## **AP STATISTICS** Unit 7: Inference When Variables Are Related

## Our Learning Goals:

#### We will:

- ✓ Use Chi-Square distribution models to make inferences about relationships
- ✓ Make Linear Regression Inferences
- ✓ Analyze computer output

# Why do we study this?

- Researchers and scientists use inferential statistics to predict possible outcomes with a level of certainty.
- Knowing how inferential statistics are found will help students become an informed consumer.
- Inferential and analytical skills can be transferred into any industry and career field.

# How we will show what we have learned...

Formative Assessments	Summative Assessments
Ongoing formative assessments during lesson and homework activities will help in monitoring learning and providing feedback for students.	Summative assessments to measure learning at the end of concepts will include the following: • Free Response Test: Comparing counts and regression inferences • Lab: Fingerprint Lab • Unit 7 District-wide Exam



## Sample Problem:

Some people believe that a full moon elicits unusual behavior in people. The table shows the number of arrests made in a small town during weeks of six full moons and six other randomly selected weeks during the same year. We wonder if there is evidence of a difference in the types of illegal activity that take place. Test a hypothesis about the relationship between the full moon and number of arrests made and state your conclusion.

### Additional Support:

- Check the teacher web page and Canvas page for notes, activities, and assignments.
- Search the topic on the web. We recommend using Kahn Academy.
- Attend tutorials.



Questions? Please contact your AP Statistics teacher. We look forward to a great year! --Your EMS-ISD AP Statistics Team