

MATHS 'N' MOVEMENT



Australian Curriculum Edition
www.mathsnmovement.com.au

Rachel McCann

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

This edition of Maths 'N' Movement is designed specifically for Australian Schools and combines the New Australian Maths Syllabus with the PD/H/PE Syllabus. With programs available from Kindergarten to Year 6 it provides a fun way to effectively engage students in maths learning across all 17 strands of the New Australian Maths Curriculum.

Maths 'N' Movement increases both on task student behaviour and fitness by combining Maths with the key PD/H/PE topics of fundamental movement skills, co-operation, game play, safety, nutrition and acceptance of consequences for one's actions.

Designed to get more students, more active, more often, Maths '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 even realise they are working so 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.mathsnmovement.com.au.

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MATHS 'N' MOVEMENT



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MATHS 'N' MOVEMENT

LEVEL

5

ACMNA071

NUMBER & PLACE VALUE 1

In this Maths 'N' Movement activity students will investigate and use the properties of odd and even numbers.

ACTIVITY

1. The NPV1 words 'Odd' and 'Even' are placed on the ground in 2 hula hoops at least 7 metres apart.
2. Students stand as a class facing the words.
3. Students are given either single numbers (up to 3 digits) or multiplication tables such as 2×5 to solve and must race to the 'Odd' or 'Even' sign.
4. For each round students are told a new number or algorithm to solve and a new movement to be used such as hop, leap or sprint run.



Equipment Required:

- The NPV1 Words 'Odd' and 'Even'.
- A large area in which to play.
- 2 hula hoops in which to place the Words 'Odd' and 'Even'.



Notes:

As so many students are running to the same place at the same time this activity has the potential to lead to accidents. It is important for students to know that being in the vicinity of the correct word is sufficient and they do not need to be standing on top of it.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Recalls multiplication tables.

Problem-Solving - Compares large numbers with each other and uses properties of numbers.

Reasoning - Generalises from number properties and results of calculations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT



NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MG1

MG2

MG3

SHP1

SHP2

LTF1

LTF2

GMR

SPB1

SPB2

DTA

ODD

EVEN



MATHS 'N' MOVEMENT

LEVEL

5

ACMNA072/3

NUMBER & PLACE VALUE 2

In this Maths 'N' Movement activity students will recognise, represent, order, apply place value to, partition, rearrange and regroup numbers to assist calculations and solve problems.

ACTIVITY

1. In teams of 5, students line up 5 metres from their team's pile of Base 10 blocks.
2. When a number from 1 to 9, 999 is called the first student in each team races, using the given movement, to grab that many blocks from their pile.
3. When the first team member returns and their blocks have been checked by their team members they place their pieces into their team's hula hoop.
4. Each time a student returns with their blocks they are recorded on the team's NPV2 Recording Sheet and a running total is recorded.
5. Once every team member has collected their blocks the running total for the round on each team's NPV2 Recording Sheet should match the total of all the blocks in their team's hula hoop.



Equipment Required:

- A hula hoop per team.
- A selection of Base 10 Blocks - blocks, flats, longs and ones per team.
- A NPV2 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 the printable templates available at Mathnmovement.com or use headless match sticks or cut straws bundled with an elastic band into tens and then ten tens bundled into hundreds. It may also be necessary to use some solid and some printed materials as many schools have thousands of single blocks and very few thousands cubes.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Problem-Solving - Compares large numbers with each other.

Reasoning - Generalises from number properties and results of calculations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACMP046 - Examine the benefits of physical activity to health and wellbeing.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT



- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA

Round 1	Number Called	Previous Total	New Total
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			
Student 5: _____			

Round 2	Number Called	Previous Total	New Total
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			
Student 5: _____			

Round 3	Number Called	Previous Total	New Total
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			
Student 5: _____			

Round 4	Number Called	Previous Total	New Total
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			
Student 5: _____			



MATHS 'N' MOVEMENT

LEVEL

5

ACMNA074/5

NUMBER & PLACE VALUE 3

In this Maths 'N' Movement activity students will investigate number sequences and recall multiplication and division facts up to 10×10 .

ACTIVITY

1. In teams of 4 or 5, students are shown one of the NPV3 Number Sentences.
2. The first student in each team races, using the given movement, to their team's numbers and finds the answer to the number sentence and holds it up to be checked.
3. The first student to find the correct number scores 2 for their team and each other student with the correct number scores 1.
4. The students return their numbers to their pile and the remaining students take it in turn to solve an equation. The team with the most points at the end of the activity wins.



Equipment Required:

- A copy of the NPV3 Equation Cards.
- A set of NPV3 Number Cards per team.



Notes:

This activity need not be limited to the number sentence provided as students could create their own number sentences for other students to solve.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Recalls multiplication tables.

Problem-Solving - Formulates, models and records authentic situations involving operations.

Reasoning - Derives strategies for unfamiliar multiplication and division tasks



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACMP046 - Examine the benefits of physical activity to health and wellbeing.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT



$3 \times 3 = ?$	$21 \div 3 = ?$	$? = 2 \times 5$	$36 \div ? = 9$
$3 \times 2 = ?$	$30 \div 10 = ?$	$8 = 4 \times ?$	$35 \div ? = 5$
$9 \times 1 = ?$	$14 \div 2 = ?$	$24 = 3 \times ?$	$55 \div ? = 11$
$? \times 4 = 40$	$28 \div 7 = ?$	$12 = ? \times 2$	$40 \div ? = 5$

NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MG1

MG2

MG3

SHP1

SHP2

LTF1

LTF2

GMR

SPB1

SPB2

DTA



MATHS 'N' MOVEMENT



2	5	8
3	6	9
4	7	10

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA



LEVEL

5

ACMNA076

NUMBER & PLACE VALUE 4

In this Maths 'N' Movement activity students will develop efficient mental and written strategies for multiplication and for division where there is no remainder.

ACTIVITY

1. In teams of 4, students sit 5 metres from their pile of NPV4 Cards.
2. Teams are given a multiplication equation (ie. 3×5) and the first student in each team races, using the given movement, makes this and its answer with their NPV4 Cards and records it.
3. The second student in the team then races, using the given movement, to create a multiplicative comparison equation and records it (ie. $5 \times 3 = 15$).
4. The 2 remaining students create and record associated division equations (ie. $15 \div 3 = 5$ and $15 \div 5 = 3$). The order in which the equations are created does not matter but all 4 equations must be completed by each team. Each student has a chance to be 1st, 2nd and 3rd.



Equipment Required:

- A set of NPV4 Cards per team.
- A NPV4 Recording Sheet and pencil per team.



Notes:

The numbers from 1 to 10 have been provided for this activity but as students abilities increase these could be increased to include any double digit numbers x single digit numbers. There are 4 rounds on the Recording Sheet so each student can have a turn at being 1st, 2nd, 3rd and 4th thus giving them a chance at both multiplication and division and creating and adjusting the equation.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Recalls multiplication tables.

Problem-Solving - Formulates, models and records authentic situations involving operations and uses properties of numbers to continue patterns.

Reasoning - Generalises from number properties and results of calculations, derives strategies for unfamiliar multiplication and division tasks.



Health & Physical Education Standards Covered:

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ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT

NUMBER & PLACE VALUE 4

Round 1		Equations			
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>

Round 2		Equations			
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>

Round 3		Equations			
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>

Round 4		Equations			
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	x	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>
Student _____	<input type="text"/>	÷	<input type="text"/>	=	<input type="text"/>



- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PA11
- PA12
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA

MATHS 'N' MOVEMENT



0	7
1	8
2	9
3	10
4	X
5	÷
6	=

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA



LEVEL

5

ACMNA077/8

FRACTIONS & DECIMALS 1

In this Maths 'N' Movement activity students will investigate equivalent fractions used in contexts including quarters, halves and thirds.

ACTIVITY

1. Students are shown the FD1 Cards $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$ which are placed on the ground in hula hoops at least 7 metres from each other.

2. When shown a FD1 Equivalent Fraction Card students race, using the given movement, to the card which corresponds to the lowest common fraction or equivalent fraction to the fraction shown. So if $\frac{4}{16}$ is shown students would race to $\frac{1}{4}$ and if $\frac{20}{100}$ was shown students would race to $\frac{1}{5}$.



Equipment Required:

- The FD1 Cards $\frac{1}{2}$, $\frac{1}{3}$ & $\frac{1}{4}$.
- 5 hula hoops for the cards.
- The FD1 Fractions Cards.



Notes:

As students become competent at finding equivalent fractions they could be chosen to call out or write a fraction for other students to find the equivalent thus providing an infinite number of fractions for this activity.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers.

Fluency - Recalls multiplication tables and communicates sequences of simple fractions.

Problem-Solving - Compares large numbers with each other.

Reasoning - Derives strategies for unfamiliar multiplication and division tasks.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT

FRACTIONS & DECIMALS 1

$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$
$\frac{3}{6}$	$\frac{3}{9}$	$\frac{3}{12}$
$\frac{4}{8}$	$\frac{4}{12}$	$\frac{4}{16}$
$\frac{5}{10}$	$\frac{5}{15}$	$\frac{5}{20}$
$\frac{6}{12}$	$\frac{6}{18}$	$\frac{6}{24}$
$\frac{10}{20}$	$\frac{10}{30}$	$\frac{10}{40}$

NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MGI

MG2

MG3

SHP1

SHP2

LTF1

LTF2

GMR

SPB1

SPB2

DTA



LEVEL

5

ACMNA079

FRACTIONS & DECIMALS 2

In this Maths 'N' Movement activity students will recognise that the place value system can be extended to tenths and hundredths and make connections between fractions and decimal notation.

ACTIVITY

1. In teams of 4, students stand with their 2 decahedron dice and FD2 Recording Sheet 5 metres from their team's calculator.
2. Student take it in turn to roll their 2 dice and record the 2 numbers on their FD2 Recording Sheet with the smaller number on top and the larger on the bottom. If the same number is rolled twice the student rolls again.
3. The student who rolled then races, using the given movement, with their FD2 Recording Sheet, to their calculator to divide the smaller number by the larger number to create a 2 decimal point notation.
4. The first student records the decimal and returns to their team where the next student should have already rolled the dice and have their 2 numbers.



Equipment Required:

- A calculator per team.
- 2 decahedron (10 sided dice) per team.
- A NPV4 Recording Sheet and pencil per team.



Notes:

A decahedron dice has the numbers from 1 to 10 on it but any sided dice could be used or the dice could be rolled twice to create 2 double digit numbers. As a culminating activity students could look at why the fractions $\frac{1}{2}$, $\frac{3}{6}$, $\frac{4}{8}$ and $\frac{5}{10}$ had the same decimal notation. They could also look at why fractions such as $\frac{2}{7}$ create a smaller decimal than $\frac{6}{7}$.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly and extends place value to decimals.

Fluency - Recalls multiplication tables and communicates sequences of simple fractions.

Problem-Solving - Formulates, models and records authentic situations involving operations and uses properties of numbers to continue patterns.

Reasoning - Generalises from number properties and results of calculations and derives strategies for unfamiliar multiplication and division tasks.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT

FRACTIONS & DECIMALS 2

NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MG1

MG2

MG3

SHP1

SHP2

LTF1

LTF2

GMR

SPB1

SPB2

DTA

Student 1:

Number 1
(Smaller)

Number 1

Number 2

Calculation

÷

=

0. ____

Number 2
(Larger)

Answer

Student 2:

Number 1
(Smaller)

Number 1

Number 2

Calculation

÷

=

0. ____

Number 2
(Larger)

Answer

Student 3:

Number 1
(Smaller)

Number 1

Number 2

Calculation

÷

=

0. ____

Number 2
(Larger)

Answer

Student 4:

Number 1
(Smaller)

Number 1

Number 2

Calculation

÷

=

0. ____

Number 2
(Larger)

Answer

Student 5:

Number 1
(Smaller)

Number 1

Number 2

Calculation

÷

=

0. ____

Number 2
(Larger)

Answer



LEVEL

5

ACMNA080

MONEY & FINANCIAL MATHS

In this Maths 'N' Movement activity students will solve problems involving purchases and the calculation of change to the nearest five cents.

ACTIVITY

1. In teams of 4 or 5, students sit with their MFM Recording Sheet at least 5 metres from their team's bowl containing \$50 in play money with notes and coins.
2. Each team is shown 2 or more Shopping Cards and calculates on their MFM Recording Sheet the cost of their items and the change from \$5 required if the items were purchased.
3. The first student in each team must race, using the given movement, to their \$50 money bowl and count out the correct change.
4. When correct the student returns to their team and the next student in each team is shown either a new item or multiple items to be purchased.



Equipment Required:

- A selection of coins and notes to make \$50.00 per team.
- A MFM Recording Sheet and pencil per team.
- The MFM Shopping Cards.



Notes:

The shopping items need not be limited to those provided here but could be called out without a picture to accompany them or additional cards could be made from store catalogues. If desired this could also use technology and a calculator could be used and students purchase many items.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly and extends place value to decimals.

