

## Mathercise

**Pillar: Active Living**

**Division: II-III**

**Grade Level: 4-8**

**Core Curriculum Connections: Math**

### I. Rationale:

This is a very basic math activity that can be adapted to align with Number strand outcomes across several grades levels. Two simple spinners are used to create endless opportunities to practice a variety of math skills and concepts while integrating physical activity. Mathercise will help students sharpen their math skills while getting their hearts thumping, blood pumping, and bodies jumping!

### II. Activity Objectives (Active Living):

*The students will be able to:*

- perform basic physical exercises and activities to be used as the basis for solving math problems.

### III. Core Curriculum Outcomes: Math

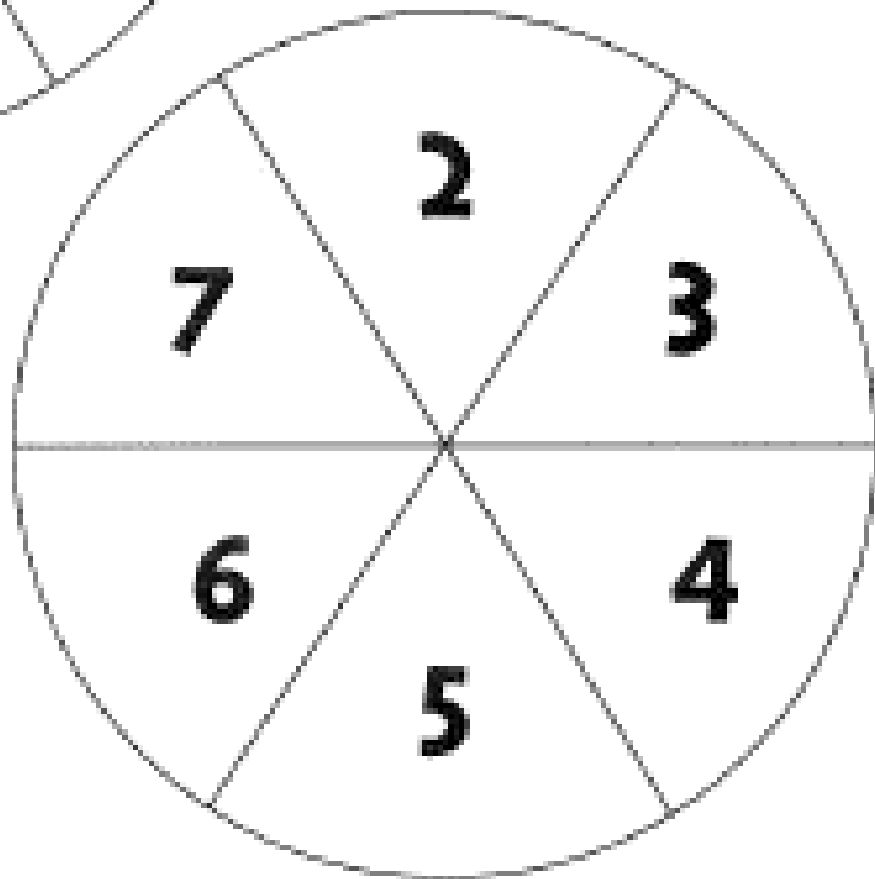
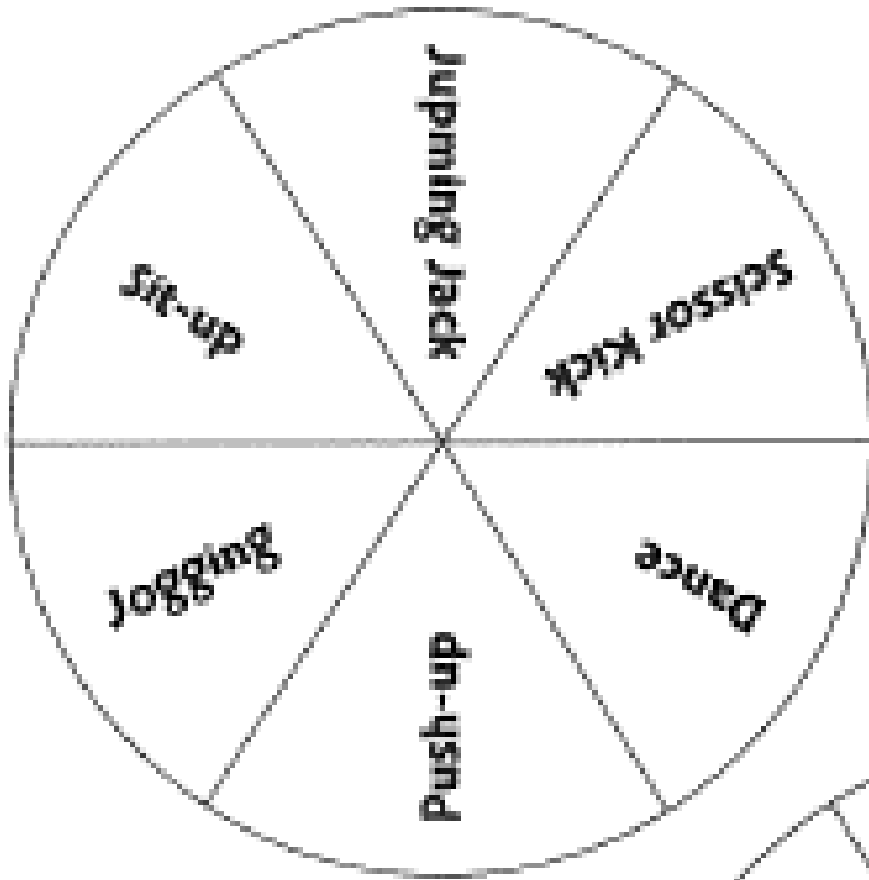
#### Number

