## Resources, Efficiency, Supply and Demand

Objectives In this activity, students will explore the concepts of resources, efficiency, supply and demand, and trade.

Materialss Playdough (various colors), pens/pencils, a timer
Procedures This activity consists of seven rounds^ each lasting one minute. In each round, students will be using the Playdough to create hot dogs, which must be roughly the size of a pen or pencil, and bagels, which are complete hotdogs, connected to make a circle.

Round 1: Each student works independently. Instruct them to make as many hotdogs and bagels as they can in one minute. Hotdogs are worth $\$ 1$ and bagels are worth $\$ 2$. Have them total the amount of money they earned.

Round 2: Each student works independently. Instruct them to make as many hotdogs and bagels as they can in one minute. Hotdogs are worth $\$ 1$ and bagels are worth $\$ 5$. Have them total the amount of money they earned.

Round 3: Each student works independently. Instruct them to make as many hotdogs and bagels as they can in one minute. Take half of their playdough away. Hotdogs are worth $\$ 1$ and bagels are worth $\$ 5$. Have them total the amount of money they earned.

Round 4: Each student works with a partner. Instruct them to make as many hotdogs and bagels as they can in one minute. Hotdogs are worth $\$ 1$ and bagels are worth $\$ 5$. Have them total the amount of money they earned.

Round 5: Each student works in a small group (3-4). Instruct them to make as many hotdogs and bagels as they can in one minute. Hotdogs are worth $\$ 1$ and bagels are worth $\$ 5$. Have them total the amount of money they earned.

Round 6: Each student works independently. Choose one color of playdough and tell them hotdogs of that color are worth $\$ 10$ and bagels of that color are worth $\$ 50$. For all other colors, hotdogs are still worth $\$ 1$ and bagels are still worth $\$ 5$. Give them one minute to trade playdough. They may trade all, some, or none of their Playdough. Once trading has ended, instruct them to make as many hotdogs and bagels as they can in one minute.

Round 7: Each student works with a partner. Choose one color of playdough and tell them hotdogs of that color are worth $\$ 10$ and bagels of that color are worth $\$ 50$. For all other colors, hotdogs are still worth $\$ 1$ and bagels are still worth $\$ 5$. Give them one minute to trade playdough. They may trade all, some, or none of their Playdough. Once trading has ended, instruct them to make as many hotdogs and bagels as they can in one minute.
*If necessary, pause the game and repeat any round until students understand the concept.

## Discussion Questionss

1. Round 1 - Discuss the successes and failures of hotdog and bagel production.
2. Round 2 - Discuss the increased value of bagels and the shift in production from hotdogs to bagels.
3. Round 3 - Discuss difficulties in producing hotdogs and bagels with less resources, and how their production techniques changed.
4. Round 4 - Discuss how more labor (workers) increased hotdog and bagel production.
5. Round 5 - Discuss how increasing the size of the labor force increased production. Also discuss how they could organize their labor to be even more productive (assemble line, specialization, etc.)
6. Round 6 - Discuss how trading impacted production and value.
7. Round 7 - Discuss how trading impacted production and value.
