Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_

Nova: Fireworks

1. When did the Chinese discover black powder?
2. Potassium nitrate (KNO3) is also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Black powder is a combination of 75% \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 15 % \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and

10% \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. How long does it take to wire a large fireworks display to its computer system?
2. Who brought fireworks to Italy from the Far East?
3. What days did the Catholic Church celebrate with fireworks?
4. Until the 1830s, fireworks displays had very little color. A significant improvement in fireworks took place then when KNO3 was replaced with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. What types of salts are added to fireworks to give them colors?
6. Copper makes the fireworks \_\_\_\_\_\_\_\_\_ in color. Strontium makes them \_\_\_\_\_\_\_\_ in color, and barium makes them \_\_\_\_\_\_\_\_\_\_ in color.
7. How many people in the US are injured each year by fireworks? What percent of those are injured by illegal fireworks?
8. How hot do sparklers burn?
9. What is the recommended safety zone around a fireworks display?