

MATH 'N' MOVEMENT



Move the desks to the side of the room it's time for math!

This edition of Math 'N' Movement is designed specifically for North American Schools and combines the Common Core State Standards for Mathematics with the Physical Education Standards. With programs available from Kindergarten to Year 6 it provides a fun way to effectively engage students in math learning.

Math 'N' Movement increases both on task student behaviour and fitness by combining Math with the key Physical Education topics of movement, co-operation, game play, safety and acceptance of consequences for one's actions.

Designed to get more students, more active, more often, Math 'N' Movement is a dual strand teaching strategy that leap-frogs time constraints by teaching twice as much in half the time. Best of all, your students won't realise they are working hard because they are having so much fun!

For further information on the best way to use this program and additional teaching resources visit www.mathnmovement.com.

Distributed International by:

**Spruikers Pty Ltd
PO Box 369
Wauchope 2446
Phone: 1800 264 429**

Copyright © 2014 Spruikers Pty Ltd for Educational Purposes

The original purchaser of this program is prohibited from on-selling this program but may reproduce the Recording Sheets and Materials for his/her class(es) only. All pages in this book are sold with limited copyright and are not transferable.

**First Edition
Published December 2014**

ISBN: 978-0-9807662-7-1

MATH 'N' MOVEMENT

LEVEL

1

Kindergarten

TABLE OF CONTENTS

COUNTING & CARDINALITY 1	4
COUNTING & CARDINALITY 2	6
COUNTING & CARDINALITY 3	8
COUNTING & CARDINALITY 4	10
COUNTING & CARDINALITY 5	11
COUNTING & CARDINALITY 6	13
OPERATIONS & ALGEBRA 1	15
OPERATIONS & ALGEBRA 2	17
OPERATIONS & ALGEBRA 3	19
OPERATIONS & ALGEBRA 4	21
NUMBER & BASE 10 - 1	23
MEASUREMENT & DATA 1	25
MEASUREMENT & DATA 2	27
MEASUREMENT & DATA 3	29
GEOMETRY 1	31
GEOMETRY 2	33
GEOMETRY 3	35
GEOMETRY 4	37
GEOMETRY 5	39
GEOMETRY 6	41



MATH 'N' MOVEMENT

LEVEL

1

K.CC.1

COUNTING & CARDINALITY 1

In this Math 'N' Movement activity students will know number names, the counting sequence and will count by 1s and 10s.

ACTIVITY

1. In pairs, students stand 1 metre apart facing each other.
2. When pairs hear the whistle they throw and catch their tennis ball for 30 seconds until the whistle sounds again.
3. Students record on their Counting & Cardinality 1 Recording Sheet the highest number of consecutive throws they had without dropping the ball.



Equipment Required:

- A 1 metre ruler.
- A tennis ball per pair.
- A Counting & Cardinality 1 Recording Sheet and pencil per student.
- A stop watch and whistle.



Notes:

This activity should be repeated either once a day over 3 weeks or on a given day each week over an extended period so students can see an increase in their counting and skill level over time.



Mathematical Practices Covered:

- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.



Physical Education Standards Covered:

- PE 1.13 - Tosses and catches a ball with a partner.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.3 – Demonstrates the characteristics of sharing in a physical activity.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT

LEVEL

1

K.CC.2

COUNTING & CARDINALITY 2

In this Math 'N' Movement activity students will count forwards from a given double digit number by single number increments.

ACTIVITY

1. Students each find a space where they will not touch another student when performing vertical jumps.
2. When students hear the whistle they perform vertical jumps for 20 seconds.
3. Students count from the number given on their Counting & Cardinality 2 Recording Sheet how many jumps they performed.
4. When students hear the whistle sound after 20 seconds they record the number they finished at.



Equipment Required:

- A Counting & Cardinality 2 Recording Sheet and pencil per student.
- A stop watch.
- A whistle.



Notes:

There are 20 different starting numbers provided on the Counting & Cardinality 2 Recording Sheet so this activity can be repeated every day for 2 weeks or can be completed once a week over the first half of the year to reinforce counting-on from any number.



Mathematical Practices Covered:

- K.4 - Models with mathematics.
- K.6 - Attends to precision.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.2 – Identifies and uses general and personal space.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.



MATH 'N' MOVEMENT



COUNTING & CARDINALITY 2 RECORDING SHEET

Start Number	Finish Number
10	_____
20	_____
50	_____
32	_____
17	_____
48	_____
36	_____
15	_____
24	_____
51	_____

Start Number	Finish Number
49	_____
33	_____
25	_____
62	_____
14	_____
22	_____
37	_____
41	_____
28	_____
11	_____

CC.1

CC.2

CC.3

CC.4

CC.5

CC.6

OA.1

OA.2

OA.3

OA.4

NBT.1

MD.1

MD.2

MD.3

G.1

G.2

G.3

G.4

G.5

G.6



MATH 'N' MOVEMENT

LEVEL

1

K.CC.3

COUNTING & CARDINALITY 3

In this Math 'N' Movement activity students will write numbers from 0 to 20 and count out objects to represent this number.