| Grade 4  | Grade 5  | Grade 6  | Grade 7  |
|--|--|--|--|
| 3. Demonstrate an understanding of addition of numbers by solving problems involving addition and subtraction. | 3. Apply mental math strategies and number properties for basic multiplication facts.  | 2. Solve problems involving whole numbers and decimal numbers.   | 3. Solve problems involving percents from 1% to 100%. (see extension activity) |
| 5. Describe and apply mental mathematics strategies to determine basic multiplication facts .                  | 5. Demonstrate, with and without concrete materials, an understanding of multiplication (2-digit by 2-digit) to solve problems. (Extension Activity) | 5. Demonstrate an understanding of ratio, concretely, pictorially and symbolically. (See Extension Activity)                 |  |
|  |  | 6. Demonstrate an understanding of percent (limited to whole numbers), concretely, pictorially and symbolically. (Extension) |  |

### IV. Materials:

- Fitness exercise spinner
- Number spinner
- paper

- pencil
- small paper plates
- toothpicks
- stop watch/clock with second hand



## **V. Procedure:**

1. Pair students in the class.
2. Have each pair make two spinners using paper plates, two arrows, and a toothpick. On this first spinner, students divide the plate into 6 equal parts. In each section, students indicate exercises that they can perform in repetition (jumping jacks, push-ups, sit-ups). On the second spinner, the students divide the plate into 6 parts and indicate the numbers 2-7.
3. To begin, the first person spins the fitness spinner and performs the exercise while their partner counts the number of repetitions they do within 1 minute.
4. The number of repetitions is then multiplied by the result of spinning the number spinner to earn points (partner A performed 12 sit-ups in one minute and spun the number 3, so  $12 \times 3 = 36$  points).
5. The pairs keep an ongoing tally of their results on paper and switch roles.
6. Challenge pairs to earn 1000 points.

## **VI. Extensions and Variations:**

- The number spinner could be modified using 2 digit numbers instead to work on 2 digit by 2 digit multiplication in Grade 5.
- Ask students to keep a tally of where the spinner lands (both in the exercise and number spinners separately). Express results in various forms as required by grade level
  - fractions
  - percents
  - decimal numbers
  - ratios

## **VIII. Source:**

- ❖ Lesson idea submitted by Bev Abt, Eckville Elementary School, Wolf Creek Public Schools.