

# **Wednesday, October 24, 2018**

- **Warm-up**

• In a certain archery competition, each player continues to shoot until he or she misses the center of the target twice. Quinn is one of the archers in this competition. Based on past experience, she has a 0.6 probability of hitting the center of the target on each shot. Describe a simulation to determine how many shots she will take in a competition.

- **Quizzes**

- **ACYI Survey**

- **Jelly Blubbers**



## Objectives

- Content Objective: I will work with various types of samples and explain the difference between them.
- Social Objective: I will participate in the class activities.
- Language Objective: I will clarify the meanings of **SRS**, **STRATIFIED**, **SYSTEMATIC**, and **CLUSTER** sampling

# Simulation

We are simulating shots  $\rightarrow$  using random number table, 1-6 = made shot  
7-9+0 = missed shot

• In a certain archery competition, each player continue to shoot until he or she misses the center of the target twice. Quinn is one of the archers in this competition. Based on past experience, she has a 0.6 probability of hitting the center of the target on each shot. Describe a simulation to determine how many shots she will take in a competition.

- Would a coin toss simulate it well?
- What about a dice roll?
- What is the minimum number of shots?
- What is the maximum number of shots

Continue to generate numbers until we find 2 "missed shots" (7-9 or 0). (count how many numbers (or shots) she taken.

2 4 8 2 9 = 5  
2 1 9 3 3 6 2 9 = 8

According to my simulation, she will take 6.5 shots.



# QUIZ

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# ACYI Survey

School Website

Adams County Youth Initiative Survey

Room 230

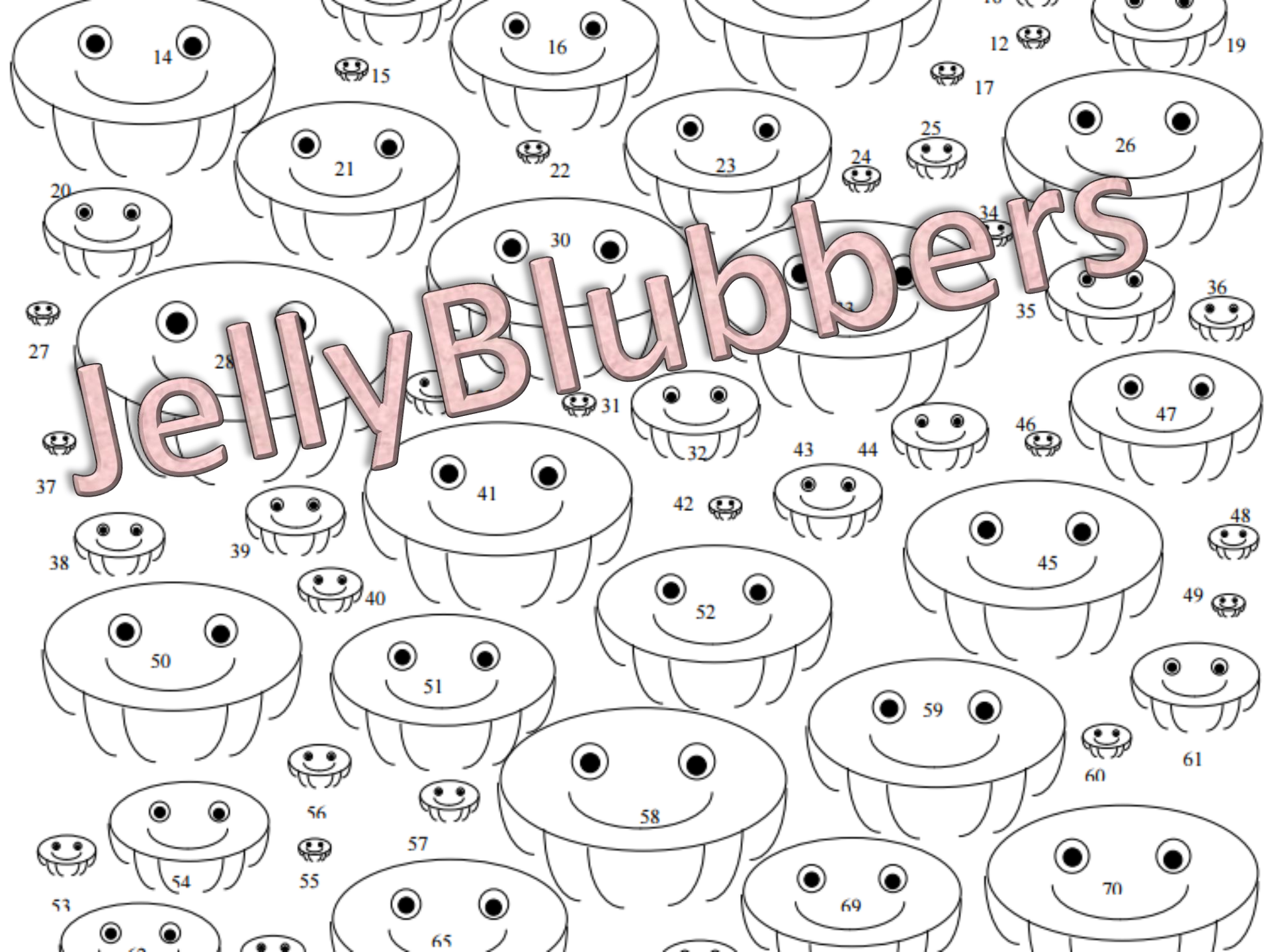
Adams 12

High School

Northglenn High School



# Jelly Blubbers





# **Homework**

Read chapter 12

Complete at least  
5 definitions or  
examples