ACTIVITY

1. In teams of 4 or 5, students line up 5 metres from their 0-1 and decahedron (10 sided) die, their counters and their team's Counting & Cardinality 3
2. The first student in each team races, using the given movement, to their dice and rolls to create a number less than 20.
3. Students record the number on their team's Counting & Cardinality 3 Recording Sheet and count out that many counters.
4. When correct, students race back to their team and the next student in each team has a turn at rolling the dice, counting and recording.



Equipment Required:

- A Counting & Cardinality 3 Recording Sheet and pencil per student.
- 20 counters per team.
- A die with only 0 & 1 per team.
- A 10 sided die per team.



Notes:

To make a 0 and 1 die use white circle stickers to cover the numbers on a regular die and add 3 x 0s and 3 x 1s. Students will need to make sure they record the 0/1 die in the first column and the decagon (10 sided) die in the second column to create a 2 digit number they can read. This activity introduces the concept of 0 before a number having no effect on the number itself.



Mathematical Practices Covered:

- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.3 – Demonstrates the characteristics of sharing in a physical activity.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



COUNTING & CARDINALITY 3 RECORDING SHEET

Student	0/1 Die	10 Sided Die	Number Created	Recorded Correctly
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____	_____	_____	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No

- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6



MATH 'N' MOVEMENT

LEVEL

1

K.CC.4

COUNTING & CARDINALITY 4

In this Math 'N' Movement activity students will understand the relationship between numbers and quantities.

ACTIVITY

1. Students stand in the middle of 5 hula hoops set out in a very large circle.
2. When a number from 1 to 6 is called students sprint run to the hoops and the number of students called must be standing in each of the 5 hula hoops.
3. Students not in a hoop are the 'remainder' and move to the teacher.
4. After a number of rounds students can predict whether there will be any 'remainder' students for the number called before moving to the hoops.



Equipment Required:

- 5 large hula hoops.
- A large area at least 7m² in which to place the hula hoops.



Notes:

This activity is good fun but can be difficult for students who are slower to move to the hula hoops. If this is the case suggest alternate methods for movement such as side gallop or leaping. Another alternative is that one of the student 'remainders' can select the next number and the remainder students swap each time so no student misses more than 1 round of the game. There is no Recording Sheet for this activity.



Mathematical Practices Covered:

- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.2 – Identifies and uses general and personal space.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT

LEVEL

1

K.CC.5

COUNTING & CARDINALITY 5

In this Math 'N' Movement activity students will count to match numbers in an array with the numerical value for that number being less than 20.

ACTIVITY

1. In teams of 4 or 5, students line up behind their team's hula hoop 5 metres from their bowl of 20 counters.
2. When shown a number array the first student in each team races, using the given movement, to collect that many counters from their bowl and return it to their hula hoop to be checked.
3. When the correct number of counters has been collected remaining students take it in turn to race, count arrays and collect counters.



Equipment Required:

- A hula hoop per team.
- 20 counters in a bowl per team.
- The Counting & Cardinality 5 Arrays enlarged onto card.



Notes:

Although a 10 x 2 array has been used for this activity a 4 x 5 array could also be used. As students progress through the year you may wish to show students 2 arrays such as 5 and 7 and have them add the arrays together before collecting that many counters from their team's bowl.



Mathematical Practices Covered:

- K.2 - Reasons abstractly and quantitatively.
- K.4 - Models with mathematics.
- K.6 - Attends to precision.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.3 – Demonstrates the characteristics of sharing in a physical activity.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.
- PE 5.5 – Participates as a leader and a follower during physical activities.



MATH 'N' MOVEMENT



<table border="1"><tr><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●																				<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●	●	●									
●																																									
●	●	●	●	●	●	●	●	●	●																																
●																																									
<table border="1"><tr><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●																			<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●	●	●	●								
●	●																																								
●	●	●	●	●	●	●	●	●	●																																
●	●																																								
<table border="1"><tr><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●																		<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●	●	●	●	●							
●	●	●																																							
●	●	●	●	●	●	●	●	●	●																																
●	●	●																																							
<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●																	<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
●	●	●	●																																						
●	●	●	●	●	●	●	●	●	●																																
●	●	●	●																																						
<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●																<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
●	●	●	●	●																																					
●	●	●	●	●	●	●	●	●	●																																
●	●	●	●	●																																					
<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●													<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●			
●	●	●	●	●	●	●	●																																		
●	●	●	●	●	●	●	●	●	●																																
●	●	●	●	●	●	●																																			
<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>	●	●	●	●	●	●	●	●	●												<table border="1"><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr><tr><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td><td>●</td></tr></table>	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●																																	
●	●	●	●	●	●	●	●	●	●																																
●	●	●	●	●	●	●	●	●	●																																

- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6



MATH 'N' MOVEMENT

LEVEL

1

K.CC.6

COUNTING & CARDINALITY 6

In this Math 'N' Movement activity students will compare 2 arrays or numerals and identify whether they are greater than, less than or equal to one and other.

ACTIVITY

1. Students are shown the Counting & Cardinality 6 Symbols '=', '>' and '<' which are placed on the ground in 3 hula hoops at least 7 metres from each other.

2. When shown 2 x Counting & Cardinality 6 Numerals or Counting & Cardinality 5 arrays students race, using the given movement, to the symbol which best matches the relationship between the 2 numbers.



