

Candy Auction: Understanding the 2020 Nobel Prize in Economics

Objectives:

- *Have students understand different types of auctioning and the advantages and disadvantages of each type*
- *Understand simultaneous multiple round auctioning (SMRA) and how it maximizes profit in the context of spectrum auctions*

Materials: Projector and Candy

Links

- [Slideshow link](#)
- [SMRA Form link](#)
- [SMRA Spreadsheet link](#)

Lesson Plan:

1. *Introductions (1 minute)*
2. *Run traditional (English) auction (5 minutes)*
 - a. 3 rounds, with three pieces of candy, with increasing size of candy to show size discrepancy problem
3. *What is an auction? What is auction theory? (1 minute)*
 - a. Explain the format of an auction
 - b. Describe auction theory
4. *What are different types of auctions? (2 minutes)*
 - a. Compare Dutch auction and English auctions
 - b. Discuss how different auctions benefit different groups (pros/cons)
5. *What is spectrum auctioning? (5 minutes)*
 - a. Explain the real-world problem of spectrum auctions
 - i. Discuss the challenges posed and potential solutions
6. *What are SMRAs? (7 minutes)*
 - a. Explain how SMRAs are a type of auction that benefits both buyers and sellers (and how they were highly effective for spectrum auctions)
7. *Run a SMRA using candy (28 minutes)*
 - a. Run a three round SMRA, to show students how they are better off bidding on multiple items simultaneously
 - b. Compare SMRA final bids to the ones made on the same pieces of candy in the first English Auction at the beginning of class
8. *Conclusion (1 minute)*
 - a. Recap the impact of spectrum auctions