How Many Equivalent Fractions?

Materials: stopwatch

1. Work with a partner. Choose one of the following fractions:

$$\frac{1}{2} \quad \frac{1}{3} \quad \frac{1}{4} \quad \frac{1}{6} \quad \frac{2}{3} \quad \frac{3}{4} \quad \frac{4}{6}$$

2. Take turns to be the timekeeper and the recorder. The timekeeper's role is to let their partner know when the 15, 30, 45, 60, 75 and 90 second marks have been reached. The recorder must write as many equivalent fractions as possible for the chosen fraction within 90 seconds. Each time the timekeeper states that a 15 second time interval has been reached the recorder must circle the last fraction written before continuing work.

3. Create a two-column table. Record the number of equivalent fractions you had written at each time interval.

Time (seconds)	No. of Equivalent Fractions
15	
30	
45	
60	
75	
90	

4. Graph your data on a coordinate grid. Use an appropriate scale. Label the axes and write a title.

5. Analyze your data. What conclusions can you draw? Record your thinking.