Equipment Required:

- The Counting & Cardinality 6 Symbols & Numbers.
- The Counting & Cardinality 5 arrays from 1 to 10.
- 3 hula hoops in which to place the symbols.



Notes:

After a number of rounds the first student to reach the correct symbol could be chosen to select the 2 numbers. If playing later in the year students may be shown 2 vs 2 numbers which are added together before they are compared ie. (3 & 6) vs (7 & 1).



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.4 - Models with mathematics.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.1 - Travels safely within a large group.
- PE 1.3 - Demonstrates a contrast between slow and fast locomotor skills.
- PE 1.10 - Travels in a straight, curved and zigzag pathway.
- PE 2.5 - Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activities.
- PE 5.4 - Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



COUNTING & CARDINALITY 6 RECORDING SHEET

=

>

Greater
Than

<

Less
Than

1

2

3

4

5

6

7

8

9

10

CC.1

CC.2

CC.3

CC.4

CC.5

CC.6

OA.1

OA.2

OA.3

OA.4

NBT.1

MD.1

MD.2

MD.3

G.1

G.2

G.3

G.4

G.5

G.6



LEVEL

1

K.OA.1

OPERATIONS & ALGEBRA 1

In this Math 'N' Movement activity students will represent addition with objects and verbal explanations.

ACTIVITY

1. In groups of 3 or 4, students stand 2 steps from the edge of their team's hula hoop.
2. Students take it in turns to throw their 5 bean bags into their team's hula hoop.
3. Students use their Operations & Algebra 1 Recording Sheet to show how many of the bean bags landed in the hoop.
4. If a student gets all 5 bean bags into the hoop they take 2 steps backwards and try from there next time.
5. Each student takes it in turns to repeat throwing 3 times and record their bean bags and steps taken.
6. Students add up the total number of bean bags they, their team and the class got into the hula hoop each round over 4 day.



Equipment Required:

- 5 bean bags per student.
- 1 hula hoop per team.
- An Operations & Algebra 1 Recording Sheet and a pencil per student.



Notes:

This activity can be repeated either once a day for 4 days or on a given day each week for 4 weeks so students can see an increase in their skill level over time. Students will need help adding up the total for all the team's bean bags but this is a good culminating activity each day.



Mathematical Practices Covered:

- K.2 - Reasons abstractly and quantitatively.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.13 - Tosses and catches a bean bag.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.

CC.1

CC.2

CC.3

CC.4

CC.5

CC.6

OA.1

OA.2

OA.3

OA.4

NBT.1

MD.1

MD.2

MD.3

G.1

G.2

G.3

G.4

G.5

G.6



MATH 'N' MOVEMENT



OPERATIONS & ALGEBRA 1 RECORDING SHEET

Day 1	Steps from hoop	Your bean bags in hoop	Your team's bean bags in hoop	Whole class' bean bags in all hoops
Round 1				
Round 2				
Round 3				
Total				

Day 2	Steps from hoop	Your bean bags in hoop	Your team's bean bags in hoop	Whole class' bean bags in all hoops
Round 1				
Round 2				
Round 3				
Total				

Day 3	Steps from hoop	Your bean bags in hoop	Your team's bean bags in hoop	Whole class' bean bags in all hoops
Round 1				
Round 2				
Round 3				
Total				

Day 4	Steps from hoop	Your bean bags in hoop	Your team's bean bags in hoop	Whole class' bean bags in all hoops
Round 1				
Round 2				
Round 3				
Total				

CC.1

CC.2

CC.3

CC.4

CC.5

CC.6

OA.1

OA.2

OA.3

OA.4

NBT.1

MD.1

MD.2

MD.3

G.1

G.2

G.3

G.4

G.5

G.6



LEVEL

1

K.OA.2

OPERATIONS & ALGEBRA 2

In this Math 'N' Movement activity students will subtract within 10 by using objects.

ACTIVITY

1. In pairs, students stand 5 steps from the edge of their hula hoop.
2. The 1st student in each pair throws 5 bean bags into the hula hoop.
3. The student not throwing bean bags records their partner's score with '2' for a bag in the hoop but '1' subtracted for each bean bag outside the hoop. (A student can not score less than zero).
4. If a student gets all their bean bags into the hoop they take 2 step backwards for their next turn.
5. Each student takes it in turns to throw their 5 bean bags 3 times and records their partner's results on their Operations & Algebra 2 Recording Sheet.



Equipment Required:

- 5 bean bags per pair.
- 1 hula hoop per pair.
- An Operations & Algebra 2 Recording Sheet and pencil per pair.



Notes:

This activity should be repeated throughout the year so students can see an increase in their speed to tabulate the results and the improvement in their throwing skill level over time.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.7 - Looks for and makes use of structures.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.13 - Tosses and catches a ball.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activities.
- PE 5.3 - Demonstrates the characteristics of sharing in a physical activity.
- PE 5.4 - Identifies that positive social interactions make physical activity more fun.
- PE 5.5 - Participates as a leader and a follower during physical activities.



MATH 'N' MOVEMENT



Student 1: _____

Student 2: _____

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

Day 1	
Round 1	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 2	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 3	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____

Day 2	
Round 1	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 2	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 3	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____

Day 3	
Round 1	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 2	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 3	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____

Day 4	
Round 1	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 2	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 3	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____

Day 5	
Round 1	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 2	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____
Round 3	Steps from hoop: ____ Score: ____ Steps from hoop: ____ Score: ____

Note: Highlight your best score on each day to see how you improved over the 5 days.



- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

MATH 'N' MOVEMENT

LEVEL

1

K.OA.3

OPERATIONS & ALGEBRA 3

In this Math 'N' Movement activity students will decompose numbers up to 20 into equal parts by using objects.

ACTIVITY

1. In teams of 4 or 5, students line up 5 metres from their Operations & Algebra 3 Recording Sheet with their team's 20 counters and their transport container.
2. When an even number less than 20 is called the first student in each team places that many counters into their transport container and races, using the given movement, to their team's Operations & Algebra 3 Recording Sheet.
3. Students divide their counters into 2 piles and record how many are in each pile (half of the original number).
4. After all students have had 2 turns at counting and dividing, teams can identify what all the original numbers have in common (they are even numbers).



Equipment Required:

- 20 counters per team.
- A transport container per team.
- An Operations & Algebra 3 Recording Sheet and pencil per team.



Notes:

As students become more competent in this task, numbers greater than 20 could be used and students could estimate first whether the number is odd or even before racing to check with their counters.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.7 - Looks for and makes use of structures.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.3 - Demonstrates a contrast between slow and fast locomotor skills.
- PE 1.10 - Travels in a straight, curved and zigzag pathway.
- PE 2.5 - Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activities.
- PE 5.4 - Identifies that positive social interactions make physical activity more fun.
- PE 5.5 - Participates as a leader and a follower during physical activities.



LEVEL

1

K.OA.4

OPERATIONS & ALGEBRA 4

In this Math 'N' Movement activity students will find the number that makes 10 when added to the given number.

ACTIVITY

1. In teams of 4, students line up 5 metres from their Operations & Algebra 4 Recording Sheet and their container.
2. When a number of counters have been placed ready the first student in each team races, using the given movement, to their team's counters and counts how many have been placed out.
3. Students color in circles on their Operations & Algebra 4 Recording Sheet to record the number of counters and how many more counters are needed to make 10 (using counters if needed).
4. When correct, students return to their team and the remaining students take it in turns to record a new number of counters.



Equipment Required:

- 10 counters per team.
- An Operations & Algebra 4 Recording Sheet and pencil per team.



Notes:

As students become more competent in this task up to 20 counters could be used and students could estimate first the number of counters they think will be required. Similarly as they become more advanced numerals rather than counters could be used.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.
- PE 5.5 – Participates as a leader and a follower during physical activities.



MATH 'N' MOVEMENT



- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

Student	Counters Given	Counters Needed to Make 10
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____
_____	○ ○ ○ ○ ○ _____	○ ○ ○ ○ ○ _____

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9



LEVEL

1

K.NBT.1

NUMBER & BASE 10 - 1

In this Math 'N' Movement activity students will compose and decompose numbers up to 20 into tens and ones.

ACTIVITY

1. In teams of 4 or 5, students line up 5 metres from their Number & Base 10 Recording Sheet and their container of Base 10 blocks.
2. When a number from 1 to 20 is called the first student in each team races, using the given movement, to their team's blocks and counts out that many using tens and ones.
3. Students record the number of tens and ones on their Number & Base 10 Recording Sheet.
4. When correct, students return to their team and remaining students take it in turn receive a new number to create.



Equipment Required:

- A selection of Base 10 blocks per team.
- A Number & Base 10 Recording Sheet and pencil per team.



Notes:

Base 10 blocks are common in most schools but if you do not have them you can use headless match sticks, pop sticks or cut straws or print the set available for free at www.mathmovement.com.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.4 - Models with mathematics.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.
- PE 5.5 – Participates as a leader and a follower during physical activities.



MATH 'N' MOVEMENT

LEVEL

1

K.MD.1

MEASUREMENT & DATA 1

In this Math 'N' Movement activity students will describe length as a measurable attribute of objects.

ACTIVITY

1. Students take it in turns to perform a well executed leap into a long jump pit.
2. Students measure in footsteps next to the pit how far they leapt.
3. Students record on their Measurement & Data 1 Recording Sheet how far, in footsteps, they and 5 other class members leapt.
4. Students order the 6 jumps on their recording sheet from shortest leap to longest leap.



Equipment Required:

- A long jump pit.
- A Measurement & Data 1 Recording Sheet and pencil per student.



Notes:

This activity is a great way to demonstrate the varying foot sizes of students in the class and why a formal measuring unit is required when comparing student's jump lengths. Although it does tie in nicely with annual long jump carnival practice this activity does not need to be limited to once a year and could be used as good revision to see if students remember why formal measurements are required and if they are performing their leaps correctly.



Mathematical Practices Covered:

- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.



Physical Education Standards Covered:

- PE 1.3 - Demonstrates a contrast between slow and fast locomotor skills.
- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



MEASUREMENT & DATA 1 RECORDING SHEET

Your Name: _____

Student 1's Name: _____

Student 2's Name: _____

Student 3's Name: _____

Student 4's Name: _____

Student 5's Name: _____

Feet Lengths Leapt						
Order from Shortest (1) to Longest (6)						

- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6



MATH 'N' MOVEMENT

LEVEL

1

K.MD.2

MEASUREMENT & DATA 2

In this Math 'N' Movement activity students will directly compare 2 objects with a measurable attribute in common.

ACTIVITY

1. Students are shown 2 items such as an apple and a textbook and are shown on which side of the equal arm balance each will be placed.
2. Students predict on their Measurement & Data 2 Recording Sheet which way the balance will tip and when finished they move to the side of the balance which they think will be heaviest.
3. When all students have moved to their chosen side the items are placed on the balance and students mark whether or not they were correct.



Equipment Required:

- An equal arm balance.
- A collection of items to weigh.
- A Measurement & Data 2 Recording Sheet and pencil per student.



Notes:

This activity is the least active in the Level 1 Math 'N' Movement program but it can be adapted to increase the action component. If outside, students could travel around a set obstacle course and then select their chosen side of the balance.



Mathematical Practices Covered:

- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.



Physical Education Standards Covered:

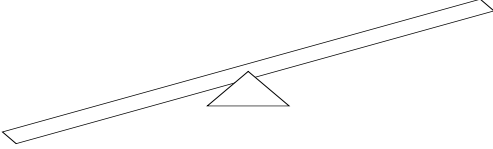
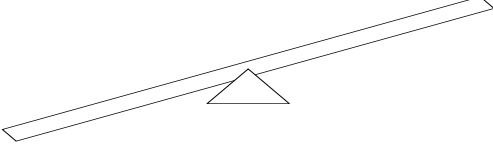
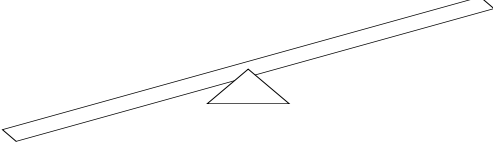
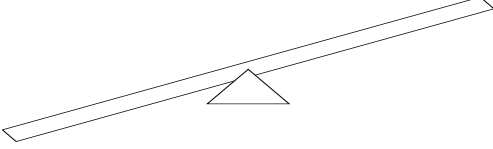
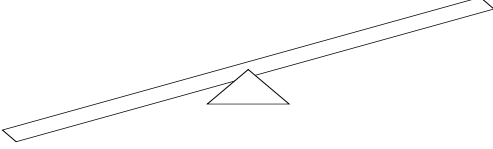
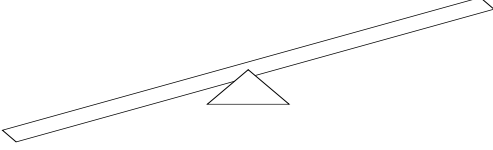
- PE 1.1 - Travels safely within a large group.
- PE 1.3 - Demonstrates a contrast between slow and fast locomotor skills.
- PE 1.10 - Travels in a straight, curved and zigzag pathway.
- PE 2.5 - Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activity.
- PE 5.4 - Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

Draw a picture of the items being weighed.	Predicted Heavier Item	Predicted Lighter Item	Were You Correct?
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No



MATH 'N' MOVEMENT

LEVEL

1

K.MD.3

MEASUREMENT & DATA 3

In this Math 'N' Movement activity students will classify objects into categories, count the number of objects in each category and sort the categories by count.

ACTIVITY

1. In teams of 4, students line up 5 metres from their Measurement & Data 3 Recording Sheet and their container of up to 10 red, up to 10 green, up to 10 blue and up to 10 yellow counters.
2. Students take it in turns to race, using the given movement, to their counters and each student counts how many counters there are of one colour and records this on their team's Measurement & Data 3 Recording Sheet.
3. When all 4 colours have been recorded, students work as a team to order the colours from most to least counters.



Equipment Required:

- A container of about 20 red, green, yellow and blue counters per team.
- A Measurement & Data 3 Recording Sheet and pencil per team.



Notes:

This activity can be repeated a number of times with different numbers of counters so that students have more opportunities to count and sort objects.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.



Physical Education Standards Covered:

- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.3 – Demonstrates the characteristics of sharing in a physical activity
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.
- PE 5.5 – Participates as a leader and a follower during physical activities.



MATH 'N' MOVEMENT



- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

10				
9				
8				
7				
6				
5				
4				
3				
2				
1				
X	Red Counters	Yellow Counters	Blue Counters	Green Counters

Circle the most common coloured counter: Red Yellow Blue Green

Circle the least common coloured counter: Red Yellow Blue Green



MATH 'N' MOVEMENT

LEVEL

1

K.G.1

GEOMETRY 1

In this Math 'N' Movement activity students will describe the relative position of objects using terms such as above, below, beside, in front of, behind and next to.

ACTIVITY

1. Students form pairs and 1 student records in words or pictures a set of directions on their Geometry 1 Recording Sheet for their partner to follow.

2. Students use verbal directions such as crawl next to the third table, walk in front of the first window, hop towards the bin and gallop around the blue chair.

3. The student giving the directions must have a destination recorded on their sheet and when their partner arrives at that destination the students swap roles.



Equipment Required:

- Items to use as directional markers such as chairs or trees.
- A Geometry 1 Recording Sheet and pencil per pair.



Notes:

As all students will be completing this task simultaneously it is important to ensure students do not put silly instructions such as jump over a chair or sprint to the other side of the room which could cause injury. It is also important that students use verbal directions not pointing to direct their partner.



Mathematical Practices Covered:

- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.7 - Looks for and makes use of structures.



Physical Education Standards Covered:

- PE 1.1 - Travels safely within a large group.
- PE 1.10 – Travels in a straight, curved and zigzag pathway.
- PE 2.1 - Understand the difference between over, under, behind, in front of etc.
- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

Student 1's Directions:

Final Destination: _____

Student 2's Directions:

Final Destination: _____



LEVEL

1

K.G.2

GEOMETRY 2

In this Math 'N' Movement activity students will correctly name and identify the 3D shapes 'sphere', 'cube' and 'pyramid'.

ACTIVITY

1. Students are shown the Geometry 2 3D Shape Cards - ball (sphere), box (cube) and pyramid which are then placed on the ground in 3 hula hoops at least 5 metres apart.
2. When one of the 3 shapes is called all students race, using the given movement, to that shape.
3. Once students can identify the shapes by name the shape's attributes can be used such as "the shape which rolls" and students move to the sphere.



Equipment Required:

- A copy of the Geometry 2 Shapes enlarged onto card.
- 3 hula hoops in which to place the 3D Shape Cards.



Notes:

If desired a physical 3D shape could be used instead of a picture.

The last student to reach each item could be chosen to call out the next item for students to run to. By choosing the last student to call the next item they have the advantage of knowing where they need to get to first thus improving their chances of not being last next time.



Mathematical Practices Covered:

- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.7 - Looks for and makes use of structures.
- K.8 - Looks for and expresses regularity in repeated reasoning.

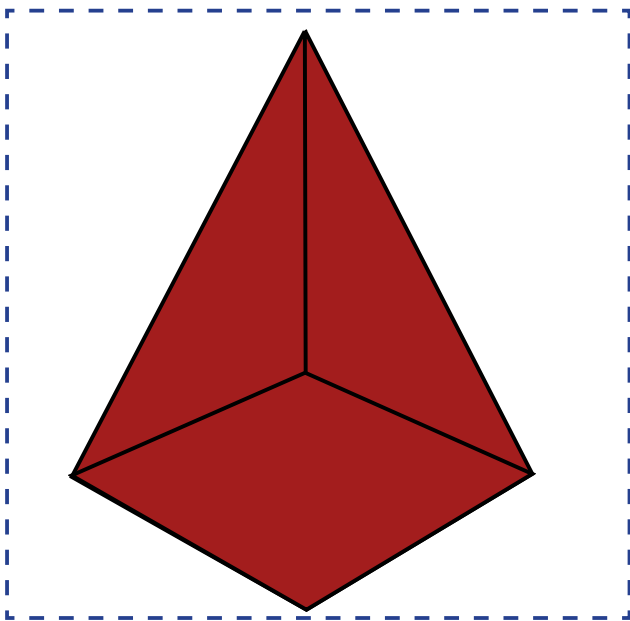
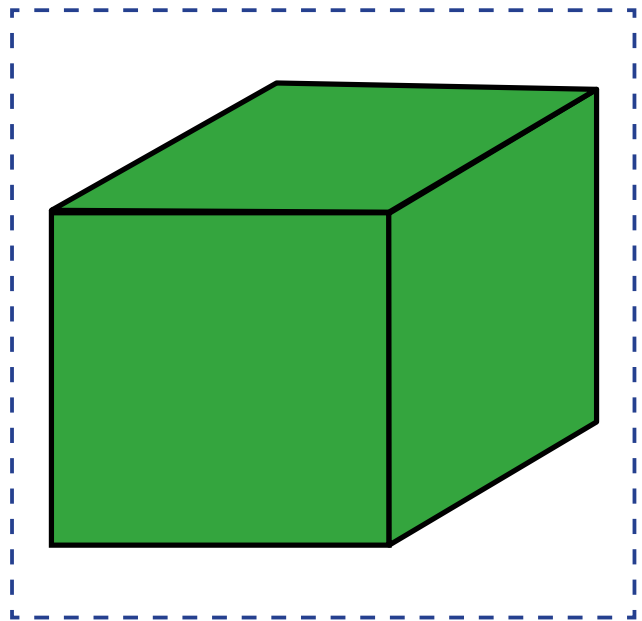
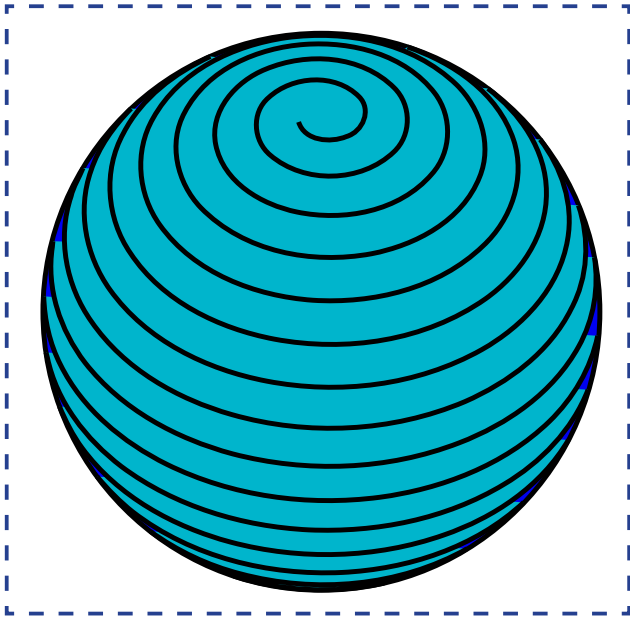


Physical Education Standards Covered:

- PE 1.1 - Travels safely within a large group.
- PE 1.2 - Travel forward and sideways and change directions at a signal.
- PE 1.3 - Demonstrates a contrast between slow and fast locomotor skills.
- PE 1.10 - Travels in a straight, curved and zigzag pathway.
- PE 2.5 - Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activities.



MATH 'N' MOVEMENT



CC.1

CC.2

CC.3

CC.4

CC.5

CC.6

OA.1

OA.2

OA.3

OA.4

NBT.1

MD.1

MD.2

MD.3

G.1

G.2

G.3

G.4

G.5

G.6



MATH 'N' MOVEMENT

LEVEL

1

K.G.3

GEOMETRY 3

In this Math 'N' Movement activity students will categorize shapes as 2 Dimensional (flat) or 3 Dimensional (solid).

ACTIVITY

1. Students are shown the Geometry 3 Cards '2 Dimensional' and '3 Dimensional' which are then placed on the ground in 2 hula hoops at least 7 metres apart.
2. When Geometry 3 items and shapes are shown all students race, using the given movement, to the card which best describes that item - '2 Dimensional' or '3 Dimensional'.
3. Once students can identify the shapes by sight their names can be used and called out so students must visualise the shape rather than have a representation of it.



Equipment Required:

- A copy of the Geometry 3 Cards '2 Dimensional' & '3 Dimensional' and items.
- A large area in which students can run.
- 2 hula hoops in which to place the Geometry 3 Cards.



Notes:

Any items at all can be used for this activity and they need not be shown as pictures. Students could be asked to categorize a cake, tire, an airplane, a house, a square or a circle. Be careful with items which are 2D but can also describe 3D items such as diamond or star.



Mathematical Practices Covered:

- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.
- K.7 - Looks for and makes use of structures.
- K.8 - Looks for and expresses regularity in repeated reasoning.



Physical Education Standards Covered:

- PE 1.1 - Travels safely within a large group.
- PE 2.5 - Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activities.
- PE 5.4 - Identifies that positive social interactions make physical activity more fun.

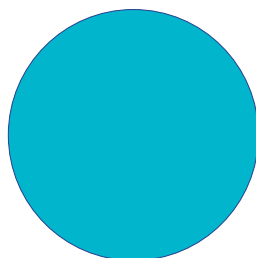
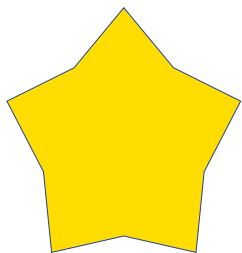
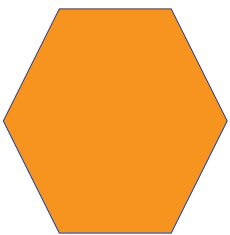
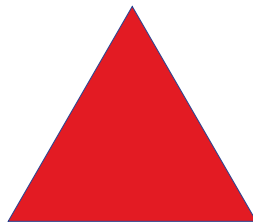
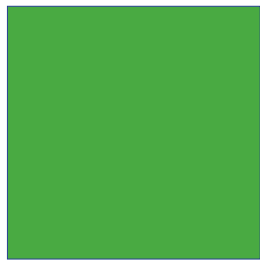
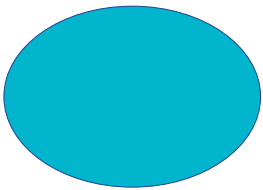
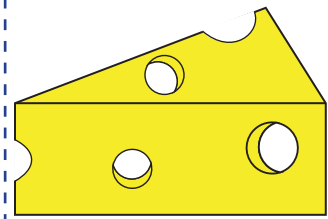
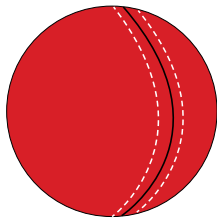
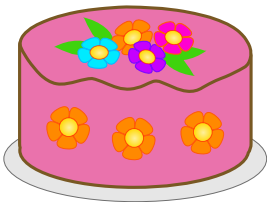
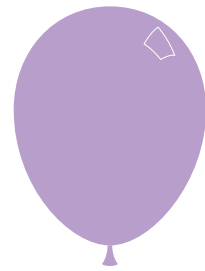
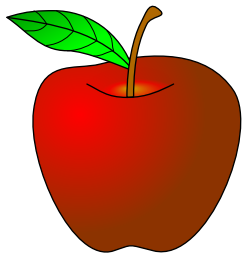
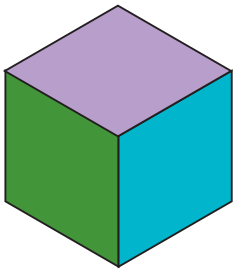


MATH 'N' MOVEMENT

GEOMETRY 3 RECORDING SHEET

2 Dimensional

3 Dimensional



- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

LEVEL

1

K.G.4

GEOMETRY 4

In this Math 'N' Movement activity students will analyse and compare 3 dimensional shapes based on their volume and order them from largest to smallest.

