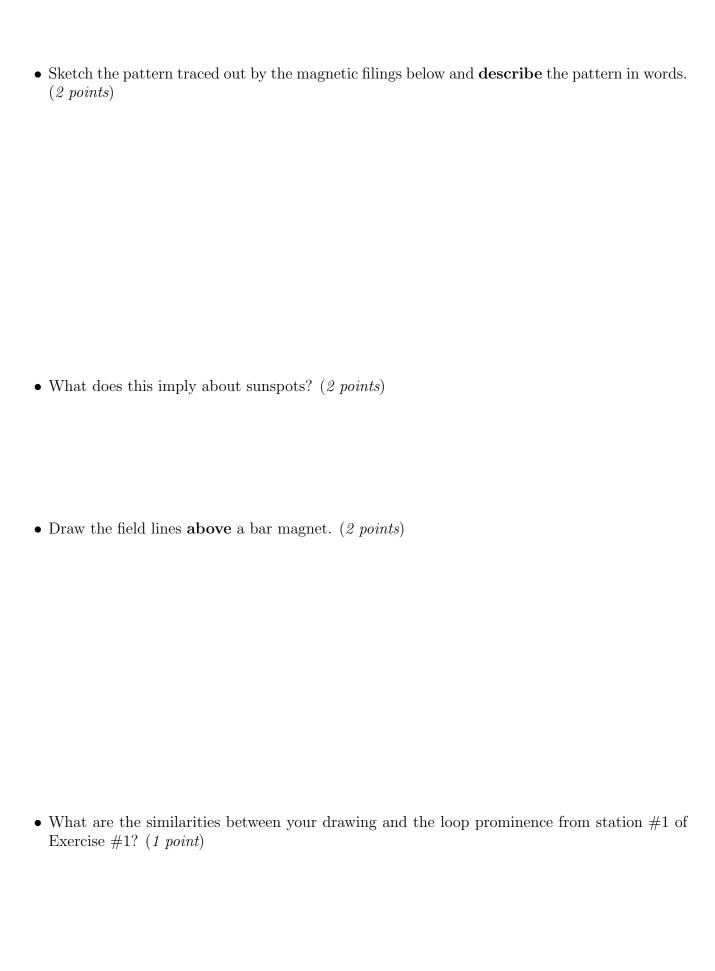
## Lab 6 Our Sun

Names: \_\_\_\_

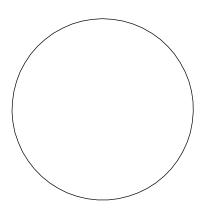
Exercise #1 Station 2
• SOHO Images (8 points)
– If the Sun turns by 90 degress in a time $t$ , it would complete one revolution of 360 degrees in how much time?
<ul> <li>Does this match the rotation rate given in your textbook or in lecture? Cite a source for this value.</li> </ul>
• Magnetogram (7 points)
- What do you notice about the location of <i>sunspots</i> in the photo and the location of the <i>strongest magnetic fields</i> , shown by the brightest or darkest colors in the magnetogram?
- Based on this answer, what do you think causes sunspots to form? Why are they dark?

Station 3 (10 points)	
• Diameter of the Sun (on paper):	
Minimum extent of the corona (on paper):	-
• Size of the corona (in reality):	
How many times larger than the Earth is the corona?	
Station 4 (15 points)	
• Diameter of the Sun (on paper):	
- Biameter of the can (on paper):	
First prominence distance (on paper):	
Theo prominence discusses (on paper).	
Second prominence distance (on paper):	
How far did the prominence move (on paper)?	
• Diameter of the Sun (in reality):	
• Diameter of the bull (in reality).	
How far did the prominence move (in reality)?	
Trow far the profitmence move (in reality).	
17.1	
• Velocity of the prominence:	
• Time to reach the Earth if a prominence were moving at 2000 km/s:	

<b>Station 5</b> What do you notice about the distribution of sunspots? How long does it take for the pattern to repeat? What does the length of time correspond to? (3 points)
Exercise #2
• Which end of the compass needle (or arrow) seems to be attracted by the north pole of the magnet? (1 point)
ullet Which end of the compass needle is attracted to the south pole of the bar magnet? (1 point)
• Which pole is attracted to which pole? (1 point)
• What is the actual "polarity" of the Earth's "magnetic North" pole?



## Solar Observation Worksheet



Name:	Lab Sec.:
Date:	ТА: