

# Codebusters Answer Sheet



## 2019 University of Chicago Science Olympiad Invitational

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

Participant Names: \_\_\_\_\_

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

Raw Score: \_\_\_\_\_/4500

Rank: \_\_\_\_\_

Time remaining (if applicable): \_\_\_\_\_

**Regional-level questions [3200 pts + time bonus]**

**1. Timed Aristocrats w/Hint [500 pts + 600 time bonus]**

**2. Affine encryption [200 pts]**

**3. Affine encryption [200 pts]**

**4. Vigenère encryption [300 pts]**

**5. Vigenère decryption [300 pts]**

**6. Spanish Cipher decryption [300 pts]**

**7. Baconian Cipher decryption [400 pts]**

**8. Caesar cryptanalysis [500 pts]**

**9. Mystery cryptanalysis [500 pts]**

**State-level questions [1300 pts]**

**10. RSA decryption [400 pts]**

**11. Hill Cipher decryption [300 pts]**

**12. Vigenère with crib cryptanalysis [300 pts]**

**13. Affine Cipher decryption [300 pts]**