ACTIVITY

1. In teams of 5, students stand with their small plastic cup 5 metres from their bucket of water.
2. Teams estimate on their Geometry 4 Recording Sheet how many small cups of water will be required to fill each of their 5 larger containers.
3. Students take it in turns to fill the cup from the bucket and run it to the container. Remaining team members keep count of the number of times the smaller cup needs to be filled.
4. Students each get to fill one of the 5 containers and be the recorder for one of their team members.



Equipment Required:

- A plastic cup per team.
- A large bucket of water.
- 5 different containers to be filled per team.
- A Geometry 4 Recording Sheet and pencil per team.



Notes:

This activity is lots of fun but as students are running with water it is best completed in summer rather than winter. If the weather is very hot you may wish to complete it a number of times over consecutive days and compare the students' results.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.7 - Looks for and makes use of structures.



Physical Education Standards Covered:

- PE 1.3 - Demonstrates a contrast between slow and fast locomotor skills.
- PE 2.5 - Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 - Participates in enjoyable and challenging physical activities.
- PE 5.2 - Participates willingly in physical activities.
- PE 5.3 - Demonstrates the characteristics of sharing in a physical activity.
- PE 5.4 - Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



Students in group: _____

Draw a Picture of the Item Being Filled	Estimated Number of Cups	Actual Number of Cups	Order From Largest to Smallest

- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6



LEVEL

1

K.G.5

GEOMETRY 5

In this Math 'N' Movement activity students will model shapes in the world by building shapes from plasticine and straws and then sketch them.

ACTIVITY

1. In teams of 3 or 4, students line up 5 metres from their large ball of plasticine, collection of varying sized drinking straws and Geometry 5 Recording Sheet.
2. Each team is told the number of sides of the shape they will be making.
3. The first student in each team races, using the given movement, to their straws and plasticine and create a shape with the given number of sides.
4. When the first student creates the correct shape they name and sketch their shape on their team's Geometry 5 Recording Sheet before dismantling their straws ready for the next student.



Equipment Required:

- A ball of plasticine per team.
- A collection of plastic straws of various sizes per team.
- A Geometry 5 Recording Sheet and pencil per team.



Notes:

It is important to stress to students that 2D shapes are drawn while 3D shapes are solid but for this activity they are creating a 3D representation of a 2D shape which they are then converting back into 2D when they draw it.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.7 - Looks for and makes use of structures.



Physical Education Standards Covered:











- PE 2.5 – Identifies the locomotor skills of walk, jog, run, hop, jump, slide and gallop.
- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.



MATH 'N' MOVEMENT



GEOMETRY 5 RECORDING SHEET

Student	Number of Sides	Shape	Picture
_____		_____	
_____		_____	
_____		_____	
_____		_____	
_____		_____	

- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6



MATH 'N' MOVEMENT

LEVEL

1

K.G.6

GEOMETRY 6

In this Math 'N' Movement activity students will describe and compare the size of shapes using everyday language.

ACTIVITY

1. In pairs, students are given a container of small items such as blocks, rubbers, pencil sharpeners or bean bags.
2. Student work together to predict on their Geometry 6 Recording Sheet how many of the small item are required to cover the area of the larger item such as a textbook or desk.
3. Pairs then physically test their estimation and count the actual number of smaller items required to cover the larger area and record this on their shared Geometry 6 Recording Sheet.



Equipment Required:

- A container of small items per team.
- A selection of large items such as books or a tissue box.
- A Geometry 6 Recording Sheet and pencil per pair.



Notes:

It must be impressed upon students that this activity requires them to estimate and make a calculated guess so they need not be correct but within close proximity. If they guess 30 erasers will fit on the desk and 40 fit that is acceptable and should be commended. If they guessed 200 erasers some work may need to be done on estimating.



Mathematical Practices Covered:

- K.1 - Makes sense of problems and perseveres in solving them.
- K.2 - Reasons abstractly and quantitatively.
- K.3 - Constructs viable arguments and critique the reasoning of others.
- K.4 - Models with mathematics.
- K.5 - Uses appropriate tools strategically.
- K.6 - Attends to precision.
- K.7 - Looks for and makes use of structures.



Physical Education Standards Covered:

- PE 3.1 – Participates in enjoyable and challenging physical activities.
- PE 5.2 – Participates willingly in physical activities.
- PE 5.3 – Demonstrates the characteristics of sharing in a physical activity.
- PE 5.4 – Identifies that positive social interactions make physical activity more fun.
- PE 5.5 – Participates as a leader and a follower during physical activities.



MATH 'N' MOVEMENT



Students in Group: _____

Draw a picture of the small item being used	Draw a picture of the large area being covered	Estimate	Actual Number

- CC.1
- CC.2
- CC.3
- CC.4
- CC.5
- CC.6
- OA.1
- OA.2
- OA.3
- OA.4
- NBT.1
- MD.1
- MD.2
- MD.3
- G.1
- G.2
- G.3
- G.4
- G.5
- G.6

