PUZZLE: CREATE A BOARD GAME ABOUT THE LAW OF SUPPLY AND DEMAND

STANDARDS & CONNECTIONS: NGSS.3-5-ETSI, NGSS.MS-ETSI

SUGGESTED MATERIALS: Dice, paper, colored markers, scissors, cardboard, access to the internet or economic books

BACKGROUND: The basic economic principles of supply and demand often determine the price of food in the grocery store. Supply is the amount of a product that a seller is willing and able to sell. Demand is a consumer’s willingness and ability to buy a product. There are a variety of factors, or determinants, that determine supply and demand. If the supply is low, and demand is high, the price will rise. If the supply is high, and the demand is low, the price will fall. This concept is the Law of Supply and Demand.¹

1. IDENTIFY: Share the background information with the students, then share the puzzle to be solved. Determine constraints (e.g., time allotted, space, materials provided, etc.) and divide students into small groups.

2. IMAGINE: Ask a series of questions to help students brainstorm solutions to the puzzle. Encourage students to list all ideas – don’t hold back! Before moving on, make sure each group selects a solution that fits within the contraints.
   
   • Ask: How can you solve this puzzle? Which of your ideas can you build a prototype for given the constraints?

3. DESIGN: Students diagram the prototype, identify the materials needed to build the prototype, and write out the steps to take. Students describe the expected outcomes.
   
   • Ask: What steps will you take to create your solution? What do you expect your solution to look like and be able to do?

4. CREATE: Students follow their design plan and build their prototypes. Monitor their progress and remind them about how much time they have.

5. TEST & IMPROVE: Students evaluate their creation and compare it with the expected outcomes. Students seek areas of improvement and make changes where needed.

6. SHARE: Students share their solution to the puzzle and communicate lessons learned.
   
   • Ask: What was your biggest takeaway? What would you do differently?

ADDITIONAL RESOURCES: For more background information on this topic, please visit www.purpleplow.org.

Have students research supply and demand before creating their game if they are unfamiliar with the concept. Keep the best games in your classroom for students to play during their free time.