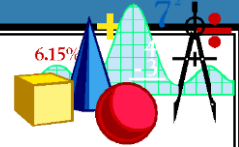Mathematics, Grade 6
Unit VI: Lesson 3   Portfolio: **Math Man X – PI (Prime Time Investigator)**

When a detective runs an investigation on an individual, he/she finds out as much information as possible about them. This would include such things as complete physical description, photographs, "modus operandi" (method of operating), kinds of activities individual is involved in, places they go often, people they see, occupation, home, aliases (other names they go by), unique identifying characteristics, and so on. Review prime numbers.

You have been asked by the police dept, the math dept, the FBI, and/or any other such organizations to conduct a thorough investigation on prime numbers. They are the prime suspect as you can imagine. Consider such questions as: how many prime numbers are there between 1 and 10, 11 and 20, etc.; how many between 1 and 100, 101 and 200, etc.; how often prime numbers occur separated by only one digit such as 5 and 7 or 11 and 13; the largest; smallest; identifying characteristics; common uses, and so on. Think of other questions an investigator might inquire about and find the answers. Make a confidential investigative portfolio containing the data you have collected.

Present your report to the class. Pretend they are the special force who is to apprehend this "prime" suspect. They will need a lot of information.

Variation: *Make a Guinness book of prime number oddities and records.*