Problem-Solving - Formulates, models and records authentic situations involving operations and compares large numbers with each other.

Reasoning - Derives strategies for unfamiliar multiplication and division tasks.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM048 - Adopts inclusive practices when participating in physical activities.

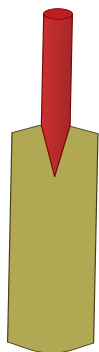
ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT

MONEY & FINANCIAL MATHS

\$13.15



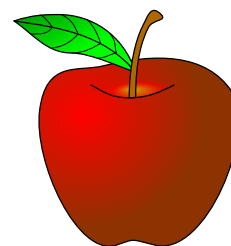
\$24.90



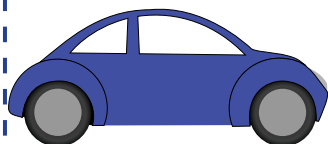
\$3.25



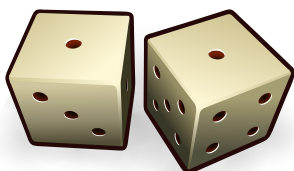
\$1.50



\$9.45



\$2.75



\$12.20



\$14.90



\$2.65



\$4.50



75c



95c



LEVEL

5

ACMNA081

PATTERNS & ALGEBRA 1

In this Maths 'N' Movement activity students will explore and describe number patterns resulting from performing multiplication using 2, 3, 5 and 10 x tables.

ACTIVITY

1. In teams of 5, students line up with their pile of PAA1 Numbers, 5 metres from their team's hula hoop.
2. When 3 numbers are called ie. 25, 35 and 45 the first student in each team selects the next 3 numbers in that series from their PAA1 Numbers and races, using the given movement, to place these in order in their hula hoop.
3. The first team to place their numbers correctly scores 2 points for their team and each other team with the correct numbers scores 1 point. If incorrect no points are scored by that team.
4. Students take it in turns to place numbers in the hula hoop and the team with the most points wins.



Equipment Required:

- A set of PAA1 Numbers per team.
- A hula hoop per team.



Notes:

As students become proficient with the numbers provided and are able to incorporate numbers greater than 100 they could be given blank squares of paper on which to write the correct numbers to be placed in their hoop. This activity can also include more difficult tables such as 4, 6 and 7 as students ability increases.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers.

Fluency - Recalls multiplication tables and creates patterns with these.

Problem-Solving - Formulates, models and records authentic situations involving operations and uses properties of numbers to continue patterns.

Reasoning - Generalises from number properties and results of calculations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

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MATHS 'N' MOVEMENT

PATTERNS & ALGEBRA 1

2	3	4	5	6
8	9	10	12	14
15	16	18	20	21
22	24	25	26	27
28	30	32	33	34
35	36	38	39	40
42	44	45	46	48
50	51	52	54	55
56	57	58	60	62
63	64	65	66	68
69	70	72	74	75
76	78	80	81	82
84	85	86	87	88
90	92	93	94	95
96	98	99	100	

NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MG1

MG2

MG3

SHP1

SHP2

LTF1

LTF2

GMR

SPB1

SPB2

DTA



LEVEL

5

ACMNA082/3

PATTERNS & ALGEBRA 2

In this Maths 'N' Movement activity students will solve word problems and number sentences involving multiplication or division.

ACTIVITY

1. Students stand in the middle of the PAA2 Number Cards '3', '4', '5', '7', '9' and '10' which are placed in 6 hula hoops spread in a large square with at least 5 metres between each hoop.

2. When a PAA 2 Problem is read out students record the number sentence and their answer and then race, using the given movement, to the number which correctly answers the question.



Equipment Required:

- A set of PAA2 Number Cards.
- The PAA2 Word Problems.
- A PAA2 Recording Sheet and pencil per student.
- 6 hula hoops in which to place the numbers.



Notes:

There are 12 problems provided with answers being 2, 3, 4, 5, 9 and 10. The need to record the numbers sentence means that students are able to demonstrate how they reached their chosen answer and they are not just copying other students in racing to a given number. Other questions could be used to match students interest in this activity or to include additional factors and tables as students ability increases.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Recalls multiplication tables.

Problem-Solving - Formulates, models and records authentic situations involving operations.

Reasoning - Generalises from number properties and results of calculations and derives strategies for unfamiliar multiplication and division tasks.



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ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

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MATHS 'N' MOVEMENT

PATTERNS & ALGEBRA 2

	Word Problem	Solution	Answer
1	If it cost \$27 for 9 books - how much does each book cost?	$27 \div 9 = ?$	3
2	If there are 20 students and only 5 lunch benches - how many students sit at each bench?	$20 \div 5 = ?$	4
3	If it cost \$50 to buy 10 salad sandwiches - how much did each sandwich cost?	$50 \div 10 = ?$	5
4	If there are 21 pencils in a pack and 3 students need them - how many can each student have?	$21 \div 3 = ?$	7
5	If apples cost \$18 for 2 bags - how much does each bag of apples cost?	$18 \div 2 = ?$	9
6	If you visit the dentist once every 6 months - how many times do you see the dentist in 5 years? *Tricky*	$12 \div 6 = 2$ $2 \times 5 = ?$	10
7	If 7 toothbrushes cost \$21 - how much does each toothbrush cost?	$7 \times ? = 21$	3
8	If 4 bottles of water cost \$16 - how much does each bottle cost?	$4 \times ? = 16$	4
9	If you run for 9 minutes each day at school - how many days does it take to run for 45 minutes?	$9 \times ? = 45$	5
10	If 1 apple costs 50c - how much does it cost in dollars for 14 apples?	$0.50 \times 14 = ?$	7
11	If a dozen eggs are \$3 - how much for 36 eggs? * Very Tricky*	$36 \div 12 = 3$ $3 \times 3 = ?$	9
12	If you drink 2L of water each day for 5 days - how much water have you drunk in a school week?	$2 \times 5 = ?$	10



MATHS 'N' MOVEMENT



Q	Word Problem Information	Working Out	Answer
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA



MATHS 'N' MOVEMENT



3	7
4	9
5	10

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA



LEVEL

5

ACMMG084

MEASUREMENT & GEOMETRY 1

In this Maths 'N' Movement activity students will use scaled instruments to measure and compare lengths.

ACTIVITY

1. In teams of 4, students predict on their MG1 Recording Sheet how far they will be able to long jump into a long jump pit.
2. Students line up 5 metres from the long jump pit and each student runs and jumps into the pit. Student's jumps are measured based on the part of their body closest to the jump board. Students record the distance on their MG1 Recording Sheet and compare this to their prediction.
3. Each student's jumped length is deducted from 3 metres to find their final score.
4. The student with the lowest score after 4 rounds has jumped the furthest and is the long jump champion.



Equipment Required:

- A long jump pit.
- A tape measure.
- A MG1 Recording Sheet and pencil per team.



Notes:

This is a great activity to complete in the lead up to a school athletics carnival but if you do not have a long jump pit students can perform a standing jump and deduct their length from 2 metres rather than 3 metres.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly and extends place value to decimals.

Fluency - Uses instruments to measure accurately.

Problem-Solving - Formulates, models and records authentic situations involving operations and compares large numbers with each other.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT



Round 1	Predicted Jump Length	Actual Jump Length	3m – Jump Length
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			

Round 2	Predicted Jump Length	Actual Jump Length	3m – Jump Length
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			

Round 3	Predicted Jump Length	Actual Jump Length	3m – Jump Length
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			

Round 4	Predicted Jump Length	Actual Jump Length	3m – Jump Length
Student 1: _____			
Student 2: _____			
Student 3: _____			
Student 4: _____			

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA



LEVEL

5

ACMMG290

MEASUREMENT & GEOMETRY 2

In this Maths 'N' Movement activity students will compare objects using familiar metric units of area.

ACTIVITY

1. In pairs, students predict on their MG2 Recording Sheet the area of pieces of classroom furniture and work items in cm^2 .
2. Using a ruler students work together to measure the perimeter of each item they chose and calculate its actual area.
3. Students use their predicted area and measured area to find the difference between their estimations and the actual item's size.



Equipment Required:

- General classroom items ie. chair, table, textbook, ruler etc.
- A MG2 Recording Sheet and pencil per pair.



Notes:

Students may need a set of suggested items to measure such as a textbook, eraser, desk etc. The more spaced out the items the more students will be moving during this activity. There is enough space for each pair to predict and measure 10 items on their MG2 Recording Sheet. Each pair's estimations should become closer to the actual item's size as they progress through this task.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly and extends place value to decimals.

Fluency - Uses instruments to measure accurately.

Problem-Solving - Formulates, models and records authentic situations involving compares areas.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



LEVEL

5

ACMNA085/6

MEASUREMENT & GEOMETRY 3

In this Maths 'N' Movement activity students will convert between units of time and use 'am' and 'pm' notation to solve simple time problems.

ACTIVITY

1. In teams of 4 or 5, students line up with their MG3 Recording Sheet 5 metres from their 2 decahedron dice from 0 to 9.
2. The first students in each team race, using the given movement, to their dice to roll and they record the 2 numbers in the correct place in the problem on their MG3 Recording Sheet.
3. Team's work together to use the number of minutes created to solve their MG3 Time Problem in digital notation using am or pm correctly.
4. The second student in the team races, using a new movement, to create the time they recorded on their team's analogue clock. They will need to bring their Recording Sheet with them to be checked too.



Equipment Required:

- An analogue student clock per team.
- A pair of decahedron dice per team.
- A MG3 Recording Sheet and pencil per team.



Notes:

The questions have been designed to allow students to both add and subtract time and to use 24 and 12 hour times.

It would be a good idea to print the cards and laminate them. If students write on them in whiteboard pen they can be used multiple times with different dice rolls.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly and uses appropriate language to communicate times.

Fluency - Collects and records data such as times.

Problem-Solving - Formulates, models and records authentic situations and compares time durations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT

MEASUREMENT & GEOMETRY 3

NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MG1

MG2

MG3

SHP1

SHP2

LTF1

LTF2

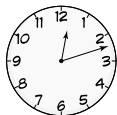
GMR

SPB1

SPB2

DTA

Mary got to school at



It was lunch time in

_____ minutes.

Number 1 Number 2

What time was lunch?

_____ : _____ am/pm

Brent's watch showed

18:12

It was bed time in

_____ minutes.

Number 1 Number 2

What time was bed time?

_____ : _____ am/pm

The school clock showed

15:08

Mustafa would be home in

_____ minutes.

Number 1 Number 2

What time would Mustafa be home?

_____ : _____ am/pm

Sura's phone alarm went off at

5:27

This was

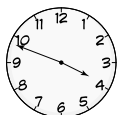
_____ minutes early.

Number 1 Number 2

What time was Sura meant to wake up?

_____ : _____ am/pm

The train arrived at



It was running

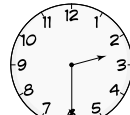
_____ minutes late.

Number 1 Number 2

What time should it have arrived?

_____ : _____ am/pm

Bob wants to be at a party at



Walking to the party takes

_____ minutes.

Number 1 Number 2

What time does Bob need to leave home?

_____ : _____ am/pm



LEVEL

5

ACMMG087

SHAPE 1

In this Maths 'N' Movement activity students will compare the areas of regular and irregular shapes by informal means.

ACTIVITY

1. Students are shown a number of bowl containing items such as blocks, rubbers, dice or bean bags which are placed at least 5 metres from the students.
2. In pairs, students predict on their SHP1 Recording Sheet how many of one of the small item they choose will be required to cover the area of a larger item of their choice such as a textbook or desk.
3. Pairs then use the given movement, to retrieve small items to physically test their estimation and count the actual number of smaller items required to cover the larger area and record this on their shared SHP1 Recording Sheet.
4. When students have finished they return the items and use different items to measure each of their remaining 5 large items.



Equipment Required:

- A container of small items per team.
- A selection of large items such as books or a tissue box.
- A SHP1 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:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Uses instruments to measure accurately.

Problem-Solving - Formulates, models and records authentic situations involving operations.



Health & Physical Education Standards Covered:

ACPMPO43 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPMPO48 - Adopts inclusive practices when participating in physical activities.



MATHS '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

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA



LEVEL

5

ACMMG088

SHAPE 2

In this Maths 'N' Movement activity students will compare and describe two dimensional shapes that result from combining and splitting common shapes.

ACTIVITY

1. In teams of 3, students line up their plasticine 5 metres from their drinking straws and SHP2 Recording Sheet. Each team is told the number of sides of the shape they will be making first.
2. The first student in each team races, using the given movement, to their straws and gets straws to create a shape with the given number of sides.
3. When the first student creates the correct shape they race back and name and sketch their shape on their team's SHP2 Recording Sheet.
4. When the next number of sides is called the second student uses their existing shape as the base for their new shape and only retrieves additional straws if required. When made they race to record it. A new number of sides is called for the third team members.



Equipment Required:

- A ball of plasticine per team.
- A collection of plastic straws per team.
- A SHP2 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:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Creates patterns with shapes and their transformations.

Problem-Solving - Formulates, models and records authentic situations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.











ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT



- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA

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



LEVEL

5

ACMMG090

LOCATION & TRANSFORMATION 1

In this Maths 'N' Movement activity students will use simple scales and co-ordinate directions to interpret information contained in basic maps.

ACTIVITY

1. In pairs, students sit with their LTF1 Game Board, 5 metres from their apple markers.
2. Students marks on their own LTF1 Game Board where they will place their apples. They can be placed vertically or horizontally but not diagonally.
3. When their apples have been placed students take it in turns to ask each other, using co-ordinates, if they have an apple at a given locations.
4. When part of an apple is picked the student who picked the apple must race, using the given movement, to get an apple marker to record the position on their LTF1 Game Board.
5. The first student to pick all of their partner's red apples is the winner.



Equipment Required:

- A LTF1 Orchard Game Board and pencil per pair.
- Apple markers per student centrally located at least 5 metres from any pair.



Notes:

This is the most sedentary of the activities in this level but by having students collect the red counters to mark their apples they will be getting up and down and moving a lot more than if the markers were on their desk for the entire activity. Obviously the further away the counters the more movement students will perform. There are enough apple markers for 7 students on the Apple Marker page.



Mathematical Practices Covered:

Understanding - Using appropriate language to communicate locations.

Fluency - Creates patterns with shapes and their transformations and collects and records data.

Problem-Solving - Formulates, models and records authentic situations.

Reasoning - Communicates information using graphical displays and evaluates the appropriateness of different displays.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.

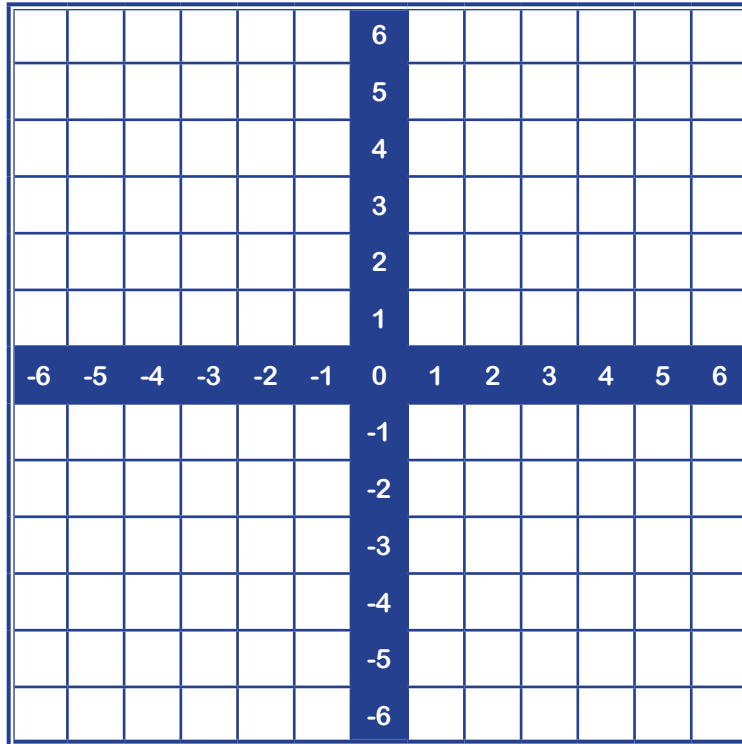


MATHS 'N' MOVEMENT



- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- TF1
- TF2
- GMR
- SPB1
- SPB2
- DTA

