

Alberta Health Services

Health in Action Project

Addition Robbery

Pillar: Active Living Division: I Grade Level: 3 Core Curriculum Connections: Math

I. Rationale:

There are no cops - only robbers - in this active game! Students will love playing 'Addition Robbery' as they become 'little thieves' and masters of addition and subtraction at the same time. This is a great way to infuse DPA and cooperative learning into an activity that improves the math skills of your students. Students will play several rounds of this game, each time focussing on using a different mental math strategy to calculate their results.

II. Pillar Focus (Active Living):

• The students will practice agility and positive social skills by engaging in physical activity to complete a cooperative learning task.

III. Curriculum Outcomes: Mathematics 3

| Genera | Outcome: | Develop number sense. |
|--------|----------|-----------------------|
| Genera | outcome. | Develop number sense. |

Specific Outcomes:

- 6. Describe and apply mental mathematics strategies for adding two 2-digit numerals, such as:
- adding from left to right
- taking one addend to the nearest multiple of ten and then compensating
- using doubles. [C, CN, ME, PS, R, V]
- 7. Describe and apply mental mathematics strategies for subtracting two 2-digit numerals, such as:
- taking the subtrahend to the nearest multiple of ten and then compensating
- thinking of addition
- using doubles. [C, CN, ME, PS, R, V]

IV. Materials:

- 8 beanbags
- 7 tennis balls
- 3 volleyballs
- 5 softballs
- 10 hockey pucks
- 5 Frisbees
- 2 footballs
- 4 hula hoops
- Student handout to record their results.

V. Procedure:

Notes: When placing the hula hoops in each corner, make sure that they are equal distances from the center and one another. This creates equal running distances for each team. Let students know that they must keep adding or subtracting when each item is placed in or taken out of their hoop.

- 1. Place one hula hoop in each corner of a basketball court.
- 2. Have students make equal groups, facing the center, behind each hoop.
- 3. In the center of the gym place different objects.
- 4. Each object should be assigned a different number value.

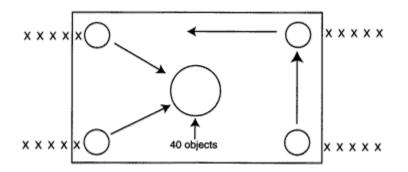
| Objects: | Point Value | Number in Center |
|--------------|-------------|------------------|
| Beanbags | 10 | 8 |
| Tennis Balls | 12 | 7 |
| Volleyballs | 15 | 3 |
| Softballs | 16 | 5 |
| Hockey Pucks | 25 | 4 |
| Frisbees | 23 | 5 |
| Footballs | 29 | 3 |

- 5. Using a relay format, each team sends a student to the center to get an object and bring it back to their hoop. The same object cannot be retrieved twice in a row.
- 6. When one person returns, the next one goes to the center and brings back another object.
- 7. When all objects are gone from the center, players may go to another group's hoop and take one of their objects (players may not guard their objects).
- 8. Play continues until one team gets objects in their hoop totalling 100 or more points.
- 9. Each time the teacher will have all student remove a "mystery object" before calculating their totals.

VI. Extensions and Variations:

Modifications:

Use only beanbags, giving each color a different value. Change the total necessary to win or number of various objects available, making the game go more quickly or more slowly.



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