

# Basketball Multiplication

**Pillar: Active Living**

**Division: II**

**Grade Level: 4-5**

**Core Curriculum Connections: Mathematics**

## I. Rationale:

From the classroom to the basketball court, students engage their minds and exercise their bodies while they participate in this active math game. Students apply multiple mental math strategies that they learned in the classroom while they shoot hoops in the gym. Although this game focuses on developing students' multiplication skills, it can also be modified and adapted to reinforce numerous other mathematical operations at various grade levels.

## II. Activity Objectives:

Students will be:

- introduced to an active game that can be used to reinforce a variety of mathematical operations.

## III. Curriculum Outcomes: Mathematics

Outcomes:	Grade 4	Grade 5
<b>NUMBER</b> Develop number sense.	5. Describe and apply mental mathematics strategies, such as: <ul style="list-style-type: none"> <li>skip counting from a known fact</li> <li>using doubling or halving</li> <li>using doubling or halving and adding or subtracting one more group</li> <li>using patterns in the 9s facts</li> <li>using repeated doubling to determine basic multiplication facts to 9 and related division facts. [C, CN, ME, R]</li> </ul>	4. Apply mental mathematics strategies for multiplication, such as: <ul style="list-style-type: none"> <li>annexing then adding zero</li> <li>halving and doubling</li> <li>using the distributive property. [C, CN, ME, R, V]</li> </ul>

## IV. Materials:

- 2 basketballs for each basket
- Math facts
- Hula hoops or poly-spots
- Score cards and pencils

## **V. Procedure:**

1. Place hula hoops or poly-spots at various distances from each basket.
2. Tape a number on each hoop or spot.
3. Also assign a number to each basket.
4. Give each student a piece of paper and pencil and ask them to divide themselves into equal groups at each basket.
5. On signal, students begin shooting from the various hoop and spot locations.
6. If a shot is made they multiply the number on the hoop or spot by the number assigned to the basket.
7. They then write the answer on the score card.
8. After 3 minutes, they add the numbers, record the sum, and rotate to the next basket.
9. Students continue rotating until all baskets have been played.
10. After playing all baskets, students should add the total of all scores.

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

- Play as a team of two or four, using one score card.
- Use other mathematical operations as appropriate for the grade level and ability of students.

## **VIII. Source:**

- Excerpted from *P.E. Teacher's Complete Fitness & Skills Development Activities Program*.