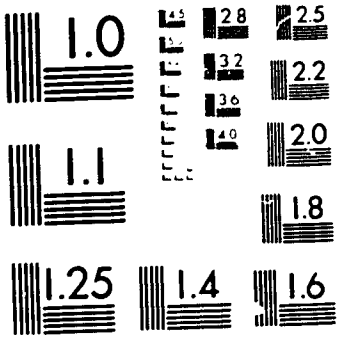

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ABSTRACT

This guide contains a motor development diagnostic survey for the use of elementary physical education teachers and classroom teachers. These tests enable teachers to identify specific perceptual motor problems of students. A description is given of activities to be used in establishing individualized instructional programs for remedial purposes. Specific perceptual motor activities included in this guide deal with these areas: body/object spatial relationships; gross motor coordination; directionality; eye-hand coordination; visual-motor coordination; laterality; midline; fine motor coordination; and balance. (JD)

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Rockville, Maryland

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Elementary Physical Education

Perceptual-Motor Resource Guide

SP 014477

ELEMENTARY PHYSICAL EDUCATION

PERCEPTUAL-MOTOR RESOURCE GUIDE

GRADES K-6

Montgomery County Public Schools
Rockville, Maryland

Spring 1979

ERIC

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Board of Education of Montgomery County

Rockville, Maryland

Table of Contents

OVERVIEW

The Perceptual-Motor Resource Guide, Grades K-6 has been developed as a supplement to the following elementary physical education courses of study:

Elementary Gymnastics, K-6, Bulletin #223

Sports Skills and Conditioning

Rhythms and Games of Low Organization

The guide contains a motor development diagnostic survey which will be used to assist elementary physical education specialists, elementary classroom teachers, and supplementary education teachers in identifying specific perceptual-motor problems of those students referred to them by the local school educational management team (EMT) as having such problems. The guide also contains a description of activities to be used in establishing individualized instructional programs to remediate students' deficiencies.

Specific perceptual-motor activities included in this guide deal with these areas: Body/motor awareness; Body/object spatial relationships; Gross motor coordination; Directionality; Eye-hand coordination; Visual-motor coordination; Laterality; Midline; Fine motor coordination; and Balance.

Administration of the motor development survey and implementation of the remedial activities are time consuming, require a large space, and necessitate the use of various types of equipment. Therefore, considerable preplanning must be done; and cooperation among local school administrators, teachers, and other members of the instructional staff must be achieved before this program is initiated.

The essential focus of this guide, as stated also in the Physical Education section of the Program of Studies, is on helping students to develop motor abilities which permit them to respond and act in effective and satisfying ways. Since some students need special instruction for various physical, mental, and emotional causes, attention is being given to the development of adaptive physical education approaches. Of initial importance in the primary grades is the learning of basic motor patterns and perceptual-motor skills, some of which appear to have an effect upon academic progress. The development of a positive self-concept is encouraged as the teacher seeks evidence of individual progress and designs the program so that all children have opportunities to be successful.*

The Perceptual-Motor Resource Guide has been designed to help the students:

- develop motor skills in a non-competitive but individually challenging situation
- participate in a variety of individualized activities for improving motor performance

* Program of Studies: Physical Education K-8 (Rockville, Md.: MCPS, 1979) p.1.

- acquire a variety of general movement patterns and specific motor skills which lead to mastery and enjoyment of physical activity
- understand the principles involved in effective movement
- recognize their capabilities and limitations as well as those of others and assume supportive or leadership roles as the situations may dictate

This guide contains individual prescriptive activities for students who have been identified by the local school Educational Management Team and who appear to have perceptual-motor problems.

ACKNOWLEDGMENTS

With the guidance of G. C. Edward Masood, Coordinator of Elementary Physical Education, this Perceptual-Motor Resource Guide for Grades K-6 was developed in workshops during the summers of 1975 and 1976. The following Montgomery County Public School staff participated in writing, evaluating, and field testing this motor development document:

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GOALS AND OBJECTIVES

The goal of the perceptual-motor program is to provide an opportunity for students to increase their skills in those areas in which they are deficient. Therefore, probably by the end of Grade 3 and certainly by the end of Grade 6, the student who has participated in this program should be able to:

- make projections of right, left, up, down, forward, and backward from his/her body out into space (directionality)
- maintain balance with performing a locomotor task (dynamic balance)
- integrate the eye and hand in purposeful movement (eye-hand coordination)
- perform precise movements with small muscle groups (fine motor coordination)
- utilize the large muscle groups of the body to perform a specific task (gross motor coordination)
- show that he/she is aware of both sides of the body (laterality)
- move his/her body through space while traveling a predetermined distance (locomotor)
- cross his/her midline while performing specific tasks (midline)
- exhibit knowledge of his/her body and the possibilities for movement and performance (motor awareness)
- move his/her body through space without traveling a predetermined distance, (non-locomotor)
- interpret his/her relative position in space and the relationship of objects to other objects (spatial awareness)
- maintain balance while performing a non-locomotor movement (static balance)
- coordinate the movements of the eyes (visual-motor)

GENERAL DIRECTIONS

The perceptual-motor program contains activities which are different from those generally found in other instructional programs; and the presentation of these activities is slightly different from that in other instructional guides, because each student must be evaluated (pretested) to determine his/her performance level before the remediation activities can be identified and implemented. After students have participated in the instructional program, they are re-evaluated (post-tested) to determine the degree of progress and new skill levels. The items in the Perceptual-Motor Development Diagnostic Survey and Composition Evaluation, used for both the pre- and post-tests, are located in the section of this guide entitled Assessment Measures.

The activities used for implementing the instructional program are classified according to the skill performance areas and contain suggestions for instructional methods, materials, and equipment, when applicable. These items are located in the Instructional Activities section of this guide. These activities are also cross-referenced to other major skill performance areas of the survey and the composite evaluation sheet. The use of this format should assist teachers in determining the student's specific deficient motor skill area(s), prescribe individual activities, and reevaluate the student's performance levels. This process gives the teacher specific directions for implementing the entire program.

As previously indicated, the administration of the Perceptual-Motor Development Diagnostic Survey and implementation of the remedial activities are time consuming, require a large space, and necessitate the use of various types of equipment. It is therefore stressed that considerable planning and a commitment by local school administrators, teachers, and other members of the instructional staff must be established before this program is initiated.

INSTRUCTIONS FOR ADMINISTERING PERCEPTUAL-MOTOR DEVELOPMENT DIAGNOSTIC SURVEY

1. Conduct the survey in an area which is relatively free from distractions.

2. Each student should be evaluated individually without other students' being present.

3. The directions may be repeated if the student either does not respond or appears hesitant.

4. Some performance areas may require demonstrations because some students may be unable to interpret verbal instructions.

5. Directions for each performance area are specified on the long form of the survey.

6. If the student does not meet the criterion, place an X on the appropriate line. Hand dominance indicators should be identified by placing X on the line for the hand which was used. These items should be transferred to the composite evaluation sheet by circling the criterion number which was marked on the survey.

7. The teacher will evaluate the student by using the Perceptual-Motor Diagnostic Survey. The student's responses will be marked on the short form and then transferred to the composite sheet. (See page 28.) After becoming familiar with the specific directions and activities on the Perceptual-Motor Development Diagnostic Survey, the teacher may use the short form exclusively. (See page 24.)

8. A Composite Evaluation Form is used to determine the student's total performance on the diagnostic survey. After the survey is administered and the results are recorded on the composite, an adaptive program can then be established for the student.

Instructional Materials and Equipment

The following items are needed to conduct the survey

- 1 - 8½"-diameter playground ball
- 1 - bean bag
- 1 - hoop or tire
- 1 - 8½"x11" unlined paper with a drawn cutting line
- 7 - 3"x5" index cards containing one of the following figures drawn on each card: vertical line, horizontal line, circle, square, triangle, cross, or diamong
- 7 - 3"x5" blank index cards per student
- Chalkboard, 2 long pieces of chalk and eraser
- Meter stick or broom handle
- 1 - tennis ball
- 1 - 12' length of tumbling mats
- 1 - shoe with eyelets for lacing, and shoelace
- 1 - cardboard box
- 1 - pair of right-hand scissors; 1 - pair left-hand scissors
- 1 - diaper pin or large safety pin
- 1 - 12' length of balance beam 4" wide
- 1 - student chair

Additional Comments

In order to expedite the administration of this survey, it may be desirable for classroom teachers, teacher aides, parent volunteers, or older students to assist the physical education specialist in conducting all or part of the individual student evaluation. In addition, the survey administrator or assistant(s) must be familiar with the contents of the survey, the tabulation sheet, and the process for transposing the data onto the composite sheet.

All survey administrators should be trained in order to provide a higher level of validity for the evaluation process.

DEFINITION OF TERMS

Balance
- Dynamic - the ability to maintain equilibrium while performing a locomotor movement
- Static - the ability to maintain equilibrium while performing a non-locomotor movement

Bilaterality - the ability to move both arms or both legs at the same time

Body/Object Spatial Relationship - the knowledge and interpretation of one's position in space and the relationship of objects in space to each other and to one's self. The association of the body or one of its parts to an object or from one object to another.

Body/Motor Awareness - the knowledge of one's body and its possibility of movement and performance

Cross Laterality - the ability to move an arm and leg on opposite sides of the body at the same time

Directionality - the projection in the direction of right, left, up, down, front, or back from one's body out into space

Earthbound - unable to lift the weight of one's body off the ground

Eye-Foot Coordination - the ability to integrate the eye and foot in purposeful movements

Eye-Hand Coordination - the ability to integrate the eye and hand in purposeful movements

Fine Motor Coordination - the precise performance of small muscle groups which usually involves a narrow range of movement

Gross Motor Coordination - the use of large muscle groups to perform specific tasks

General Space - an area with or without boundaries where the instruction or activity is taking place

Hand Dominance - use of the preferred hand

Laterality - the knowledge of the differences between the right and left sides of the body

Locomotion - the ability to move the body through space and time (fast/slow) while traveling a distance

Midline - an imaginary vertical plane which starts at the top of the head and extends through the body dividing it into two separate halves--right and left

Non-Locomotion - the ability to move the body through space and time (fast/slow) without traveling a distance

Self-Space - the area immediately surrounding one's own body

Unilaterality - the ability to use the arm and leg on the same side of the body at the same time

Visual-Motor Coordination - the ability to coordinate the movements of the eye in tracking an object (s)

PERCEPTUAL-MOTOR DEVELOPMENT DIAGNOSTIC SURVEY

BODY/MOTOR AWARENESS - knowledge of one's body and its possibility of movement and performance

Identification of Body Parts

Equipment: None

Directions: Tell the student to touch the named body part

Criterion 1: Successfully identifies 12 of 12 in column 1 _____

Criterion 2: Successfully identifies 9 of 10 in column 2 _____

Criterion 3: Successfully identifies 7 of 10 in column 3 _____

Column 1	Column 2	Column 3
Head _____	Neck _____	Heel _____
Toe _____	Back _____	Ankle _____
Arm _____	Stomach _____	Forehead _____
Hand _____	Elbow _____	Hips _____
Teeth _____	Wrist _____	Shin _____
Leg _____	Finger _____	Underarm _____
Feet _____	Thumb _____	Waist _____
Eye _____	Shoulder _____	Chest _____
Ear _____	Knee _____	Thigh _____
Nose _____	Chin _____	Calf _____
Mouth _____		
Tongue _____		

BODY MANAGEMENT CONCEPTS - knowledge of movement dimensions

Equipment: None

Directions: Ask the student to use his/her body to demonstrate the following:

Criterion 4: Correctly performs 12 of 14 _____

_____ Can you make yourself high?

_____ Can you make yourself short?

_____ Can you make yourself curved?

_____ Can you make yourself straight?

_____ Can you bend yourself?

_____ Can you make yourself little?

_____ Can you make yourself tall?

_____ Can you make yourself narrow?

_____ Can you make yourself big?

_____ Can you make yourself wide?

_____ Can you make yourself fast?

_____ Can you make yourself slow?

_____ Can you make yourself low?

_____ Can you stretch yourself?

BODY/OBJECT SPATIAL RELATIONSHIPS - the associations of the body or one of its parts to an object or from one object to another

Body/Object Positioning

Equipment: Tire or hoop, cardboard box, bean bag, or other similar objects

Directions: Place the equipment on the floor. Tell the student to make the following relationships with his/her body or with objects. If the student does not respond, repeat the directions. These procedures should be repeated for each item on the list.

