Dance Designer — Loop Notation Worksheet

Name: _____ **Date:** _____

Group Members: _____

Part 1: Warm-Up — Simplify This Sequence

Sequence: Jump, Jump, Spin, Jump, Jump, Spin, Jump, Jump, Spin

What is the repeating pattern? _____

How many times does it repeat? ___

Write it as a REPEAT loop:

```
REPEAT ___ TIMES {
      _____
      _____
}
```

Check: How many individual actions does your loop represent? ___ × ___ = ___

Part 2: Design Your Dance

Choose your three moves:

- Move 1: _____
- Move 2: _____
- Move 3: _____

Write your basic sequence as a REPEAT loop:

```
REPEAT ___ TIMES {
      _____
      _____
      _____
}
```

Total individual actions: ___ × ___ = ___

Part 3: Add a Nested Loop

A **nested loop** is a loop inside another loop. The inner loop finishes completely before the outer loop does its next iteration.

Example:

```
REPEAT 3 TIMES {              ← outer loop (runs 3 times)
    REPEAT 2 TIMES {          ← inner loop (runs 2 times EACH outer
iteration)
        Clap
        Stamp
    }
    Jump
}
```

Total actions: outer runs 3 times × (inner runs 2 times × 2 actions + 1 Jump) = 3 × 5 = 15

Write your dance routine with a nested loop:

```
REPEAT ___ TIMES {
    REPEAT ___ TIMES {
        _____
        _____
    }
    _____
}
```

Explain in words what your nested loop does:

Calculate the total number of individual actions your routine contains:

Show your working:

Answer: _____ total actions

Part 4: Peer Performance Test

This section is filled in by the GROUP who performed your algorithm.

Performing group: _____

Did the algorithm give enough information to perform without help? Yes / No / Mostly

Steps that were unclear:

Did the performance match what the authors intended? Yes / No

Part 5: Condition-Controlled Challenge

Optional extension

Rewrite your basic loop (Part 2) using a condition-controlled loop:

```
REPEAT UNTIL { _____ } {
        _____
        _____
        _____
}
```

What condition did you choose? Why?