

# QS1: STAR LAWS (Shedding Light on Astronomy) Episode I: What Causes Day and Night?

Name: \_\_\_\_\_

1. What is astronomy? \_\_\_\_\_  
\_\_\_\_\_
2. The sun rises every day in the \_\_\_\_\_ sky and sets in the evening in the \_\_\_\_\_ sky.
3. Explain why we have day and night. Use text and a diagram.

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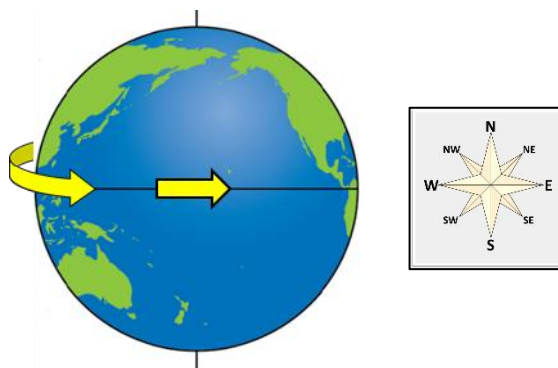
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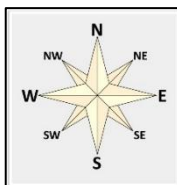
4. Label the diagram on the right.

- A. The north pole
- B. The northern hemisphere
- C. The equator
- D. The southern hemisphere
- E. The south pole



5. The Earth spins from \_\_\_\_\_ to \_\_\_\_\_.

6. Go to Google Maps ([www.google.com/maps](http://www.google.com/maps)) and find either your house or the classroom that you are in. Draw a simple labelled map of your house (or your classroom building) and the street in the space provided.



7. When you leave your house to go to school in the morning (or when you leave school to go home), in which approximate direction do you travel along your street?

\_\_\_\_\_

8. The sun rises in the general direction of \_\_\_\_\_. In the early morning, the sun is relatively \_\_\_\_\_ (low or high) in the sky. Shadows are relatively \_\_\_\_\_ (long or short) and point roughly towards the \_\_\_\_\_.

9. Which rooms of your house (or school building) receives early morning sunlight?

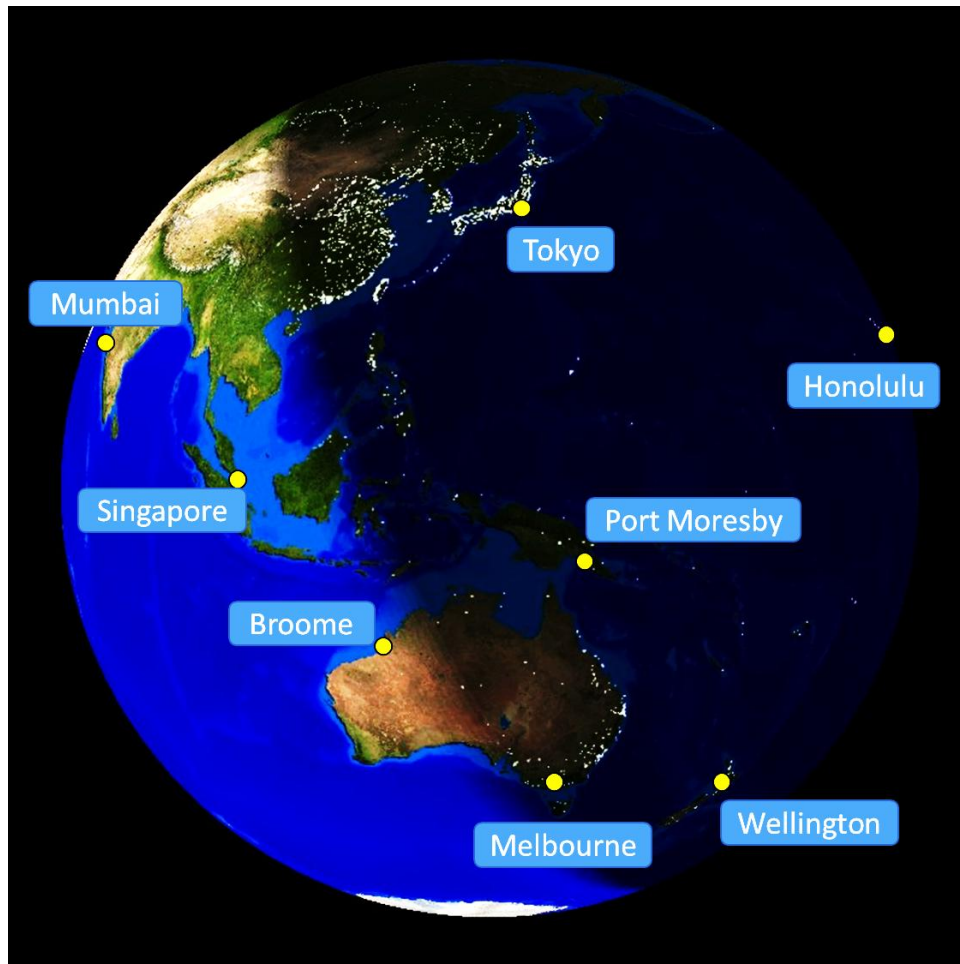
\_\_\_\_\_

10. The time of day that the sun reaches its highest point in the sky is called \_\_\_\_\_. At this time the sun is relatively \_\_\_\_\_ (low or high) in the sky and shadows are relatively \_\_\_\_\_ (long or short).
11. In the evening, the sun is relatively \_\_\_\_\_ (low or high) in the sky. Shadows are relatively \_\_\_\_\_ (long or short) and point roughly towards the \_\_\_\_\_. The sun sets in the general direction of \_\_\_\_\_.
12. Which part of your house (or school building) receives evening sunlight?

\_\_\_\_\_

13. Why are tennis courts (and cricket pitches) aligned north south? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Do a google maps search of your local area for tennis courts. Are there any courts that are not aligned north south (or close to north south)? \_\_\_\_\_  
\_\_\_\_\_



This image of the Earth was generated by the US government's National Oceanic and Atmospheric Administration.

15. Which cities in the photo are experiencing daytime?

16. In which city will the sun set first? \_\_\_\_\_ (You may wish to revisit Q4.)

17. In which city has the sun just set? \_\_\_\_\_

18. In which city is it close to midnight? \_\_\_\_\_

19. In which city has midday occurred most recently? \_\_\_\_\_

20. Which city will experience sunrise first? \_\_\_\_\_