Criterion 5: Correctly performs 16 of 18 relationships _____

_____ Place your foot on an object.

_____ Place your foot inside an object.

_____ Place your foot outside an object.

_____ Place your hand in front of an object.

_____ Place your hand near an object.

_____ Place your hand far from an object.

_____ Place your self beside an object.

_____ Place one object behind another object.

_____ Place your arm under an object.

_____ Place one object between two objects.

_____ Put one object around another object.

_____ Place one object above an object.

_____ Place your hand on the bottom of an object.

_____ Place one object on the top of another object.

_____ Take one object off another object.

Obstacle Course

Equipment: Meter stick or 3' broom handle

Directions: The student should perform the following tasks without touching the stick or overestimating the space:

1. Place the stick at the student's knee level. Tell student to step over the stick.

2. Place the stick at the student's shoulder level. Tell the student to go under the stick.

3. Place the stick parallel to the wall and floor at a distance from the wall which makes the student turn sideways in order to complete the task. Tell the student to go between the stick and the wall.

Criterion 6: Successfully goes over the stick _____

Criterion 7: Successfully goes under the stick _____

Criterion 8: Successfully goes between stick and wall _____

GROSS MOTOR COORDINATION - use of large muscle groups to perform specific tasks

DIRECTIONALITY - the projection in the direction of right, left, up, down, front, or back from one's body out into space

Equipment: Tennis ball

Directions: Have the student perform the following tasks while using good form. The teacher should have the student move whatever distance is necessary to determine good form. Some of these tasks may need a demonstration. Where the locomotor movement indicates right or left, it is immaterial on which foot the student begins. However, the next movement skill must begin with the other foot.

Locomotor Movements:

Criterion 9: Walks forward, while moving arms in opposition to feet_____

Criterion 10: Walks backward with control _____

Criterion 11: Stands for 5 seconds with heel of front foot touching toe of back foot _____

Criterion 12: Stands on right foot for 5 seconds _____

Criterion 13: Stands on left foot for 5 seconds _____

Criterion 14: Jumps forward, taking off and landing on two feet at the same time _____

Criterion 15: Jumps backward, taking off and landing on two feet at the same time _____

Criterion 16: Hops forward on right foot _____

Criterion 17: Hops forward on left foot _____

Criterion 18: Hops backward on right foot _____

Criterion 19: Hops backward on left foot _____

Criterion 20: Slides across room with right side leading _____

Criterion 21: Slides across room with left side leading _____

Criterion 22: Gallops across room with right foot leading _____

Criterion 23: Gallops across the room with left foot leading _____

Criterion 24: Skips across the room _____

Criterion 25: Throws a tennis ball overhand _____

a). Prefers to throw with right hand_____

b). Prefers to throw with left hand _____

Criterion 26: Steps when throwing a tennis ball overhand _____

Criterion 27: Steps out with the opposite foot of the throwing hand when throwing a tennis ball _____

Log Roll:

Equipment: 12' length of mat

Directions: Student lies on his/her back at one end of the mat, head touching the edge of the mat; then rolls continuously in a straight line to the end of the mat and stops. Student then rolls continuously back in a straight line.

Criterion 28: Rolls correctly to the right side in a straight line _____

Criterion 29: Rolls correctly to the left side in a straight line _____

EYE-HAND COORDINATION - the ability to integrate the eye and hand in purposeful movement

Equipment: 8½" diameter playground ball

Directions: The student will perform the following throwing and catching tasks with good form:

Criterion 30: Catches an 8½" diameter ball, rolled slowly, three out of five times _____

Criterion 31: Catches an 8½" diameter ball, bounced from a distance of 8 ft. three out of five times _____

Criterion 32: Catches an 8½" diameter ball, thrown underhand at chest height, three out of five times _____

Criterion 33: Bounces and catches an 8½" diameter ball three out of five times _____

LATERALITY - knowledge of the difference between the right and left sides of the body

Bilateral Recognition

Equipment: None

Directions: The student will perform the following tasks while standing:

Raise and lower one arm _____

Raise and lower the leg on the other side of the body _____

Raise and lower the other leg _____

Raise and lower the arm on the other side of the body _____

Criterion 34: Correctly performs all tasks_____

Angels in the Snow

Equipment: Two meter sticks or two 3' broom handles for pointers

Directions: The teacher or survey administrator may demonstrate the following procedure:

- Lie flat on back with arms at sides and feet together
- Keeping arms as straight as possible on the floor, slide hands as far away from body as possible; then return arms to sides.
- Keeping heels on the floor and legs straight, move legs as far apart as possible and bring them back together.

Tell the student to lie down on his/her back and perform the demonstrated task. If the student cannot perform the task, show him/her the range of movement. Tell the student that you will point to a limb(s), using the sticks as pointers, and he/she will move that part(s). Do not give verbal commands. Proceed with the following criteria:

Criterion 35: On command, moves right arm without moving another limb(s)_____

Criterion 36: On command, moves left arm without moving another limb(s) _____

Criterion 37: On command, moves right leg without moving another limb(s)_____

Criterion 38: On command, moves left leg without moving another limb(s)_____

Criterion 39: On command, moves both arms without moving leg(s)_____

Criterion 40: On command, moves both legs without moving arms(s) _____

Criterion 41: On command, moves left arm and left leg without moving another limb(s)_____

Criterion 42: On command, moves right arm and right leg without moving another limb(s)_____

Criterion 43: On command, moves right arm and left leg without moving another limb(s)_____

Criterion 44: On command, moves left arm and right leg without moving another limb(s) _____.

MIDLINE - the imaginary vertical plane which starts at the top of the head and extends through the body, dividing it into two separate halves--right and left

Cross Movements

Equipment: One student chair

Directions: Have the student sit on the chair. Identify the right and left body parts for the student. The student then performs the following tasks:

Criterion 45: Crosses right leg over left knee _____

Criterion 46: Touches left elbow with right hand _____

Criterion 47: Touches right ear with left hand _____

Criterion 48: Touches left foot with right hand _____

Criterion 49: Touches right knee with left hand _____

Chalkboard Skills

Directions: Have the student stand still and face the chalkboard. The teacher will then place a mark on the board directly in front of the student's nose. Tell the student to draw a large circle around the mark. (If the circle is less than 20" in diameter, tell the student to draw a larger circle until a 20" or larger diameter circle is obtained.)

Criterion 50: The student correctly crosses the midline while drawing at least a 20" diameter circle _____

a). Right hand preferred _____

b). Left hand preferred _____

Horizontal Line

Directions: The student stands with his/her back to the chalkboard. At the student's chest height, the teacher places two X's parallel to the floor and approximately 24" apart so the student's midline is between the two X's. Tell the student to turn and face the board and connect the two X's.

Criterion 51: Crossing the midline, the student connects the two X's with a horizontal line. The feet must remain stationary with no rotation of the head or trunk while completing the task._____

a). Right hand preferred _____

b). Left hand preferred _____

Vertical Line

Directions: The student stands with his/her back to the board. The teacher places two X's above the student's head so that he/she must extend the hands to reach the X's. The X's should be 6" to 8" apart. Tell the student to turn, take one piece of chalk in each hand, and place the chalk on each mark. Draw a line from each X to the bottom of the chalkboard.

Criterion 52: Without bowing the lines, the student draws two vertical lines simultaneously, beginning on the X's.

Double Circle

Directions: Have the student stand still facing the chalkboard, and tell him/her to take a piece of chalk in each hand and draw two large circles at the same time.

Criterion 53: The student draws two large circles simultaneously _____

FINE MOTOR COORDINATION - the precise performance of small muscle groups which usually involves a narrow range of movement

Equipment: Laced shoe; diaper pin or large safety pin; right-handed and left-handed scissors; 8½"x11" paper with a line in the center which is parallel to the short sides

Directions: Tell the student to perform the following tasks:

. Tie a shoe lace
. Open and close the pin
. Cut the paper on the line
(Give the student the correct pair "handed" of scissors.)

Criterion 54: Successfully ties the shoe lace _____

Criterion 55: Successfully opens and closes the pin _____

a). Right hand preferred_____

b). Left hand preferred _____

Criterion 56: Successfully follows the line when cutting the paper in half_____

a). Right hand preferred_____

b). Left hand preferred _____

VISUAL-MOTOR - the ability to coordinate the movements of the eyes in tracking an object;

and

EYE-HAND COORDINATION - the ability to integrate the eye and hand in purposeful movements

Geometric Designs

Equipment: Seven 3"x5" index cards with one of the following shapes drawn on each card: vertical line, horizontal line, circle, square, triangle, cross, and diamond; seven blank index cards and a pencil

Directions: Show the student the card with a designated shape. Tell the student, "On your card, draw a shape that is the same size as the picture." Repeat for all the shapes.

Criterion 57: Makes a predominantly vertical line _____

Criterion 58: Makes a predominantly horizontal line _____

Criterion 59: Makes a predominantly circular shape _____

Criterion 60: Makes 4 clearly defined sides resembling a square_____

Criterion 61: Makes a shape with 3 clearly defined sides, resembling a triangle _____

Criterion 62: Makes a drawing having 2 lines that intersect at approximately their midpoints _____

Criterion 63: Makes a shape that resembles a diamond_____

a). Right hand preferred _____

b). Left hand preferred _____

BALANCE - the ability to maintain equilibrium while performing specific tasks. (Directionality tasks are also included in this area.)

Equipment: One 12'x4" balance beam or two 6'x4" balance beams placed end to end (These walking surfaces must not be higher than 8" from the floor.)

Directions: Have the student straddle the beam before he/she steps onto it. Tell the student to step onto the beam and perform the following tasks: walk forward; walk backward; slide sideways to the end of the beam; and without turning, slide back to the starting position on the beam.

Criterion 64: Walks forward on the beam without touching the floor with either foot more than once _____

Criterion 65: Walks backward on the beam without touching the floor with either foot more than once_____

Criterion 66: Moves sideways to the right on the beam without touching the floor with either foot more than once_____

Criterion 67: Moves sideways to the left on the beam without touching the floor with either foot more than once _____

PERCEPTUAL-MOTOR DEVELOPMENT DIAGNOSTIC SURVEY (SHORT FORM)

BODY/MOTOR AWARENESS

Identification of Body Parts

1. Identified 12 of 12 _____

2. Identified 9 of 10 _____

3. Identified 7 of 10 _____

Head _____	Neck _____	Forehand_____
Toe _____	Back _____	Ankle _____
Arm _____	Stomach _____	Hips _____
Hand _____	Elbow _____	Shin _____
Teeth_____	Wrist _____	Armpit _____
Leg _____	Finger _____	Waist _____
Feet _____	Thumb _____	Chest _____
Eye _____	Shoulder_____	Calf _____
Nose _____	Knee _____	Thigh _____
Mouth_____	Chin _____	

BODY MANAGEMENT CONCEPTS

4. High _____	Narrow _____	
Short _____	Big _____	
Curved _____	Wide _____	
Straight_____	Fast _____	
Bend _____	Slow _____	
Little _____	Stretch_____	
Tall _____	Low _____	

BODY/OBJECT SPATIAL RELATIONSHIPS

Body/Object Positioning

5. Identified 16 of 18 _____

   On

   Off

   Inside

   Outside

   In front of

   Behind

Obstacle Course

6. Steps over stick _____

7. Steps under stick _____

8. Goes between stick and wall _____

GROSS MOTOR COORDINATION AND DIRECTIONALITY

Locomotor Movements

9. Walks forward _____

10. Walks backward _____

11. Stands on heels _____

12. Stands on right foot _____

13. Stands on left foot _____

14. Jumps forward _____

15. Jumps backward _____

16. Hops forward on right foot _____

17. Hops forward on left foot _____

18. Hops backward on right foot_____

19. Hops backward on left foot _____

20. Slides, right foot leading _____

21. Slides, left foot leading _____

22. Gallops, right foot leading _____

23. Gallops, left foot leading _____

24. Skips _____

25. Throws overhand _____

    a). Prefers right hand _____

    b). Prefers left hand _____

26. Steps when throwing _____

27. Steps with opposite foot _____

Log Roll

28. Rolls to right _____

29. Rolls to left _____

EYE-HAND COORDINATION

30. Catches rolled 8½" ball _____

31. Catches bounced 8½" ball _____

32. Catches thrown 8½" ball _____

33. Bounces and catches 8½" ball _____

LATERALITY

Bilateral Recognition

34. Raises correct limb _____

Angels in the Snow

35. Right arm _____

36. Left arm _____

37. Right leg _____

38. Left leg _____

39. Both arms _____

40. Both legs _____

41. Left arm - left leg _____

42. Right arm - right leg _____

43. Right arm - left leg _____

44. Left arm - right leg _____

MIDLINE

Cross Movements

45. Crosses right leg over left knee _____

46. Touches left elbow with right hand _____

47. Touches right ear with left hand _____

48. Touches left foot with right hand _____

49. Touches right knee with left hand _____

Chalkboard Skills

50. Draws circle _____

a). Uses right hand _____

b). Uses left hand _____

51. Draws a horizontal line _____

a). Uses right hand _____

b). Uses left hand _____

52. Draws vertical line _____

53. Draws two circles _____

FINE MOTOR COORDINATION

54. Ties shoes _____

55. Opens and closes safety pin_____

a). Uses right hand pick up _____

b). Uses left hand pick up _____

56. Cuts paper in half _____

a). Uses right hand on scissors____

b). Uses left hand on scissors_____

VISUAL-MOTOR

Geometric Designs

57. Vertical line _____

58. Horizontal line _____

59. Circle _____

60. Square _____

61. Triangle _____

62. Cross _____

63. Diamond _____

a). Uses right hand _____

b). Uses left hand _____

BALANCE

64. Walks forward _____

65. Walks backward _____

66. Moves sideways to right _____

67. Moves sideways to left _____

xxx

COMPOSITE EVALUATION FORM

Student's Name ______________________ Grade or Age __________ Date __________

Administrator ______________________ School ______________________

Directions for using this form: Circle the number which corresponds to the criterion that received an X.

