Andrew Carnegie's Vertical Monopoly

1. In the early 1860s, Carnegie invested in the Freedom Iron Company, which manufactured iron rails, and the Keystone Bridge Company, which built bridges for railroad lines. He merged two of his iron works into Union Iron to provide a reliable and inexpensive source of railroad axles, beams, and plates for his bridge company.

2. In 1865, Freedom Iron retooled using the Bessemer process to produce steel rails.

3. Carnegie hired a chemist to analyze the quality of ores in various mines and devise uses for the by-products of the steel industry.

4. Carnegie introduced cost accounting to determine the exact price of each process and evaluate the efficiency of each of his workers.

5. In the 1870s, Carnegie bought the Scotia Ore Mines, the Ferro-Manganese Mines, the Pittsburgh Limestone Company, and acquired controlling interest in the Mesabi iron ore mines in Minnesota.

6. Carnegie's partner, Henry Clay Frick, built the Union Railway to connect Carnegie's scattered steel mills with the area's railroad trunk lines.

7. Carnegie bought the Pittsburgh, Bessemer, and Lake Erie Railroad to prod the powerful Pennsylvania Railroad into signing a contract to carry his goods at exceptionally low rates.

8. In the late 1890s, Carnegie hired knowledgeable sales representatives to promote sales in all the major cities in the United States and Canada and to develop sales in foreign countries.

9. Carnegie purchased a fleet of ore boats to carry ore across the Great Lakes from Minnesota.

John D. Rockefeller's Horizontal Monopoly

1. During the Civil War, Rockefeller invested money in an oil refinery in Cleveland, Ohio. By the end of the war, his company was the largest of 60 refineries in the city.

2. Rockefeller introduced cost accounting that was accurate to the third decimal.

3. Rockefeller sent his brother to East and to foreign countries to develop new markets for his products.

4. Rockefeller bought out many of his competitors during the depression that began in 1873. Threatened with bankruptcy, they sold out to him for very low prices.

5. Rockefeller hired research chemists to improve refining methods and develop kerosene by-products.

6. In 1870, Rockefeller converted his partnership to a joint stock company, the Standard Oil Company of Ohio.

7. Rockefeller persuaded the railroads to give him substantial rebates by arguing that his large volume of business on a regular basis helped the railroads pay their fixed costs and kept down rates for smaller users.

8. By 1875, Standard Oil had bought out or merged with most of the Cleveland refiners and many others outside the city.

9. The Standard Oil Trust, created in 1879, allowed nine trustees of Standard Oil to own the controlling stock and manage all of the subsidiary and allied companies of Standard Oil in other states.
Comparing Horizontal & Vertical Integration

Directions: Both Andrew Carnegie and John D. Rockefeller achieved fantastic success in their industries, but they took different approaches to eliminating their competition. Read about how they each monopolized their industries then complete the steps below.

1. In your own words, summarize how each figure established a monopoly:

   Andrew Carnegie  
   John D. Rockefeller

2. Create a graphic or drawing to summarize each’s steps in a visual way.

3. Below your completed visual above, write your own definitions for vertical and horizontal integration.

   Vertical Integration  
   Horizontal Integration