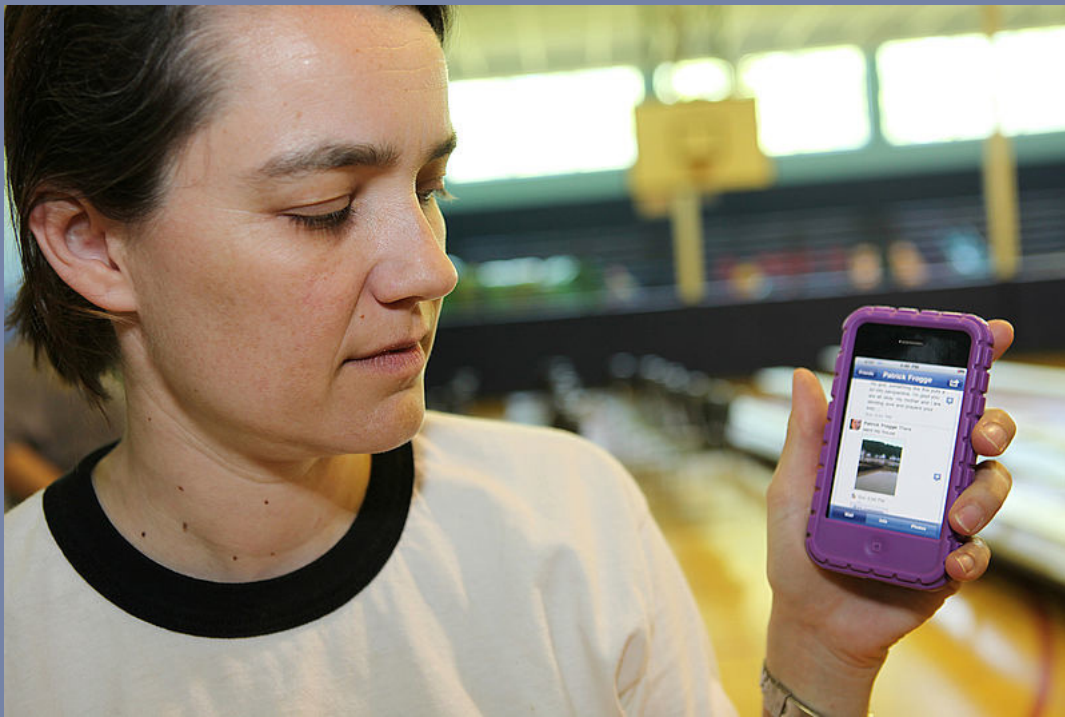


STEM *Sims*™

Social Network

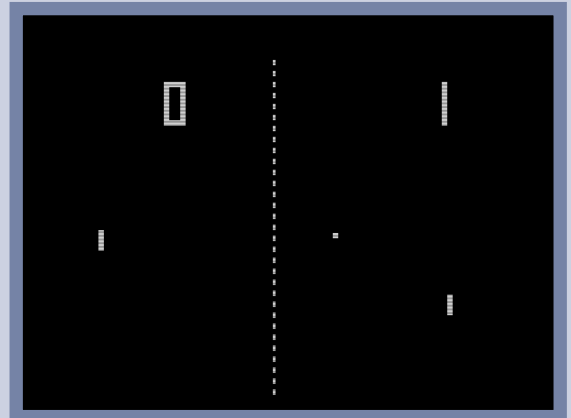


Social Network

**Do you need an idea for a scientific study?
Try out one of our ideas or make one of your own.**

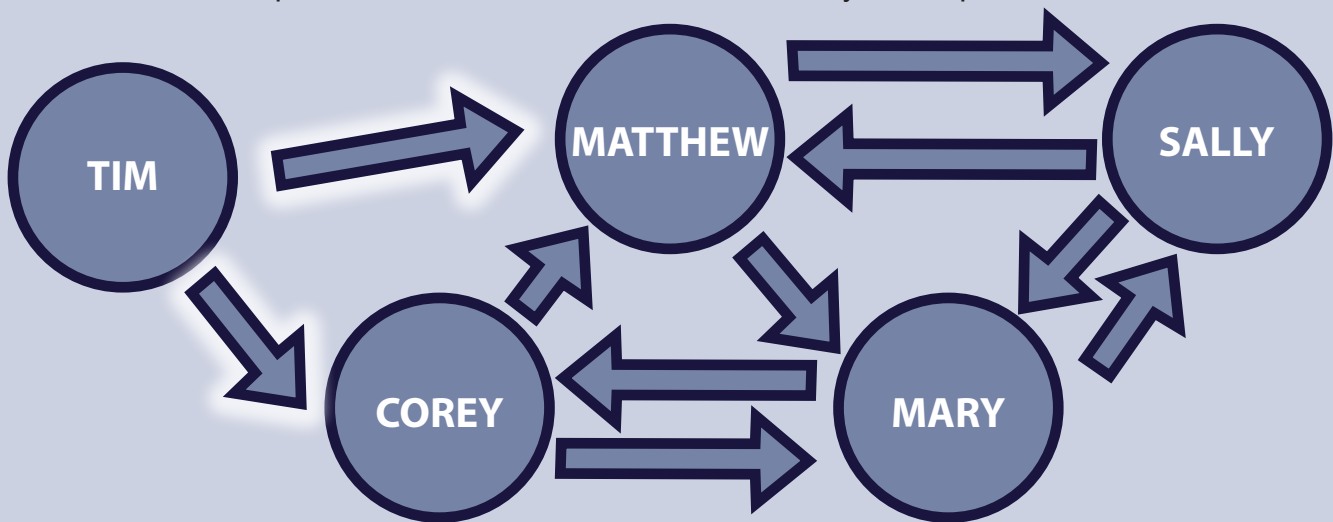
Start learning right now about how people create and use social networks to interact with others. Take the following brief quiz to see how much you already know about using technology to connect with others. See the bottom of page 4 to check your answers.

