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

You are a party planner and your customer wants everyone to sit together.

1. If you only have **triangular** tables, how many tables will you need to seat **12** dinner guests?

|  |  |
| --- | --- |
| **# Tables** | **#** **Seats** |
| 1 | 3 |
| 2 |  |
| 3 |  |
| 4 |  |
| 6 |  |
| 8 |  |
|  | 12 |

Use the toothpicks to create tables and help solve the problem.

**Draw a picture of the 12 dinner guests seating:**

2. If you only have **square** tables, how many tables will you need to seat **12** dinner guests?

Use the toothpicks to create tables and help solve the problem.

|  |  |
| --- | --- |
| **# Tables** | **#** **Seats** |
| 1 | 4 |
| 2 |  |
| 3 |  |
|  |  |
|  | 12 |

**Draw a picture of the 12 dinner guests seating:**

3. If you only have **pentagonal** tables, how many tables will you need to seat **20** people?

|  |  |
| --- | --- |
| **# Tables** | **#** **Seats** |
| 1 | 5 |
| 2 |  |
| 3 |  |
|  |  |
|  | 20 |

Use the toothpicks to create tables and help solve the problem.

**Draw a picture of the 20 dinner guests seating:**

4. How many people would six **hexagonal** tables seat?

|  |  |
| --- | --- |
| **# Tables** | **#** **Seats** |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

Use the toothpicks to create tables and help solve the problem.

two tables

 **Draw a picture of the 6 tables and their guests seating:**