Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

**AFM Unit 5: Probability Homework Day 3**

**Determine whether each arrangement of objects is linear or circular. Then state whether it is reflective or not reflective.**

1. people seated around a square table relative to each other

2. people seated around a square table relative to one chair

3. a list of students in a given class

4. placing coins in a circle on a desk

**How many different ways can the letters of each word be arranged?**

5. FLOWER 6. ALGEBRA 7. PARALLEL

8. CANDIDATE 9. ARREARS 10. MONOPOLY

11. QUADRATIC 12. BASKETBALL 13. CLOCKMAKER

14. How many ways can 7 keys be arranged on a key ring?

15. How many ways can 7 people be seated around a campfire?

16. How many ways can 8 charms be arranged on a bracelet that has no clasp? Has a clasp?

17. How many ways can 4 congressmen and 4 congresswomen be seated alternately at a round table?

18. How many different arrangements can be made with 10 pieces of silverware, laid in a row if three are identical spoons, four are identical forks, and three are identical knives?

19. How many six-digit license plates of the same state can have digits 3, 5, 5, 6, 2, and 6?

20. How many ways can 5 people be seated around a circular table if 2 of the people must be seated next to each other?

21. Twenty beads are strung on a necklace with no clasp. Fourteen are natural wood and 6 are red. How many ways can the beads be strung on the necklace?