1. In what year was Facebook™ launched?
 - a. 1996
 - b. 2000
 - c. 2004
 - d. 2006
2. As of April 2010, about what percentage of Americans had a Facebook account?
 - a. 5%
 - b. 10%
 - c. 20%
 - d. 40%
3. As of May 2012, how many worldwide users of Facebook were active?
 - a. 300 million
 - b. 600 million
 - c. 900 million
 - d. 3 billion
4. What was the content focus of the first video ever uploaded to YouTube?
 - a. an elementary teacher's science lesson
 - b. a visit to a zoo
 - c. a trip to a beach
 - d. a wedding ceremony
5. Researchers estimate that the bandwidth used by YouTube viewers in 2007 was about equal to the:
 - a. entire Internet in 1990.
 - b. entire Internet in 1995.
 - c. entire Internet in 2000.
 - d. entire Internet in 2010.



I Choose...You!

Sociograms are wonderful tools for investigating social interactions and choice patterns. Teachers use sociograms to better understand the group dynamics that take place in their classrooms. Here are some basics about representing choice patterns with a sociogram. First, a task is given and each student is asked to write down the name of two other students he or she would like to work on the task with. In a sociogram, a person is represented with a circle with her/his name inside. The person's choices are indicated by two arrows directed towards the two people chosen to be partners. In the example below, Tim chose Matthew and Corey as his partners.



After all of the people and their choices are drawn, the sociogram must be analyzed. The class star is the student most often selected. An isolate is any person not selected. Mutual selections are two people who choose each other. A clique is a group of mutual selections. A teacher can use this information to improve the collaboration between students. The following table shows the choice pattern for a given task. Draw a sociogram using the following information, then identify the star(s), isolate(s), mutual selections, and clique(s). See the bottom of page 4 to check your answer.

Person	Who the Person Selected						
	Bob	Corey	Matthew	Mary	Sally	Tanya	Tim
Bob				x		x	
Corey			x				x
Matthew		x					x
Mary			x				x
Sally		x					x
Tanya	x						x
Tim		x	x				

1. Star(s) =

3. Mutual Selections =

2. Isolate(s) =

4. Clique(s) =

Social Network

More Connected than Ever...Kind of

Over the past ten years, social networking using technology has skyrocketed. For instance, Facebook went from 100,000 active users in 2005 to one billion in 2012. And it is very common for a typical social media user to have hundreds and even thousands of technology-based friends. With all of this connectivity, you would think that people would feel less isolated with their friends and peers. An interesting collection of research is emerging that indicates just the opposite.



People now meet in-person fewer people than in the past. Face-to-face encounters with groups are often reported by many as being uncomfortable. They have fewer “close” friends. In fact, the average number of people a person felt comfortable sharing personal details with has dropped from 2.94 in 1985 to 2.08 just twenty years later. In 1985 only 10% of people reported that they had no one to talk to about meaningful issues, while that number increased to 25% twenty years later.

But does using social media increase loneliness? Yes and no. It depends how you use the technology. One finding is of high importance. Heavy social media users felt less lonely with their peers, but more lonely with respect to their own families. Another finding of interest reports that loneliness is closely tied to how a person uses the social media. Those who wrote and received thoughtful messages and in-depth responses were less lonely than others. However, users who only skimmed pages and walls of others stated they were lonelier. This finding makes sense because it appears to the skimmers of information that others’ lives were much more interesting and exciting since they were only reviewing the highlights of that person’s existence. One last finding is probably the most important of all. The more face-to-face friendships and interactions people have, the less lonely they are. Is more research needed in this area? You bet! This line of research would be a great starting point for crafting a meaningful science fair project.

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Answers: Page 2 Answers: 1) c, 2) d, 3) c, 4) b, 5) c. Page 3 | Choose...You! Answers: 1) Tim, 2) Sally, 3) Tim-Matthew, Tim-Corey, Matthew-Corey, Tanya-Bob, 4) Tim-Matthew-Corey.

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