

# Optics Answer Sheet

2017 Princeton University Science  
Olympiad Invitational

**TEAM SIZE:** Up to 2

**TIME:** 50 minutes

**ALLOWED RESOURCES:** All reference materials to be used during all parts of the competition must be initially secured in a 3-ring binder, so that regardless of orientation none can fall out. Competitors may bring any measuring tools, premade templates, writing utensils and any type of calculators for use during any part of the competition. Competitors must not bring lasers or minors.

**School Name:** \_\_\_\_\_

**Team #:** \_\_\_\_\_

Part 1: \_\_\_\_ / 40

Part 2: \_\_\_\_ / 12

Part 3: \_\_\_\_ / 30

**Total:** \_\_\_\_ / 82

**INSTRUCTIONS:**

- Welcome to the 2017 Princeton University Science Olympiad Invitational!! Please fill in the blanks for your school name and team number on this title page.
- All answers must be written on this answer sheet.

Write your answers in the corresponding blanks:

### Part I:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_
19. \_\_\_\_\_
20. \_\_\_\_\_

9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_

### Part III:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

### Part II:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_