BODY/MOTOR AWARENESS

1	5	36	40	44
2	28	37	41	
3	29	38	42	
4	35	39	43	

MIDLINE

45	48	51
46	49	52
47	50	53

BALANCE

11	16	65
12	17	66
13	53	67

VISUAL-MOTOR COORDINATION

50	53	59	62
51	57	60	63
52	58	61	

EYE-HAND COORDINATION

25	31	51	55
26	32	52	56
27	33	53	
30	50	54	

FINE MOTOR COORDINATION

54
55
56

BODY/OBJECT SPATIAL RELATIONSHIPS

5	8
6	28
7	29

GROSS MOTOR COORDINATION

9	14	19	24	29	35	40
10	15	20	25	30	36	41
11	16	21	26	31	37	42
12	17	22	27	32	38	43
13	18	23	28	33	39	44

DIRECTIONALITY

5	16	21	37	42	66
12	17	22	38	43	67
13	18	23	39	44	
14	19	35	40	64	
15	20	36	41	65	

LATERALITY

Rightsidedness:	12	16	18	20	22	28	35	37	42			
Leftsidedness:	13	17	19	21	23	29	36	38	41			
Cross Laterality:	34	43	44	45	46	47	48	49	50	51	52	53

HAND DOMINANCE

Right:	25a	50a	51a	55a	56a	63a
Left:	25b	50b	51b	55b	56b	63b

BODY/MOTOR AWARENESS

Instructional Objectives:

The student will exhibit knowledge of his/her body and its possibilities for movement and performance.

Activities:

1. Scooter Board (Students should not stand on the scooter.)

   a). Support body on knees, seat, stomach, or back.

   b). While balancing on the board, propel the board, using various body parts.

   c). Vary the distances travelled.

   d). Vary the directions travelled (e.g., forward, or forward and turn right).

   e). Use two scooters (e.g., two students with two scooters working together or one student sitting on one scooter, placing feet on second scooter and propelling scooters with hands).

   f). Use low organized games such as relays or obstacle courses.

2. General Tumbling Skills

   a). Rolling Log - Lie on back with arms stretched overhead. Roll sideways the length of the mat. Roll back to the starting place. Students should roll to the right and to the left. To roll in a straight line, keep the feet slightly apart.

   b). Side Roll - Place hands and knees on the mat with the side selected for the roll toward the direction of the roll. Drop the shoulder facing the mat, tuck both the elbow and knee under it, roll over completely on the shoulders and hips, and return to the hands and knees position. Momentum is needed to return to the original position. Students should roll both to the right and to the left.

   c). Forward Roll - Stand on a mat with feet slightly apart with body facing forward. Squat and place the hands on the mat about shoulder width apart and outside the knees. Draw the chin to the chest and make a rounded back. Push off with the hands and feet to provide the force for the roll. Come to a standing position at the end of the roll. The student should carry the weight of his/her body on the rounded back and shoulders, not on the head or neck. Kneeling alongside the student, the teacher can help by placing one hand on the back of the student's head and the other hand under the thigh for a push.

d). Roly Poly - Using a mat, lie on back, clasp knees to chest, roll forward and backward and from side to side.

e). Puppy Dog Run - Place hands on the floor, bending the arms and legs slightly. Walk and run like a happy puppy. Students may also use the same position to imitate a cat. Walk softly, stretching at times like a cat. The teacher should see that the students look ahead. By keeping the head up in good position, the neck muscles are strengthened.

f). Rabbit Jump - Crouch to a deep knee bend position and place the hands on the floor in front of the feet with the knees pointed out. Move forward first with the hands and then bring the feet up to the hands. Emphasize to the students that this is called a jump rather than a hop because both feet move at the same time.

g). Lame Dog Walk - Walk on both hands and one foot. The other foot should be in the air as if it is injured. Walk for a distance and then change feet. Keep the eyes facing forward.

h). Crab Walk - From a squat position, reach backward and place both hands flat on the floor without sitting down. With the head, neck, and body in a straight line and parallel with the floor, move forward, backward, or sideways.

i). Measuring Worm - From a front-leaning rest (push-up) position and keeping the knees stiff, bring up the feet as close as possible to the hands by inching forward with the feet. Regain the starting position by inching the hands forward. Stress good form in keeping the body straight when supported on the hands and feet. (Part of the value in the flexibility is lost if the knees are not kept straight.)

j). Turk Stand - Stand with feet apart and arms folded in front. Pivot on the balls of both feet and face the opposite direction. The legs are now crossed. Sit down in this position. Reverse the process. Get up without using the hands as supports, and uncross the legs with a pivot to face the original position.

k). Thread the Needle - Stand erect. Clasp hands together in front of the body, interlocking fingers. Step through the hands with the left foot, then the right foot. Step back with the left foot, then the right foot. Return to the original standing position. A jump rope or stick, keeping hands one foot apart, may be used with children who have difficulty stepping through their hands.

l). Flip Flop - From a front leaning push-up position, turn over, using the arms and hands as movement forces. Keep the body straight. Lift one hand, depending upon the direction of the turn, and at the same time turn the body so the back is at approximately 45^{o} angle with the floor. The lifted hand returns quickly to the floor for support. The weight is now on the hands and heels. Continue with the other hand and complete the turn. Return by reversing the direction and make a complete, opposite turn.

m). Coffee Grinder - Bend forward and place the right hand on the floor, extending the body with the side to the floor in a leaning position. Walk around the hand, making a complete circle while keeping the body straight. Repeat with the left hand.

3. Vaulting Skills with Tumbling Bench, Low Vaulting Box, and Tumbling Mats

a). Step On and Over - Student puts one foot on the bench, then steps up and over the bench.

b). Jump Off - The student steps up onto the bench, leans forward with slight squat, with arms behind hips. The student throws arms forward and jumps up and off the bench, landing in a flexed knee position.

c). Jump Off Backward - The student steps up onto the bench and turns around with heels near edge, leans slightly forward, and comes to a slight squat with hands behind the hips. The student throws arms upward and jumps upward and slightly backward, landing in a flexed knee position.

d). Squat Mount, Jump Dismount - The student places hands on bench with arms shoulder width apart. Bounce and lift hips upward, tuck knees, and place feet on bench between hands. Lift arms upward and jump off other side.

e). Jump Off with One-Half Turn - The student stands on the bench prepared to jump forward. Throw arms upward; bring left arm farther back than the right arm; and look under the left arm thus executing a half turn. Land and regain balance.

4. Identification of Body Parts

a). Ask the student to point or to touch different body parts.

b). Mirroring Skills - Teacher faces the student and moves one arm while saying "Move your arm." The student repeats the motion. Proceed with other body parts. Teacher moves right while the student moves left.

c). Reverse Mirroring Skills - The student faces the teacher and moves the correct body part. Teacher moves right arm, student moves right arm.

d). Play the game "Simon Says."

5. Trampoline Skills

These skills should be taught by a physical education teacher. Safety rules and spotting must be provided.

a). Jump and Stop

b). Controlled Bounces - (Move right, left, forward, and backward while using 1 or 2 bounces.)

c). Bounce on Hands and Knees

d). Jumping Jack

e). Seat Drop

f). Knee Drop

g). Combinations of above

h). 1/4 and 1/2 turns (both to the left and to the right)

6. Body Management Concepts

a). Ask the student to demonstrate the body management concepts. (Can you move in a curved line? Can you wiggle like a snake?)

b). Ask the student to demonstrate the body/object positioning skill. (Put the ball on the line--dribble around the circle.)

c). Set up obstacle courses for students to move through.

7. Balloon Skills (See Appendix A-4.)

8. Bean Bag Skills (See Appendix A-5.)
1 a), b), and c); 2 a), and b)

9. Tire Skills (See Appendix A-8.)
1 a) - i) and 2 a) - i)

10. Balance Stick Skills (See Appendix A-3.)
1 through 12

11. Tube Skills (See Appendix A-9.)
11 a) - c), e), f), h) i), k) - 2 d), e), g) - k)

12. Rope Jumping Skills (See Appendix A-7.)

13. Earthbound Skills

a). Place hands on desk top, palms flat; lift one leg; push down on the deck and hop; repeat with other leg; repeat both with eyes closed.

b). Lift one leg, hop on the other leg; repeat with other leg; repeat both with eyes closed.

c). Jump over a mark on the floor, a yardstick, a rope, or ladder rungs.

d). Jump and reach using chalk as a marker, and leaving the mark for future motivations.

e). Hop over a mark on the floor, a yardstick, a rope, or ladder rungs.

Other Performance Areas Related to Body/Motor Awareness

1. Midline - Page 21, items 3, 4, 5 and 12
2. Laterality - Page 19, items 6, 8, 9, 10 and 11
3. Gross Motor Coordination - All activities - Pages 11-13
4. Body/Object Spatial Relationship - Page 7, items 8, 9 and 12

BODY/OBJECT SPATIAL RELATIONSHIP

Instructional Objective

The students will interpret their relative position in space and the relationship of their body and/or objects to other objects.

Activities

1. Tire Skills - (See Appendix A-8.)

2. Obstacle Course - Ask the student to go around, through, under, or above a series of obstacles such as:

   a). Tires on floor

   b). Graduated hoops (tunnel)

   c). Over hurdle (tubes, yardstick)

   d). Under hurdle (tubes, yardstick)

   e). Balance beam

   f). Vaulting box

   g). Tumbling mat

   h). Jump ropes, climbing ropes

   i). Tin cans, bowling pins, cones

3. The student demonstrates the relationships listed below using his/her body and an object, or using two objects.

on	beside	below	outside
off	between	through	near
in	around	beneath	far
out	in front of	top	
over	behind	bottom	
under	above	inside	

4. Jump the Creek - Use two ropes or two drawn lines on the ground in a V shape. Have the student start at the narrow end and jump across the V. If the student is successful, he/she may move to a wider section. A running jump may also be used.

5. Rope Jumping Skills (See Appendix A-7.)
   1 a) - e), g) - j)
   2 a) - f), l) - p)

6. Hoop Skills (See Appendix A-6.)

7. Moving Boundaries - Have the student perform various locomotor movement patterns within a designated boundary. Gradually decrease the amount of space within the boundaries. (Begin with the total room, decreasing to half the room, and then to one-fourth the room.)

8. Ladder - Place a ladder flat on the floor. Have the student perform the following skills:

   a). Walk forward and backward stepping between the rungs. Repeat, hopping and jumping.

   b). Crawl forward and backward stepping between the rungs. Repeat, hopping and jumping.

   c). Crawl forward and backward over the rungs.

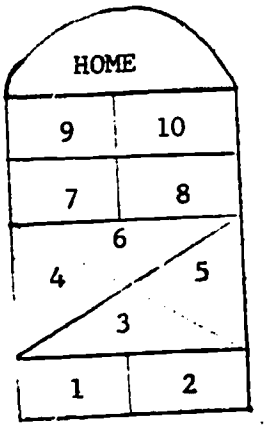
   d). Raise the ladder several inches off the floor and repeat the above ladder skills.

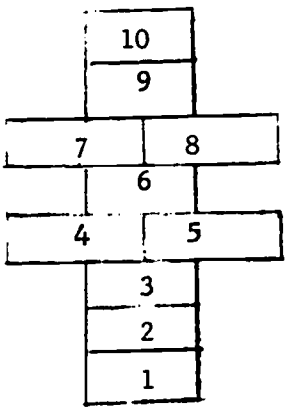
9. Graduated Hoops - Stand several hoops of graduated size in a row (tunnel effect). Have the student go through the hoops without touching them, in as many ways as possible (forward, backward) and with as many leads as possible (feet first, elbow first). The distance between hoops can be varied.

10. Balance Board Skills (See Appendix A-2.)
    1 - 9

11. Balance Beam Skills (See Appendix A-1.)

12. Hop Scotch - Play Hop Scotch, using one of these patterns.





13. Bean Bag Skills (See Appendix A-5.)
    1 a) - d), 2 a) - e)

14. Balloon Skills (See Appendix A-4.)

15. Tube Skills (See Appendix A-9.)

Other Performance Areas Related to Body/Object Spatial Relationships

1. Body/Motor Awareness - Pages 1 - 4, items 1, 2, 3 and 5

2. Gross Motor Coordination - Page 12 , item 4

Instructional Objectives:

1. The student will utilize the large muscle groups of the body to perform a specific task.

2. The student will move his/her body through space while travelling a predetermined distance.

3. The student will move his/her body through space without travelling a predetermined distance.

4. The student will make projections of right, left, up, down, forward, and backward from his/her body into space.

Activities:

1. Crawling and Creeping

   a). Have the student crawl, using bilateral, unilateral, and cross lateral arm and leg patterns.

   b). Have the student creep, using bilateral, unilateral, and cross lateral arm and leg patterns.

2. Locomotor Movements

   a). Have the student perform these locomotor movements: walk, run, slide, gallop, skip, hop, jump, and leap.

   b). Have the student perform these locomotor movements: walk, run, slide, gallop, skip, hop, jump, and leap, varying the distance travelled.

   c). Have the student perform these locomotor movements: walk, run, slide, gallop, skip, hop, jump, and leap, varying the speed of movement.

   d). Have the student perform these locomotor movements: walk, run, slide, gallop, skip, hop, jump, and leap, combining several movements into a repetitive pattern.

   e). While the student is moving, have him/her change the direction of travel.

   f). Have students perform the above locomotor movements to music.

3. Animal Walks

a). Bear Walk - Bend forward and touch the ground with both hands. Travel slowly forward by simultaneously moving the hand and foot on the same side of the body; that is, the right hand and right foot are moved together, and then the left hand and left foot. As a variation, lift the free foot and hand high while the side of the body supports the action.

b). Belly Crawl - Lie on mat face down. Pull self along mat with hands and elbows while propelling the body forward with knees, alternating right and left knees. Stomach should remain in contact with mat, and toes should help knees in pushing.

c). Elephant Walk - Bend forward clasping hands together to form a trunk. Walk forward in a slow, dignified manner with big steps, keeping the legs straight and swinging the trunk from side to side.

d). Gorilla Walk - Bend knees slightly and lean forward from the waist. Arms hang at the side. As you walk forward, touch fingers to the ground at each step. As a variation stop occasionally and have students beat on their chests in gorilla fashion or perform other ape imitations.

4. Throwing and Catching

a). Have the student perform these individual ball skills:

(1) Roll ball

(2) Bounce and catch

(3) Pat bounce

(4) Dribbling

(5) Toss ball up and catch

(6) Underhand and overhand throw

(7) Throw and catch with partner

(8) Target throw

b). Using the listed ball skills, vary the type and size of the ball: 8½", 6" tennis ball, whiffle ball, yarnball, basketball.

c). Where possible, increase the distance between partners and/or a target.

d). Where possible, have the student(s) travel around the general space while performing the ball skills.

e). Students should work with both hands and left and right hand individually.

5. Rubberband Boards (Geo Board)

6. Balance Beam Skills (See Appendix A-1.)

7. Balloon Skills (See Appendix A-4.)

8. Bean Bag Skills (See Appendix A-5.)
   1 b) - f), h) - j); 2 c) - e)

9. Hoop Skills (See Appendix A-6.)

10. Tire Skills (See Appendix A-8.)

11. Tube Skills (See Appendix A-9.)
    2, 3, 5, 12 - 18, 20

12. Rope Jumping Skills (See Appendix A-7.)

Other Performance Areas Related to Gross Motor Coordination and Directionality

1. Balance - Pages 25 - 26, all activities

2. Body/Motor Awareness - Pages 1 - 5, all activities

3. Midline - Page 21, items 1, 3, 4, 5, 9, 11 and 12

4. Laterality - Page 19, item 7

5. Eye-Hand Coordination and Visual-Motor Coordination - Pages 15 - 16
   items 18, 30

6. Body/Object Spatial Relationship - Pages 7 - 9, all activities

7. Fine Motor Coordination - Page 23, item 7

EYE-HAND COORDINATION AND VISUAL-MOTOR

Instructional Objectives

1. The student will integrate the eye and hand in purposeful movement.
2. The student will coordinate the movements of the eye (tracking) to perform a task.

Activities

1. Pot holder weaving
2. Coloring books
3. Finger painting
4. Building with graduated size blocks
5. Copying geometric figures (square, diamond, etc.)
6. Using pick up sticks
7. Playing marbles
8. Balloon skills (See Appendix A-4.)
9. Chalkboard skills (See Motor Survey - Midline Activities, page 21.)
10. Lanyard weaving
11. Dropping clothespins from a distance of 2', 3', 4', 5' into a bottle
12. Cutting with scissors
13. Tracing objects
14. Sliding hockey puck across a table top toward or onto a target; or using a plastic hockey stick and puck on the floor
15. Tapping a ping pong ball with a paddle
16. Stringing beads which have openings of different sizes
17. Making puzzles, starting with large-shaped pieces and advancing to smaller pieces
18. Putting pegs into a pegboard, following predetermined designs

19. Pounding objects with a mallet or hammer

20. Hitting a ball off a batting tee

21. Pitching plastic horseshoes (As accuracy improves, increase the distance from the target.)

22. Bean bag skills (See Appendix A-4, 1d.), e), g), i) and j); 2c, d, and e.)

23. Bouncing a ball off a wall and catching it on the rebound, using various size balls and increasing the student's distance from the wall

24. Hitting the ball against a wall using right hand, then left hand. (Vary the ball size. Increase the distance from the wall as the student improves.)

25. Using a paper punch to punch out spots drawn on a paper

26. Playing with a Fli-Back paddle and ball

27. Building and gluing toothpick structures

28. Playing jacks

29. Playing Odyssey, Pong, or Race Driver

30. Striking Skills:

    Balls may be suspended from doors, basketball goals, or tether ball poles. (For construction details see Appendix A-10.) The Johnny Bench Batting Machine may be used. Always begin with the largest ball possible and progress toward activities using smaller balls. Begin with two hands, then work with individual hands, right or left. Paddles, sticks, tubes, racquets, or bats may be used.

    a). Baseball - Hang a piece of paper or cardboard on the door with a baseball field drawn on it. Designate various spaces for hit, double, out, etc. Have the student hit the suspended ball. The area on the paper that the ball touches tells the batter what to do; e.g., hit, go to first, etc.

    b). Hit the color - Hang a piece of paper on the door with different colored lines, squares, or circles drawn on the paper. With a broom handle held with one hand at each end, try to hit a designated color or shape with the suspended ball.

    c). Color to Color - Do the same as above, but paint the broom handle with the same colors as the paper. Try to make contact with the same color on the paper as on the broom handle.

31. Juggling Objects

32. Hoop Skills (See Appendix A-6.)
1, 2, 3, 5, 9, 12 - 15, 19 - 27

33. Tire Skills (See Appendix A-8.)
1j), m), n)

34. Tube Skills (See Appendix A-9.)
1, 4, 6, 7 - 11, 13 - 27

35. Rope Jumping Skills (See Appendix A-7.)
2d) - f)

36. Balance Board Skills (See Appendix A-2.)
10 - 12

Other Performance Areas Related to Eye-Hand and Visual-Motor Coordination

1. Midline - Page 21, item 10

2. Gross Motor Coordination - Page 21, items 4a) - d)

3. Fine Motor Coordination - Pages 23 - 24, items 7, 13, 14 and 20

Instructional Objective

The student will demonstrate that he/she is aware of two sides of the body, right and left.

Activities

1. Rope Jumping Skills - (See Appendix A-7; 1c.)
2. Balance Beam Skills - (See Appendix A-1.)
3. Balance Stick Skills - (See Appendix A-3.)
4. Balance Board Skills - (See Appendix A-2.)
5. Use hoops, tires, or footprint patterns to lay out this diagram. (L = left; R = right) Have the student walk the pattern:

6. Bean Bag Skills (See Appendix A-5.) 1d) - f)
7. Tube Skills (See Appendix A-9.) 26 and 27
8. Have the student creep or walk so that half the body is on one side of a rope and half on the other side. A balance beam may also be used.
9. Jumping Jacks
10. Rhythmic Patterns - Using percussion instruments, beat various rhythmic patterns with right hand, left hand, right foot, left foot.
11. Angels in the Snow
12. Arm and leg lifts while lying on the back:
    a). Bilateral - one arm, other arm
    b). Bilateral - one leg, other leg
    c). Crosslateral - right arm, left leg
    d). Crosslateral - left arm, right leg
13. Marching Skills

Other Performance Areas Related to Laterality

1. Midline - Page 21, item 3
2. Gross Motor Coordination - Pages 11 - 12, items 1, 3, and 4
3. Body Motor Awareness - Page 1, item 1

Instructional Objective

The student will be able to cross his/her midline while performing specific tasks.

Activities

1. Have student follow footprint patterns on the floor.
2. Chalkboard drawings - Draw circles, horizontal lines, vertical lines, and double circles as described in motor survey.
3. Perform windmill exercises.
4. Perform alternate toe-touching exercises.
5. Perform sit-up exercises, crossing over to touch toes on opposite sides of the body.
6. Play the autoharp.
7. Use midline boards and trace geometric shapes using form plates. Center the plate directly in front of the student's body.
8. Crisscross line walks using tape on the floor.
9. Crisscross leg jumps from side to side.
10. Toss ball from one hand to the other, following through across midline of the body.
11. Pick up objects by reaching across the body for the object.
12. Mirror image and reverse mirror image activities. See Body/Motor Awareness.

Other Performance Areas Related to Midline

1. Gross Motor Coordination - Pages 12 - 13, items 4 and 7
2. Eye-Hand and Visual-Motor Coordination - Page 15, item 30.

Instructional Objectives

1. The student will perform precise movements with small muscle groups.
2. The student will coordinate movements of the eye with movements of the fingers.

Activities

1. Tinker toys
2. Build 1" x 1" blocks into a high tower.
3. Work with coins.
4. Finger taps: Have the student place both wrists on the table. Have the student tap each finger a given number of times. Continue adding a finger until all fingers can be tapped in order. Repeat using both hands at the same time.
5. Work with clay by kneading, rolling, and molding.
6. Turn pages in a book, using dominant and nondominant hands.
7. Etch-A-Sketch
8. Pick up small objects.
9. Sort small objects, such as buttons.
10. Squeeze rubber ball with dominant and nondominant hand. Add music to establish a rhythmic pattern.
11. Shuffle and deal playing cards.
12. Paper folding (Origami)
13. Assembly tasks using nuts and bolts
14. Dressing board
15. Finger puppetry
16. Put on and remove lids from plastic jars.
17. Typing
18. Tie shoe laces.

19. Finger and string manipulation, such as in playing Cats Cradle

20. Play Tiddley Winks.

21. Finger snaps

22. Use a screw driver to turn screws into soft wood.

23. Crumple paper and smooth it out, using both dominant and nondominant hands.

Other Performance Areas Related to Fine Motor Coordination

1. Midline - Page 21, items 2, 7

2. Eye-Hand Visual-Motor Coordination - Pages 15 - 16, items 1, 5, 8, 9, 12, 17, 27 and 29

Instructional Objectives

1. The student will maintain balance while performing a locomotor (dynamic) task.

2. The student will maintain balance while performing a nonlocomotor (static) task.

Activities

1. Have the student perform the following skills while kneeling on his/her hands and knees:

   a). Lift one leg off floor.

   b). Lift other leg off floor.

   c). Lift one hand off floor.

   d). Lift other hand off floor.

   e). Lift right leg and left arm.

   f). Lift left leg and right arm.

   g). Lift left leg and left arm.

   h). Lift right leg and right arm.

   The student should repeat these actions with eyes closed.

2. Have the student perform the following skills:

   a). Kneel on both knees.

   b). Lift left knee.

   c). Lift right knee.

   d). Repeat these three tasks with the eyes closed.

3. Have the student perform the following skills:

   a). Stand on both feet.

   b). Lift one foot.

   c). Lift the other foot.

   d). On tiptoes, lift one foot.

   e). On tiptoes, lift the other foot.

4. Walk on tiptoes.

5. Walk on heels.

6. Have students walk on a line while performing various locomotor skills.

7. Balance Stick Skills (See Appendix A-3.)

8. Balance Board Skills (See Appendix A-2.)

9. Balance Beam Skills (See Appendix A-1.)

10. Tire Skills (See Appendix A-8, items 1b), 1e), and 2e.)

11. Rope Jumping Skills (See Appendix A-7, items 1h and 2a, b, e, g, h, i, k, m, and n.)

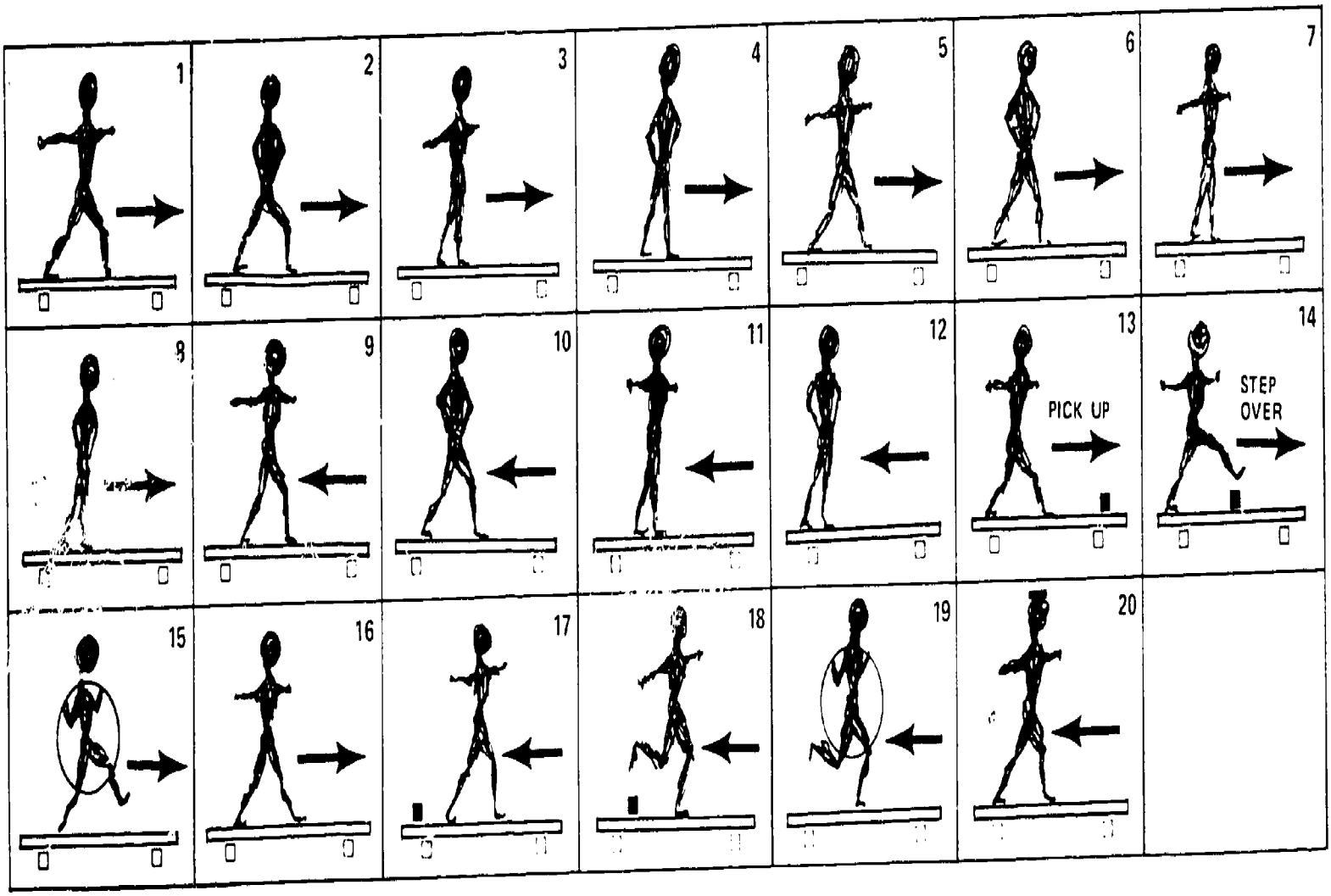
Other Performance Areas Related to Balance

1. Body/Motor Awareness - Pages 1 - 4, items 1, 2, and 5

BALANCE BEAM SKILLS

1. Walk beam forward, arms out to side, eyes down.
2. Walk beam forward, hands on hips, eyes down.
3. Walk beam forward, heel touching toe, arms out, eyes down.
4. Walk beam forward, heel touching toe, hands on hips, eyes down.
5. Walk beam forward, arms out from sides, eyes up.
6. Walk beam forward, hands on hips, eyes up.
7. Walk heel touching toe, arms out, eyes up.
8. Walk heel touching toe, hands on hips, eyes up.
9. Walk backward, arms out, eyes down.
10. Walk backward, hands on hips, eyes down.
11. Walk backward, heel touching toe, arms out, eyes down.
12. Walk backward, heel touching toe, hands on hips, eyes down.
13. Walk beam, arms out; pick up object on beam.
14. Walk beam, arms out; step over object, 6"-9" high, and continue walking.
15. Walk beam, turning a hoop as if you were jumping rope.
16. Walk beam, arms out, balancing felt eraser on the head.
17. Walk beam backward, arms out; pick up object on beam.
18. Walk beam backward, arms out; step over object 6" - 9" high, and continue walking.
19. Walk beam backward, turning a hoop as if you were jumping rope.
20. Walk beam backward, arms out, balancing felt eraser on the head.

Additional balance beam activities can be found in Elementary Gymnastics K-6, Bulletin 223.



PROGRESSION CHARTS FOR

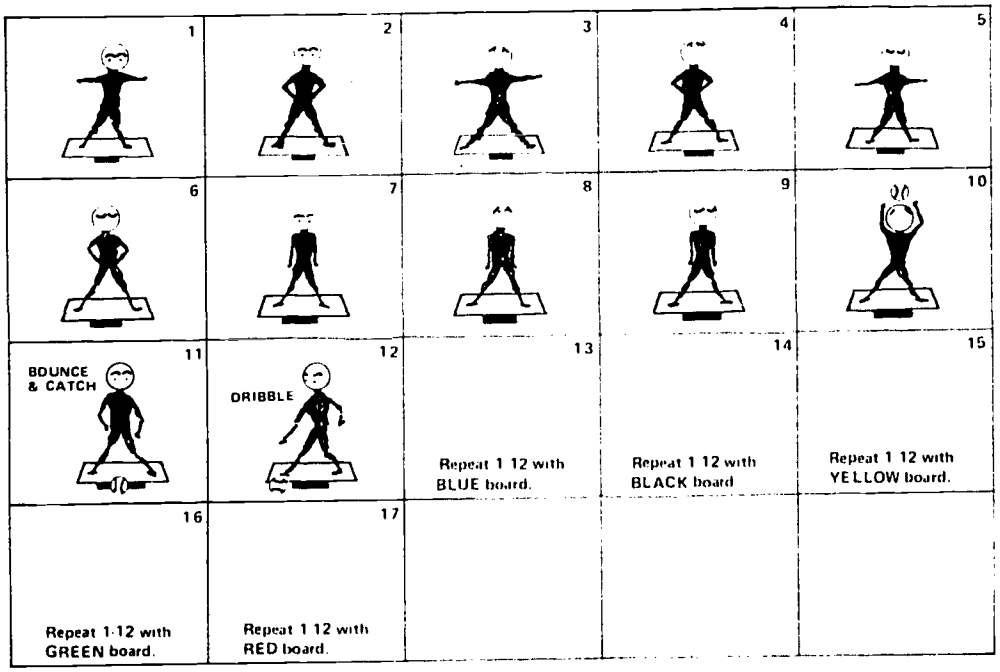
BALANCE BEAM SKILLS

BALANCE BOARD SKILLS

Boards are color coded according to degree of difficulty. (See Perceptual-Motor Development Equipment, Appendix A-10, for construction details.)

1. Stand on board, arms out from sides, eyes down.
2. Stand on board, hands on hips, eyes down.
3. Stand on board, arms out from sides, eyes up.
4. Stand on board, hands on hips, eyes up.
5. Stand on board, arms out from sides, eyes closed.
6. Stand on board, hands on hips, eyes closed.
7. Stand on board, hands and arms at side, eyes down.
8. Stand on board, hands and arms at side, eyes up.
9. Stand on board, hands and arms at side, eyes closed.
10. Stand on board; toss and catch a ball.
11. Stand on board; bounce and catch a ball.
12. Stand on board; dribble a ball on the floor.

Repeat 1 - 12 in sequence with blue, black, yellow, green, and red boards.

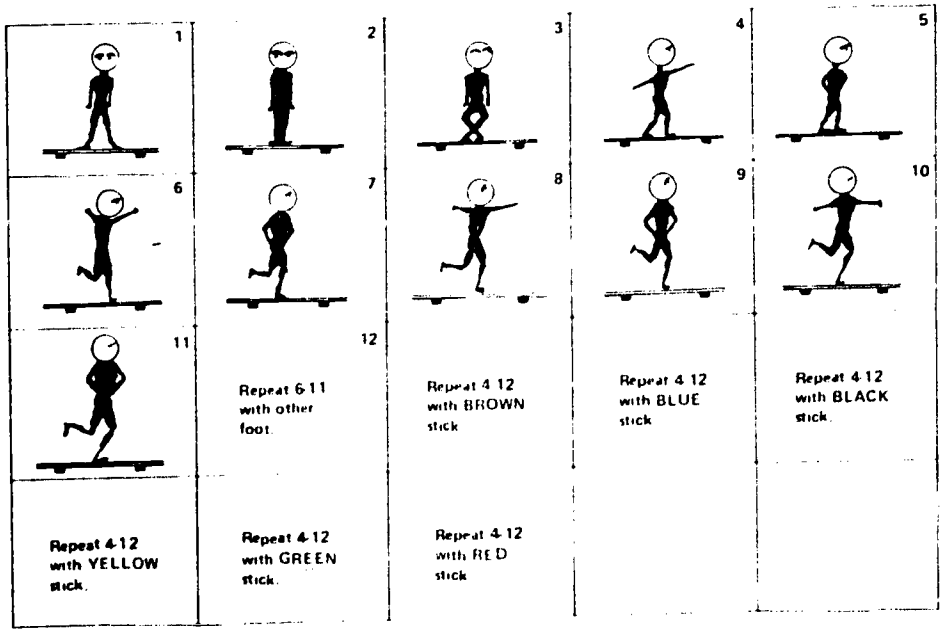


BALANCE STICK SKILL

Sticks are color coded according to degree of difficulty. (See Perceptual-Motor Development Equipment, Appendix A-10, for construction details.)

1. Stand crossways on the balance stick for 10 seconds in an erect body position, feet a shoulder-width apart.
2. Same as in #1 with feet together, for 10 seconds.
3. Stand crossways on the balance stick for 10 seconds with legs crossed.
4. Stand erect for 10 seconds, heel touching toe, arms out.
5. Stand erect for 10 seconds, heel touching toe, hands on hips.
6. Stand on one foot with arms out.
7. Stand on one foot with hands on hips.
8. Stand on one foot eyes up and arms out.
9. Stand on one foot with eyes up and hands on hips.
10. Stand on one foot with eyes closed, arms out.
11. Stand on one foot, eyes closed, hands on hips.
12. Do #s 6 through 11 with other foot.

Repeat in sequence #s 4-12 with brown stick; then with blue, black, yellow, green, and red sticks.



BALLOON OR BEACHBALL SKILLS

1. Stand and repeatedly hit balloon into the air with both hands; with right hand; with left hand. Repeat in kneeling, sitting, and lying down positions.

2. Using different body parts, hit balloon repeatedly into the air.

3. Using different body parts, hit the balloon repeatedly into the air while moving around the general space. Repeat for different locomotor movements.

4. Strike the balloon repeatedly with a paddle.

5. With a partner, move the balloon back and forth, using different body parts to hit the balloon.

6. Moving around the general space, move the balloon back and forth with a partner. Vary the distance and locomotor movement.

BEAN BAG SKILLS

1. Individual Activities

a). Balance a bean bag on various body parts.

b). Perform locomotor movements while balancing a bean bag on the head. Repeat locomotor movements with different body parts supporting a bean bag. Move in different directions (e.g., forward, backward, and sideways).

c). Move bean bag around the general space with different body parts, such as using nose to push bean bag. Move in different directions.

d). Throw and catch a bean bag. Use two hands; right hand; left hand.

e). Throw a bean bag as high as you can, and catch it. Use two hands; right hand; left hand.

f). Throw a bean bag as far as you can. Use two hands; right hand; left hand.

g). Toss a bean bag from one hand to the other. Increase the distance between your hands.

h). Toss a bean bag overhead and away from your body. Move to catch it before it hits the ground.

i). Throw a bean bag into different kinds of targets.

j). Do each of the above, using more than one bean bag.

2. Partner Activities

a). Using different body parts, move a bean bag between partners.

b). Using different body parts, move a bean bag between partners who are moving. Repeat for different locomotor movements.

c). Throw and catch a bean bag with a partner. Use different types of throws. Increase the distance between partners.

d). Do each of the above, using more than one bean bag.

e). Have two partners make up a game using a bean bag(s) and a target(s).

HOOP SKILLS

Hoops may be purchased from the physical education bidlist or may be constructed according to directions in Appendix A-10. They are listed with Perceptual-Motor Development Equipment.

1. Slide the hoop across the floor.
2. Roll the hoop.
3. Roll the hoop with spin so that it returns to you.
4. Jump rope with hoop forward and backward.
5. Hula the hoop around one arm, then the other arm.
6. Hula the hoop around the waist.
7. Hold the hoop in a vertical position, and go through the hoop without touching it.
8. Hold the hoop over your head with both hands, and then let it fall to the floor without its touching your body.
9. Throw the hoop up with two hands, and let it fall to the floor without its touching your body.
10. Place the hoop flat on the floor; jump inside, jump outside, jump over, jump out to the right, jump out to the left, jump out backwards, etc. (Hopping may also be used.)
11. Hoops may be laid out in different patterns, and various locomotor skills may be used to move about the hoops.
12. Place the hoop flat on the floor, and bounce a ball inside the hoop while you are outside the hoop.
13. Place the hoop flat on floor, and bounce a ball outside the hoop while you are inside the hoop.
14. Place the hoop flat on floor, and bounce a ball outside the hoop while you move around inside the hoop.
15. Place the hoop flat on floor. Toss a ball up over your head, and catch it while you stay inside the hoop.
16. Roll a hoop, and try to go through the hoop without touching it.
17. Hula two hoops around your waist.

18. Hula one hoop around your waist and one around your arm.

19. Hoops can also be thrown over different objects such as chairs, cans, boxes, and cones. (ring toss variation)

20. Hula a hoop, and dribble a ball at the same time.

HOOP SKILLS WITH PARTNERS

21. Play catch with a partner using one hoop; then two hoops.

22. Partners can roll hoops to each other, first using one hoop, then two hoops.

23. Roll a hoop. Then roll a smaller hoop or a deck tennis ring through it.

24. Partners can catch a ball or bean bag that is thrown through a rolling hoop.

25. One partner holds two hoops at various heights, angles, and positions (vertical-horizontal), and the other partner moves through the maze without touching the hoops.

26. Partners catch ball while using hula hoops.

27. Contests will determine who can hula the longest, who can roll the hoop the farthest, or who can jump rope with a hoop the longest.

This list is by no means exhaustive. The list may be adapted or modified to accommodate the ability levels and individual needs of the students.

ROPE JUMPING SKILLS

1. Long Rope Jumping Skills

a). Jump up and down on a line using short jumps.

b). Place rope on ground and jump over it with short jumps.

c). Place rope on ground, turn body sideways, and jump over the rope. Use short jumps. Turn right, then left.

d). Place rope on ground. Face the rope. Jump over, and run around the end.

e). Student does arm circles as if turning a jump rope.

f). Using a rope, two students practice the proper arm movements necessary for turning a jump rope.

g). Two students pick up a rope, leaving the center of the rope on the ground. Another student jumps over and runs around the end and returns to jumping position.

h). Two students swing the rope while the jumper is in the center. Each time the rope touches the ground, he/she jumps over it. This can be done while facing forward or sideways.

i). Students turn rope over the jumper's head. Jumper jumps over it each time it approaches his/her feet.

j). Count to ten while jumping.

k). Run in while the rope is turning; run out while rope is turning.

l). Jump the rope using various locomotor skills--hop, leap, skip, gallop.

m). Jump to verses as follows:

Shirley Temple went to France
To teach the children how to dance.
A heel and a toe and around you go;
A heel and a toe and around I go.
Salute to the captain,
Bow to the king,
Turn your back on the ugly ole queen.
(Run out of the rope)

n). Follow-the-leader.

o). Vary the speed of the turns.

p). Place rope on the ground and do movement activities inside, outside, around, etc.

2. Individual Rope Jumping Skills

a). Jump up and down in place on a line, using short jumps.

b). Place rope in front of the body and jump over it, using short jumps.

c). Jump up and down, swinging arms in rope jumping movement.

d). Hold rope ends in one hand, and turn rope round and round while taking short jumps; change hands.

e). Hold rope, one end in each hand; turn until it comes over the head and falls to the floor in front of the body; then jump over the rope.

f). Increase the turning and jumping speed.

g). Jump with both feet, no bounce.

h). Jump with the left foot leading.

i). Jump with the right foot leading.

j). Jump on both feet with a bounce.

k). Jump with a bounce, changing lead foot.

l). Turn the jump rope while running.

m). Turn the jump rope while skipping.

n). Hop, changing feet.

o). Turn the rope backward.

p). Turn rope at differing speeds.

TIRE SKILLS

1. Individual Activities

a). Walk around on the edge of a tire. Alternate the direction.

b). Stand on the edge of a tire, and jump into it from various directions such as forward, backward, sideways, quarter turns.

c). Stand outside a tire, and jump into it. Vary the directions.

d). Stand inside a tire, and jump out of it. Vary the directions.

e). Stand on the tire with legs astride, and jump up and down on the tire.

f). Stand inside the tire and jump onto the tire. Vary directions; jump with feet together and with feet apart.

g). Place one hand on ground inside a tire, and walk around the tire. Vary by changing directions; change hands.

h). Jump over a tire which is placed flat on the ground.

i). Run a short distance and jump into a tire, landing on your feet.

j). Stand a tire upright, and spin it.

k). Stand a tire upright, and crawl through it. Vary by adding more tires or by having different body parts go through the tire first.

l). Play leap frog over an upright tire.

m). Roll the tire.

n). Roll the tire on a line; between two lines; and around a circle.

o). Roll the tire, with one push, for distance.

2. Tire Formations

a). Tires can be arranged in a straight line, touching each other.

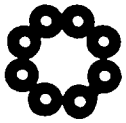
b). Tires can be arranged in a straight line with space between tires.

c). Tires can be arranged in two straight parallel lines, touching each other.

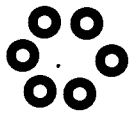
d). Tires can be arranged in a zigzag fashion, touching each other.

e). Tires can be arranged in a scattered formation.

f). Tires can be arranged in circular fashion, touching each other.



g). Tires can be arranged in circular formation with space between them.



h). Tires can be arranged in two straight parallel lines with space between them.

i). Tires can be arranged in an offset formation.

j). Tires can be arranged in a stacked formation, no more than 3 tires high.

2. Formation Activities

a). Walk around the tires in a weaving pattern, forward or backward. Repeat for all locomotor movements. (Formation b), e), g)

b). Walk, stepping inside every tire without touching the ground outside the tires. (Formation a), c), d), f) Repeat with other locomotor movements.

c). Step inside a tire with one foot. The other foot should remain outside the tires. Repeat for other locomotor movements.

d). Repeat activity c), but specify which foot must be placed inside the tire.

e). Walk on the tires without stepping off the tires. Repeat for other locomotor movements.

f). Walk so that one foot steps inside a tire, then two feet step outside the tire, then one foot steps inside again.

g). Walk so that first one foot steps inside a tire; then jump so that both feet land on the next tire; then one foot steps inside the next tire, etc. (Formation a), d), f)

h). Walk through the tire lineup so that two feet are standing inside a tire and then one foot steps outside the next tire. (Formation b), e)

3. Other Uses of Tires

a). Make a mountain out of the tires, and climb over the mountain. The maximum height is three rows.

b). Make steps out of the tires no more than three rows high.

c). Build forts and houses. Maximum height is three rows.

d). Tires can be used to establish boundaries and goals for games.

e). Tires can be set up for obstacle courses.

f). Tires can be used as obstacle for dribbling activities.

g). Tires can be used as targets for throwing objects, such as balls, and beanbags.

h). Play tic-tac-toe with the tires by throwing or bouncing objects into the tires.

This list is by no means complete. The list can be adapted or modified according to ability levels and individual needs of the students.

TUBE SKILLS

Plastic tube or paper towel tube

1. Look through the tube.
2. Roll the tube on the floor with different body parts.
3. Balance the tube in a horizontal position on different parts of the body. Place on hands, head, feet, knees, stomach, back, or neck. Repeat for vertical position.
4. Thread the needle with the tube.
5. Jump over the tube, forward and backward.
6. Move the tube around your body without letting it touch you.
7. Move the tube between and around your legs in a figure 8 without letting the tube touch your legs.
8. Throw the tube up with one hand and catch it with the other hand.
9. Hold the tube at one end, flip it, and catch it at the other end.
10. Balance the tube at one end, flip it, and catch it at the other end.
11. Balance the tube on end, flip it, and balance the other end on the hand.
12. Put a ball, a bean bag, puck, or frisbee on the floor, and push it around with the tube.
13. Hold the tube and balance a ball, puck, frisbee, or bean bag on top of it. Move on different levels and in different directions.
14. Balance an object on top of a tube, then move the tube around the body without knocking the object off.
15. Put a ball or other object on top of the tube. Throw the object up in the air with the tube, and catch the object with the free hand.
16. Put a ball or another object on the top of the tube. Throw the tube and object up in the air. Catch the tube with one hand and the object with the other hand.
17. Balance an object on top of the tube. Change hands, and keep it balanced.
18. Bounce or dribble a ball by means of a tube.

19. Bounce a tennis ball with the hand. Catch it on the end of the tube.

20. Throw a deck tennis ring up in the air, and put the tube through the ring.

21. Throw a deck tennis ring up in the air, and throw the tube through the ring.

22. Roll a deck tennis ring, and put the tube through the ring.

23. See how many objects can be balanced on top of the tube.

Tube Skills With Partners

24. Stand facing a partner. Toss and catch the tubes.

25. Balance an object on top of the tube, and pass the tube to your partner.

26. Balance an object on top of the tube. Throw the tube to the partner who should catch the tube in one hand and the object in the other hand.

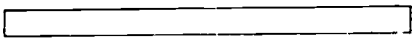
This list is by no means complete. The list can be adapted or modified to accommodate the ability levels and individual needs of the students.

PERCEPTUAL-MOTOR DEVELOPMENT EQUIPMENT

Balance Beams

Construction Materials:
8' lengths of wood

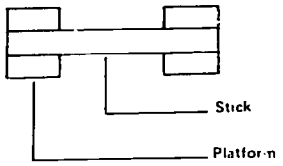
Dimensions (width of beam)
Brown - 7½ inches (2 x 8)
Blue - 5½ inches (2 x 6)
Black - 3½ inches (2 x 4)
Yellow - 2½ inches (2 x 3)
Green - 1½ inches (2 x 2)
Red - 1 inch



Balance Sticks

Construction Materials:
Sticks - 2' lengths of wood
Platforms - 5" x 5" (square) pieces of plywood or Noble ply

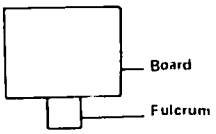
Dimensions: (width of stick)
Brown - 3½ inches (2 x 4)
Blue - 2½ inches (2 x 3)
Black - 2 inches
Yellow - 1½ inches (2 x 2)
Green - 1¼ inches
Red - 3/4 inches

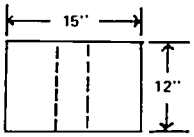


Balance Boards*

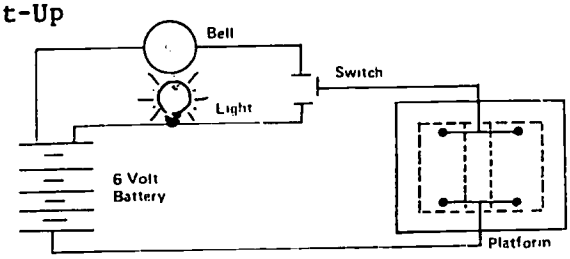
Construction Materials:
Board - 12" x 15"- boards composed of
Noble ply or particle board 3/4" thick
Fulcrum - 12" long, centered in the middle of board: composed of wood

Dimensions: (width of fulcrum)
Brown - 3½ inches (2 x 4)
Blue - 2½ inches (2 x 3)
Black - 2 inches
Yellow - 1½ inches (2 x 2)
Green - 1¼ inches
Red - 3/4 inches



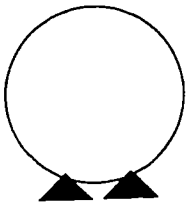


Circuit Drawing of Electrical Set-Up



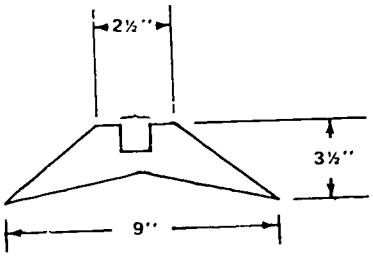
*Permission for inclusion granted by Robert Fredericks, Author

Hoops*



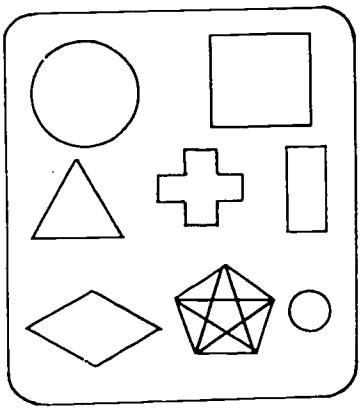
Construction Materials:
Hoop - 1 inch widths of plastic tubing
Connectors - 1 inch dowel rods 3 inches long
or 1 inch "PVC" plastic tubing connectors
Wooden stands - constructed of 3/4 inches white pine planks; 12 needed

Dimensions: Outer circumference of hoop
Brown - 125 inches
Blue - 111 3/4 inches
Black - 104 3/4 inches
Yellow - 95 3/4 inches
Green - 85 7/8 inches
Red - 75 3/4 inches



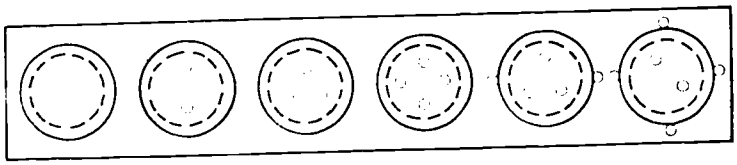
Geometric Figure Board*

Construction Materials:
4'x5' board of 1/2 inch plywood



Dimensions: (shapes)
Circle - 8½" radius
Square - 14" x 14"
Triangle - 18" x 18" x 18"
Cross - 5 - 5½" x 5½" squares
Rectangle - 7" x 18"
Horizontal diamond - vertical axis 10"
Horizontal axis 18"
Star - cut out of a pentagon having 7" sides
Small circle - 3" radius

Ring Toss*



Construction Materials:
Board - 10" plank, 5' in length
Dowel rods - 1/2" diameter
Dowel rods - 4¼" long

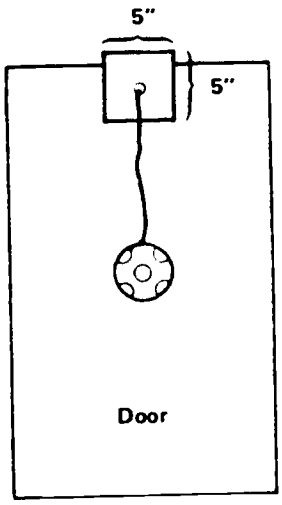
Dimensions:
Brown - 1 rod, located in center of 7" diameter circle
Blue - 2 rods, located equally along the vertical axis in a 7" circle
Black - 3 rods, shaped in the form of equilateral triangle, centered in a 7" diameter circle
Yellow - 4 rods, shaped in the form of a tilted square, centered in a 7" diameter circle
Green - 5 rods, 3 rods inside the 7" circle in the shape of an equilateral triangle, and 2 rods on the outside of the circle along the horizontal axis
Red - 6 rods, 4 rods located on the outside of a 7" circle; two on the vertical axis and two on the horizontal axis. The other two rods are located inside the circle 1½" away from the center on a left oblique line.

*Permission for inclusion granted by Robert Fredericks, Author

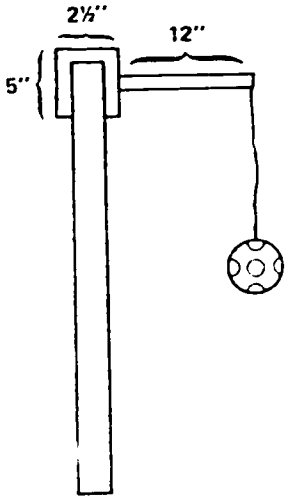
Doorway Suspended Ball

Construction Materials

¼" plywood, 12½" x 5"
¼" dowel, 12" long
Length of string 36"
Whiffle ball (softball size)



(Front View)



(Side View)

ANNOTATED BIBLIOGRAPHY

BOOKS

Abernethy, Kathleen, et al. Jumping Up and Down: A Manual of Motor Activities to Develop Balance and Coordination. San Rafael, California. Academic Therapy Publications, 1972.
Elementary teachers may use these activities in their daily programs.

American Alliance of Health, Physical Education and Recreation. Annotated Bibliography on Perceptual-Motor Development. Washington, D. C. AAHPER, 1973.
This book presents annotations of some of the research that has been conducted in the perceptual-motor development area.

American Alliance of Health, Physical Education and Recreation. Foundations and Practices in Perceptual-Motor Learning--A Quest for Understanding. Washington, D. C. AAHPER, 1971.
This book summarizes the speeches and discussions that were presented in October, 1971, at a conference in Cincinnati. "Perceptual-Motor Development: Action with Interactions."

American Alliance of Health, Physical Education and Recreation. Perceptual-Motor Foundations: A Multi-Disciplinary Concern. Speeches and condensed proceedings of the Perceptual-Motor Symposium, Washington, D. C., May 8-10, 1968. Washington, D. C. AAHPER, 1969.

Arena, John I. (ed.). Teaching Through Sensory-Motor Experiences. San Rafael, California: Academic Therapy Publications, 1969.
Articles are included on sensory-motor training such as form perception, retention, hand-eye coordination, laterality and directionality, body image and awareness, visual perception and discrimination.

Auxter, David. Perceptual-Motor Development Programs for an Individually Prescribed Instructional System. Slippery Rock, Pennsylvania: Slippery Rock State College, 1971. O. P.
Provides the rationale and implementation procedures for developing an individually prescribed perceptual-motor development program. Programmed materials which are arranged in a hierarchical order are utilized as the means for producing behavioral changes in the perceptual-motor area.

Behrmann, Polly, and Millman, Joan. How Many Spoons Make A Family. San Rafael, California: Academic Therapy Publications, 1971.
One hundred math games involving motor movements for primary children. As children enjoy playing the games, they should become more aware of numbers in everyday living.

Belgau, [illegible]ik A., and Basden, Beverley V. A Perceptual-Motor and Visual-Perceptio[illegible]andbook of Developmental Activities for Schools, Clinics, P[illegible]s and Preschool Programs. LaPorte, Texas: Perception Development Research Associates, 1971. O. P.
The book lists a progression of activities for jump rope, chalkboard, suspendable ball, bean bag, walking beam, and trampoline board.

O. P. - Out of Print

Benton, Arthur L. Right-Left Discrimination and Finger Localization. New York, New York: Paul B. Hoeber, Inc., 1969. O. P.
Analysis of the concepts of right-left discrimination and finger localization are studied in depth. The normative aspects, developmental disturbances, and techniques for measurement in both areas are included.

Braly, William T.; Konicki,Geraldine; Leedy, Catherine. Daily Sensorimotor Training Activities: A Handbook for Teachers and Parents of Preschool and Primary Children. Freeport, New York: Educational Activities, 1968.
Daily plans for a yearly program of perceptual awareness and motor ability for young children are presented. Weekly evaluations are included for use by the teacher. Areas presented are body image, space and direction, Balance, body movement, eye-hand and eye-foot coordination, rhythms and games.

Broer, Marion R. Efficiency of Human Movement (3rd ed.). Philadelphia, Pa.: W. B. Saunders Company, 1973.
Explains the basic mechanical principals involved in human movement and then applies them to basic locomotor movements, and in turn, several sport skills.

Bush, Wilma Jo, and Giles, Marion Taylor. Aids to Psycholinguistic Teaching. Columbus, Ohio: Charles E. Merrill Publishing Company, 1977.
Many motor activities are included for development of language in Grades 1-8. Auditory and visual reception and association, memory, and expression are featured.

Chaney, Clara M., and Kephart, Newell C. Motoric Aids to Perceptual Training. Columbus, Ohio: Charles E. Merrill Publishing Company, 1968.
Deals with motor system, motor generalization, exploration, cognition, and developmental sequences. Discusses evaluation, listening, differentiation of body parts, ocular-motor coordination, and speech readiness.

Corbin, Charles B. Inexpensive Equipment for Games, Play, and Physical Activity. Dubuque, Iowa: William C. Brown Company Publishers, 1976.
This book provides ideas for constructing inexpensive equipment. In the utilization of such homemade equipment, the author also provides activities and teaching suggestions.

Cratty, Bryant J. Active Learning: Games to Enhance Academic Abilities. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1971.
The author introduces more than 100 learning games that are directed toward the improvement of motor, reading, mathematics, and other similar competencies which are normally taught in the passive classroom setting.

---. Developmental Sequences of Perceptual-Motor Tasks. Freeport, N.Y.: Educational Activities, 1967.
Deals with perceptual-motor characteristics, with emphasis on balance, locomotor skills, agility, strength, and endurance.

O.P. - Out of Print

---. Learning About Human Behavior: Through Active Games. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1975.
This book contains games through which the child can learn about human behavior and about himself. The first section contains activities that attempt to help the child become aware of himself. The second section deals with activities that help children learn how to learn. The third section deals with various aspects of social interaction.

---. Movement Behavior and Motor Learning (3rd ed.). Philadelphia, Pa.: Lea and Febiger, 1973.
A research oriented book dealing with aspects of movement and its effects on learning. The book deals with research in perception; perception of near and far space; factors that influence learning such as maturation motivation, anxiety, stress and tension, practice factors, and transfer and learning theories as they relate to motor behavior.

---. Perceptual and Motor Development in Infants and Children. New York: The Macmillan Company, 1979.
Discusses research in area of motor development from birth to 12 years, visual perception, body image, and manual dexterity. An evaluation of several perceptual-motor programs is included.

---. Perceptual-Motor Behavior and Educational Processes. Springfield, Ill.: Thomas, C. C., 1970. O.P.
This book is directed toward elementary teachers and teachers of Supplementary Education. It is a discussion of movement behavior and personality and how it relates to the classroom.

---. Teaching Motor Skills. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1973.
A scientific, analytical approach to the teaching of motor skills.

Cratty, Bryant J., and Sister Margaret Mary Martin. Perceptual-Motor Efficiency in Children. Philadelphia, Pa.: Lea and Febiger, 1969.
Principles of perceptual-motor education are presented along with activities to develop perceptual-motor skills. O.P.

Early, George H. Perceptual Training in the Curriculum. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969.
This test is a practical approach to integrating the perceptual-motor program into the regular classroom. Projects are developed in Social Studies, Language Arts, Science, and Industrial Arts Units.

Folio, Rhonda, and DuBose, Rebecca F. Peabody Developmental Motor Scales (Revised Experimental Edition). Nashville, Tenn.: George Peabody College for Teachers, 1974. O.P.
The Peabody Development Motor Scales were designed as indices of gross and fine motor skills between birth and seven years. The scales are accompanied by a program of activities designed to teach each skill included by tailoring a program specifically to individual needs.

O.P. - Out of Print

Frierson, Edward C., and Barbe, Walter B. (eds.). Educating Children with Learning Disabilities: Selected Readings. New York: Appleton-Century-Crofts, 1967.
Contains selected readings dealing with identification of specific learning disorders, diagnoses, and approaches to teaching children with these disorders.

Frostig, Marianne. Move-Grow-Learn. Chicago, Ill.: Follett Educational Corporation, 1969. O.P.
This book is a guide for teachers to plan a program movement skills and creative activities. It discusses movement attributes, body awareness, language development, children with learning disabilities, facilities, and equipment.

Howard, I. P., and Templeton, W. B. Human Spatial Orientation. New York: John Wiley and Sons, Ltd., 1966. O.P.
This book presents a comprehensive coverage of human spatial orientation in all its aspects, including behavior in response to gravity, shape discrimination, geographical orientation, visual-motor coordination, and human factors in space travel. Basically this book deals with those aspects of human behavior which are determined by the position of the body in space in relation to other stable objects.

Humphrey, James H. Learning to Listen and Read Through Movement. Baltimore, Md.: Kimbo Educational, 1974. O.P.
By listening to or reading short stories in primary print, children can practice games, stunts, and rhythms. Children may improve their reading skills by using this procedure.

Kephart, Newell C. The Slow Learner in the Classroom (2nd ed.). Columbus, Ohio: Charles E. Merrill Publishing Company, 1971.
Development and identification of slow learner behavior and learning problems. Provides training procedures to improve the identified behavior and learning problems.

Kidd, Aline H., and Rivoire, Jeanne L. (eds.). Perceptual Development in Children. New York: International Universities Press, 1966. Deals with physiological, social, cognitive, and affective aspects of visual and auditory perception.

Mason, Russell E. Internal Reception and Bodily Functioning. New York: International Universities Press, 1961. O.P.
Studies relations of inner feelings, drive states, and internal sensations to physiological function.

Montgomery County Public Schools. Perceptual-Motor Sequence: A Curriculum Guide for Classes of Moderately Retarded Children. Rockville, Maryland: Montgomery County Public Schools, 1972.
A week-by-week program of perceptual-motor tasks and evaluation methods are provided. Each child can progress in a regular program.

---. Prereading, Teaching Reading Skills - Volume III. Rockville, Maryland: Montgomery County Public Schools, 1974.
An examination of activities which facilitate readiness to read and suggestions for implementation of these activities are featured.

O.P. - Out of Print

---. Some Suggestions for the Development of Sensory and Language Skills at the Kindergarten and Primary Levels. Rockville, Maryland: Montgomery County Public Schools, 1970.
A handbook of activities for the development of sensory, motor, visual, auditory, and language ability in the primary child.

Mourouzis, Ann, et al. Body Management Activities: A Guide to Perceptual-Motor Training. Cedar Rapids, Iowa: MWZ Associates, 1970. O.P.
A guide to help physical education teachers, classroom teachers, or anyone else concerned with children having motor problems, to formulate a program of body management and activities. Areas that are discussed are motor awareness, listening skills, balance, eye-hand and eye-foot coordination, and form perception. Activities are provided to help improve these areas.

O'Donnell, Patrick A. Motor and Haptic Learning. San Rafael, California: Dimensions Publications, 1969. O.P.
The author places emphasis in the areas of motor development, variables influencing motor development, components of perceptual-motor development, and tools for assessing motor development.

Oxendine, Joseph B. Psychology of Motor Learning. New York: Appleton-Century-Crofts, and Englewood Cliffs, N.J.: Prentice-Hall, 1968.
Studies the manner in which people learn fine and gross motor skills. Specific suggestions for teaching are made.

Roach, Eugene G. and Kephart, Newell C. The Purdue Perceptual-Motor Survey. Columbus: Charles E. Merrill Publishing Company, 1966.
Provides the teacher with a tool to identify perceptual-motor problems.

Robb, Margaret D. The Dynamics of Motor and Skill Acquisition. Englewood Cliffs, N.J.: Prentice-Hall, 1972.
Examines the stages of learning a skill and the factors affecting that acquisition. Includes a good taxonomy.

Shontz, Franklin C. Perceptual and Cognitive Aspects of Body Experience. New York: Academic Press, 1969.
This volume contains a broad survey of research and theory on perception of the body. It emphasizes personality and perception and makes an effort to integrate the two.

Valett, Robert E. Programming Learning Disabilities. Belmont, Cal.: Fearon Publishers, 1969.
The three stages of programming for learning disabilities--planning, implementation, and remediation--are examined. Many checklists and forms are shown.

---. The Remediation of Learning Disabilities: A Handbook of Psychoeducational Resource Programs. Belmont, Cal.; Fearon Publishers, 1974.
Fifty-three basic learning abilities are organized into the following sections: gross-motor development, sensory-motor integration, perceptual-motor skills, language, conceptual, and social skills.

O.P. - Out of Print

Van Witsen, Betty. Perceptual Training Activities Handbook. New York: Teachers College Press, 1967.
This very short book deals with auditory perception, visual training, kinesthetic perception, and fine motor coordination. It gives demonstration activities in each area.

Wilentz, Joan Steen. The Senses of Man. New York: Thomas Y. Crowell Company, 1968. O.P.
The subject of this book is communication. It deals with how a person communicates with himself/herself and the world around him and how the world informs people of itself.

Zigmond, Naomik. Auditory Learning. San Rafael, Cal.: Dimensions Publishing Co., 1968. O.P.
The purpose of this book is to explore the development of auditory processes, the disorders of auditory learning, the teaching of preschool child, and the teaching of school age children. The author also presents teaching materials and references.

RECORDS

And the Beat Goes On. New York: Educational Activities, Inc., n.d.
KEA 5010 2 LP Records, manual $12.95.
Modern tunes provide background for exercising the whole body and body parts.

And the Beatles Go On and On. New York: Educational Activities, Inc., n.d.
KEA 8080 LP Record, manual $8.95.
Combines Beatle tunes and exercise routines.

Coordination Skills - Grades K-6 Rhythmic Eye-Hand Patterned Movement Exercises. New York: Educational Activities, Inc., n.d.
KEA 6050 - 3 LP Records, manual $16.95
KEA 6050 Kit - 3 LP Records, manual, 10 yarn balls $31.95
Develops and improves listening skills, spatial awareness, and eye-hand coordination.

Creative Movement and Rhythmic Exploration. New York: Educational Activities, Inc., n.d.
ARC533 LP Record, guide $6.95
AC533 Cassette, guide $7.95
Creative movement, physical activities, and basic skills presented by Hap Palmer.

Developing Body Space Perception Motor Skills. Long Branch, New Jersey: Kimbo Educational, n.d.
CM 1056 LP and Guide $ .50
CM 1058 LP and Guide $6.50
CM 1079 LP and Guide $6.50

O.P. - Out of Print

Developing Perceptual-Motor Needs for Primary Level Children. New York: Educational Activities, Inc., n.d.
AR606-7 2 LP Records, guide $12.95
Develops areas of agility, balance, locomotor skills, and comgination of these in a sequential program.

Getting to Know Myself. New York: Educational Activities, Inc., n.d.
AR543 LP Record, guide $6.95
AC543 Cassette, guide $7.95
Hap Palmer works with areas of body awareness, spatial awareness, body part identification, and laterality.

Jumpnastics. New York: Educational Activities, Inc., n.d.
KEA6000 2 LP Records, Manual $12.95
Perform arm movements with hopping skill to improve balance, agility, and coordination.

Learning Basic Skills Through Music, Vol. I. New York: Educational Activities, Inc., n.d.
AR514 LP Record, guide $6.95
AC514 Cassette, guide $7.95
Hap Palmer uses rhythm activities to teach numbers, colors, alphabet, and body awareness. Available in Spanish.

Learning Basic Skills Through Music Building Vocabulary. New York: Educational Activities, Inc., n.d.
AR521 LP Record, guide $6.95
AC521 Cassette, guide $7.95
Hap Palmer presents parts of the body, objects, directions, body management concepts (under, low, etc.).

Mod Marches. New York: Educational Activities, Inc., n.d.
AR527 LP Record, guide $6.95
AC527 Cassette, guide $7.95
Catchy tunes played in march tempo are used to teach directions and body management concepts.

Musical Ball Skills. New York: Educational Activities, Inc., n.d.
AR30 2 LP Records, manual $12.95
AC30 2 Cassettes, manual $13.95
A variety of ball skill activities are taught using rhythmic patterns and routines.

1-2-3- and Move. New York: Educational Activities, Inc., n.d.
KR9077 2 LP Records, manual $12.95
Contemporary music for basic motor skills and rhythmic activities.

Rhythmic Parachute Play. New York: Educational Activities, Inc., n.d.
KEA6020 2 LP Records, manual $12.95
Instructions and music provide skills and background to perform parachute formations such as mushroom, ripples, popcorn, etc.

Rhythmic Rope Jumping New York: Educational Activities, Inc., n.d.
R4001 Elementary LP Record, manual $8.95
Seventeen tunes provide a variety of tempos for rope jumping.

Rope Skipping - Rhythms, Rhymes, and Routines. New York: Educational Activities, Inc., n.d.
ARB536 LP Record and Book $11.95
AR536 LP Record only $6.95
Book only $5.95
Sequential program of rope skipping activities including creative routines and strength and endurance skills.

Sensorimotor Training in the Classroom Grades K-3. New York: Educational Activities, Inc., n.d.
AR532 LP Record, manual $7.95
AC532 Cassette, manual $8.95

Sensorimotor Training in the Classroom, Volume II, Grades K-3. New York: Educational Activities, Inc., n.d.
AR566 LP Record, manual $7.95

The Development of Body Awareness and Position in Space. New York: Educational Activities, Inc., n.d.
AR605 LP Record, guide $6.50
Develops body spatial awareness through a sequential program.

To Move Is To Be. New York: Educational Activities, Inc., n.d.
KEA8060 2 Lp Records, manual $12.95
Electronic music provides background for performing locomotor movements.

FILMS

Although none of these films was made specifically to deal with perceptual-motor problems, there are elements in each one which may be of help to a person using this guide, especially the instructional activities that are illustrated.

All the Self There Is. NEA. 1973. 16 min. color. F6191
Discusses the aims and objectives of physical education, and shows the importance of movement education in the early years. Explains how self-confidence and self-discipline are developed in children through sports skills and other activities.

Balance Skills. Film Fair. 1969. 10 min. color. F6153
Illustrates the importance of balance in everyday life. Demonstrates individual skills in the use of balance board, balance beam, roller skates, and stilts.

Ball Skills. Film Fair, 1969. 10 min. color. F6152
Demonstrates how to throw, catch, bounce, kick, and hit the ball; and tells how to use these skills in ball games.

Developing Range and Understanding of Movement. Universal Education and Visual Arts. n.d. 29 min. color. F5967
Shows how teachers can assist children to develop a conceptual understanding of directional movements such as forward, sideways, across, around, and through.

Outdoor Play. Campus Films, 1973. 17 min. color. F6345
Explains that outdoor play presents the opportunity for learning when there is interaction of children with materials and each other. Some ideas on use of outdoor equipment are shown.

Phase D/Integrated Motor Perceptual Training. Thorne Films, 1964. 6 min.color.
Shows mentally retarded children taking part in various physical activities such as roller skating, hop scotch, folk dance, patterned foot movements, and recreational activities. It could be helpful in broadening knowledge of perception needs, as well as showing some useful activities. Teacher use only.

Rope Jumping. Film Associates, 1968. 12 min. color. F4450
Illustrates basic and advanced skills in rope jumping, including basic movements for beginners. Shows how rope jumping activities can be done alone, with a partner, or with several people.

Tumbling: Primary Skills. BFA, 1970. 9 min. color. F5824
Illustrates good form in the use of six basic skills--egg sit, egg roll, forward roll, backward roll, head stand, and frog head stand and shows the proper position of head, hands, and feet.