

# *Reach for the Stars*

## *Answer Sheet*

### 2012-2013

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

Team Number \_\_\_\_\_

Participant Names:

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Score: \_\_\_/200

Tiebreakers:

Bonus Points:

Final Ranking:

**Section 1: General Knowledge (67 points)**

1. \_\_\_\_\_

2. \_\_\_\_\_

a. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_  
\_\_\_\_\_

a. \_\_\_\_\_

6. \_\_\_\_\_  
\_\_\_\_\_

a. \_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_

c. \_\_\_\_\_  
\_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_  
\_\_\_\_\_

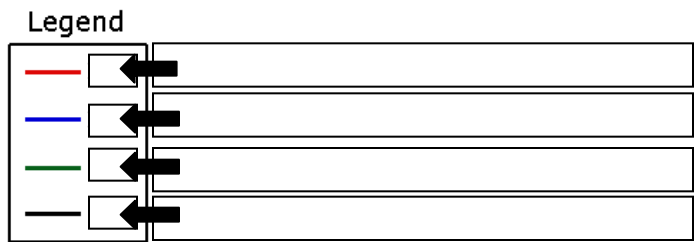
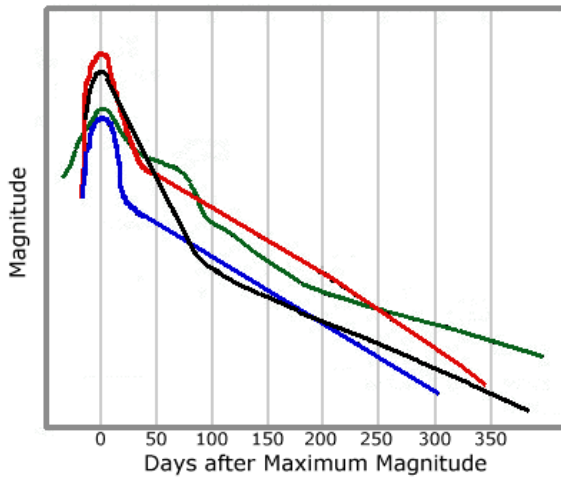
9. \_\_\_\_\_

a. \_\_\_\_\_  
\_\_\_\_\_

10. \_\_\_\_\_

11. \_\_\_\_\_

12.



13. \_\_\_\_\_

\_\_\_\_\_

14. \_\_\_\_\_

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15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_  
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19. \_\_\_\_\_

20. \_\_\_\_\_

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22. \_\_\_\_\_

23. \_\_\_\_\_

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25. \_\_\_\_\_  
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26. \_\_\_\_\_

27. \_\_\_\_\_

28. \_\_\_\_\_  
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29. \_\_\_\_\_

30. \_\_\_\_\_

31. \_\_\_\_\_

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34. \_\_\_\_\_

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**Section 2: DSO/Constellation Questions (41 points)**

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3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

a. \_\_\_\_\_

6. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

7. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

8. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

9. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

10. \_\_\_\_\_

a. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

b. \_\_\_\_\_

11. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

14. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

15. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

16. \_\_\_\_\_

a. \_\_\_\_\_

b. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

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19. \_\_\_\_\_

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20. \_\_\_\_\_

a. \_\_\_\_\_



21. \_\_\_\_\_

22. \_\_\_\_\_

23. \_\_\_\_\_  
\_\_\_\_\_

a. \_\_\_\_\_

24. \_\_\_\_\_

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**Section 3: Stellar Evolution and the HR Diagram (42 points)**

1. \_\_\_\_\_

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4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

a. \_\_\_\_\_

7. \_\_\_\_\_

8. \_\_\_\_\_

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12. \_\_\_\_\_

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13. \_\_\_\_\_  
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14.

Star	Ab Mag	Spect Type	Temp (K)	Right Asc	Dec $\delta$
	-0.48		4,940 $\pm$ 50	05h16m41.359s	+45d59'52.77"
	1.42(A)		9,940(A)	06h45m08.917s	16d42'58.017"
	15.49		3,042 $\pm$ 117	14h29m42.9487	62d40'46.141"
	-0.52		10,300-15,400	10h08m22.3s	+11d58'02"
	1.33		10,300	07h34m36s	+31d53'18"
	0.58		9,602 $\pm$ 180	18h36m56.336s	+38d47'01.29"
	-6.05		3,500	05h55m10.305s	+07d24'25.43"
	-6.7		11,000	05h14m32.272s	-08d12'05.91"
	-0.63		4,010	04h35m55.239s	+16d30'33.49"
	-3.63 $\pm$ 0.14		7,200	02h31m49.09s	+89d15'50.8"

15.

