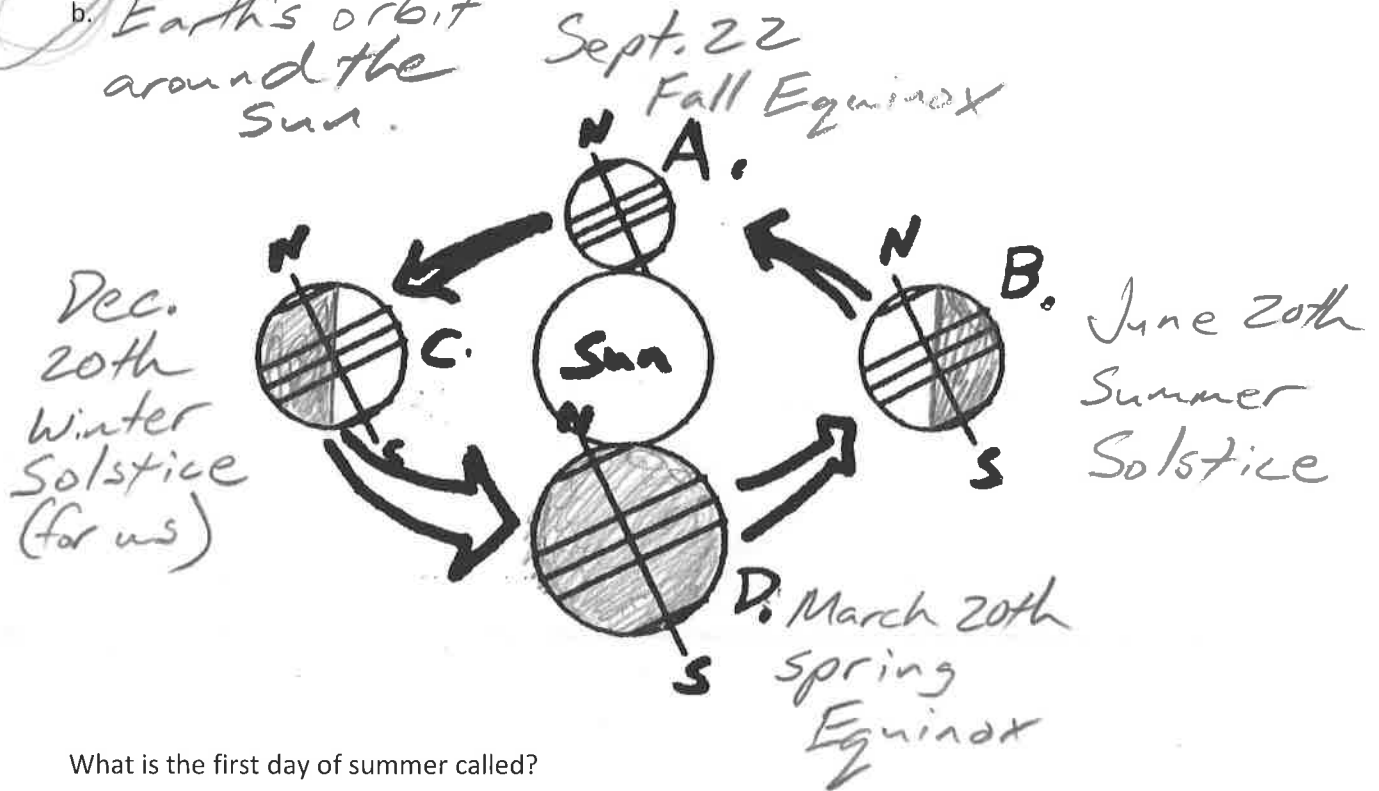


1. Why do we have seasons? What causes the temperature to change during the year?

- a. Changes in hours of daylight
- b. Changes in angle of Sun light

2. Why does the length of day and the angle of sunlight change during the year?

- a. Earth's axis is tilted.
- b. Earth's orbit around the Sun.



3. What is the first day of summer called?

4. What is the approximate date of the first day of summer in the Northern Hemisphere?

5. What is the first day of fall called?

6. What is the approximate date of the first day of fall in the Northern Hemisphere?

7. What is the first day of winter called?

8. What is the approximate date of the first day of winter in the Northern Hemisphere?

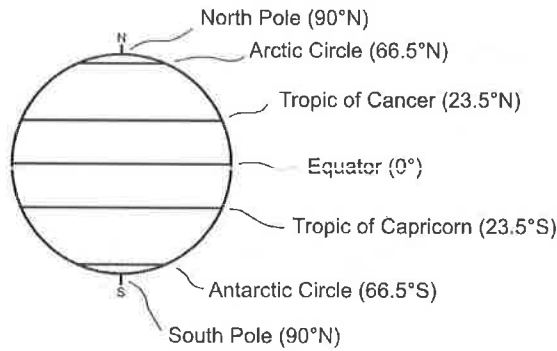
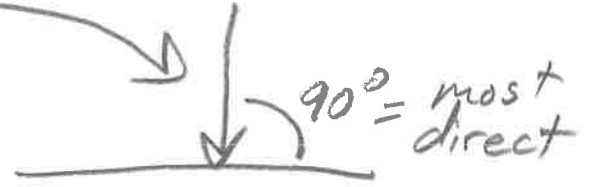
9. What is the first day of spring called?

10. What is the approximate date of the first day of spring in the Northern Hemisphere?

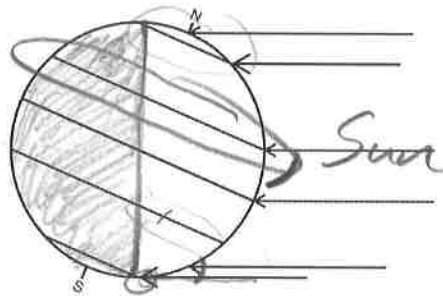
11. Shade the Earths in the diagrams below. Then choose the correct hours of daylight and directness of sunlight in all of the cells below.

		Hours of Daylight																			
Hemisphere	Location	June 20		September 22		December 20		March 20													
Northern Hemisphere	Arctic Circle	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24
	Tropic of Cancer	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24
	Equator	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24
Southern Hemisphere	Tropic of Capricorn	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24
	Antarctic Circle	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24	0	<12	12	>12	24

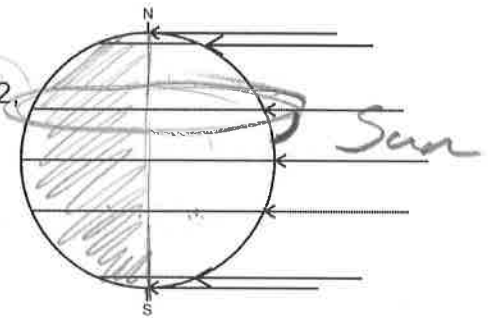
		Directness of Sunlight	
Hemisphere	Location	Date When Sun is Most Direct	Date When Sun is Least Direct
Northern Hemisphere	Arctic Circle	June 20	Dec 20
	Tropic of Cancer	June 20	Dec 20
	Equator	Sept + Mar	June + Dec
Southern Hemisphere	Tropic of Capricorn	Dec 20	June 20
	Antarctic Circle	Dec 20	June 20



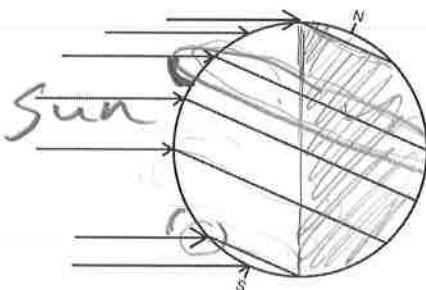
June 20, 2016



Sept. 22, 2016



Dec. 20, 2016



March 20, 2017

