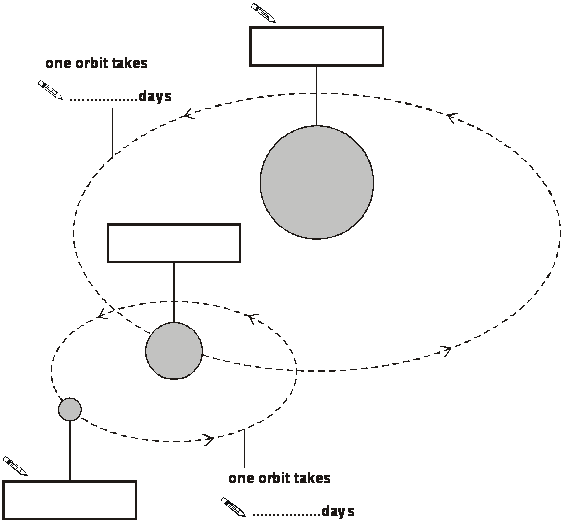
(a)     The diagram shows the Sun, Earth and Moon (not drawn to scale).

Write Sun, Moon and Earth in the correct boxes on the diagram.

1 mark

(b)     Two orbits are shown.

Write the time taken, in days, for each orbit.



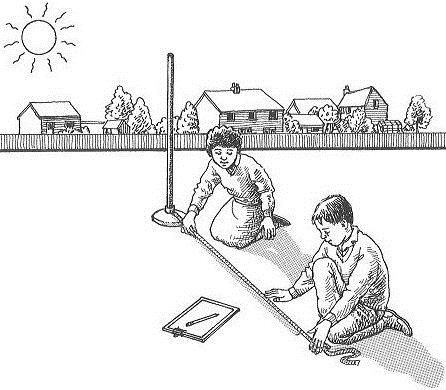
2 marks

**Q5.**

**Shadow**

(a)     The children measured the length of the stick’s shadow at different times on a day in summer.

At 9 o’clock in the morning, the Sun is shining.



Explain how the shadow of the stick is formed.

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1 mark

(b)     At 3 o’clock in the afternoon, the sun appears to be in a different position in the sky.

Explain why the Sun appears to have moved.

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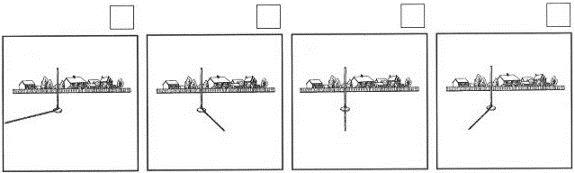
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1 mark

(c)     At 7 o’clock in the evening the Sun appears to have moved further.

Which of the diagrams below shows the position of the shadow at 7 o’clock in the evening?

Tick **ONE** box.



1 mark

(d)     Debbie measured the length of a shadow at different times during the day.

She recorded her results.

Tick the box below which shows the length of the shadow at 2 pm.

Tick **ONE** box.

|  |  |
| --- | --- |
| **Time** | **Length of shadow** |
| 10 am | 132 cm |
| 11 am | 109 cm |
| 12 am | 91 cm |
| 1 pm | 80 cm |
| 2 pm | ? |
| 3 pm | 108 cm |



81 cm          90 cm          105 cm          110 cm



1 mark

(e)     Explain why the shadow was shortest at 1 mark pm.

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1 mark