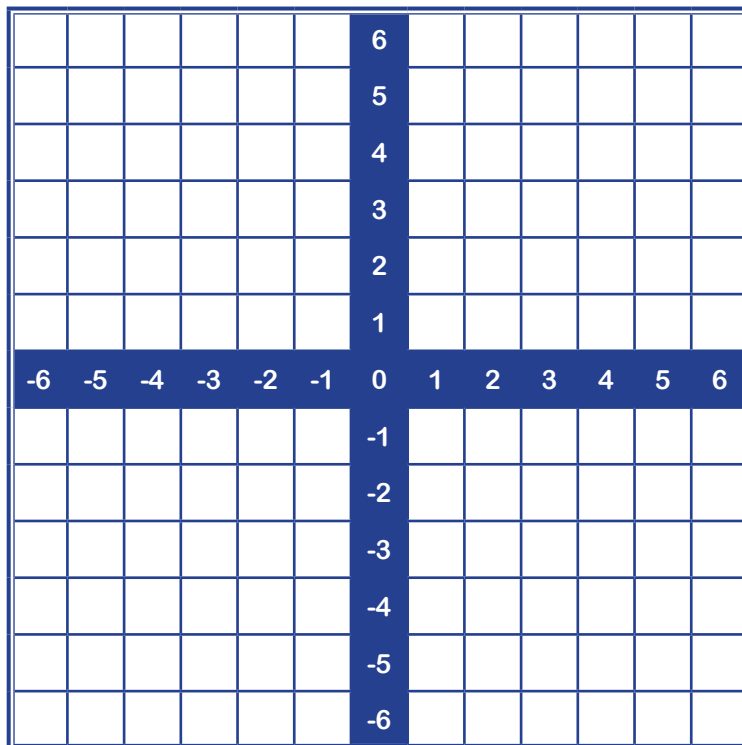
Your Apples Go On This Top Board



Your Apples - 2 Small, 2 Medium and 1 Large



Your Attempts To Pick Their Apples Go On This Board



LEVEL

5

ACMMG091

LOCATION & TRANSFORMATION 2

In this Maths 'N' Movement activity students will create symmetrical patterns, pictures and shapes.

ACTIVITY

1. In teams of 4, students line up at least 5 metres from their LTF2 Recording Sheet.
2. The first student in each team races, using the given movement, to their team's LTF2 Recording Sheet and draws one line of symmetry on the first shape.
3. Remaining students take it in turns to each race and draw a line a symmetry until 4 lines of symmetry are drawn on each shape.
4. Students change positions and repeat racing and drawing lines until all 4 students have had a chance to be 1st, 2nd, 3rd and 4th and all 4 shapes have 4 lines of symmetry drawn on them.



Equipment Required:

- A LTF2 Recording Sheet and pencil per team.



Notes:

Once all 4 shapes have 4 lines of symmetry on them teams could be asked to race and draw shapes or letters with 1, 2, 3 or 4 lines of symmetry rather than drawing lines on existing shapes. The shapes drawn could be used for later rounds of this same activity.



Mathematical Practices Covered:

Understanding - Describes properties of symmetrical shapes.

Fluency - Creates patterns with shapes and their transformations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

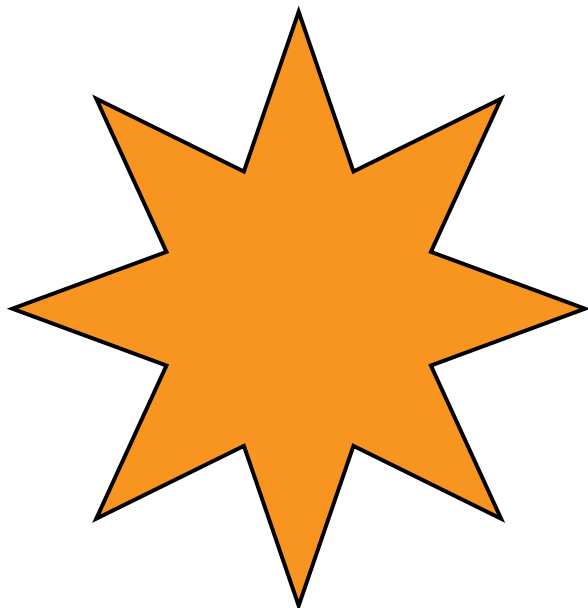
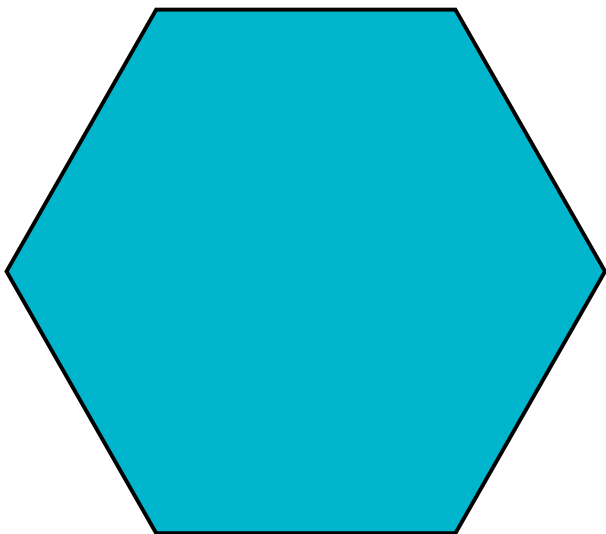
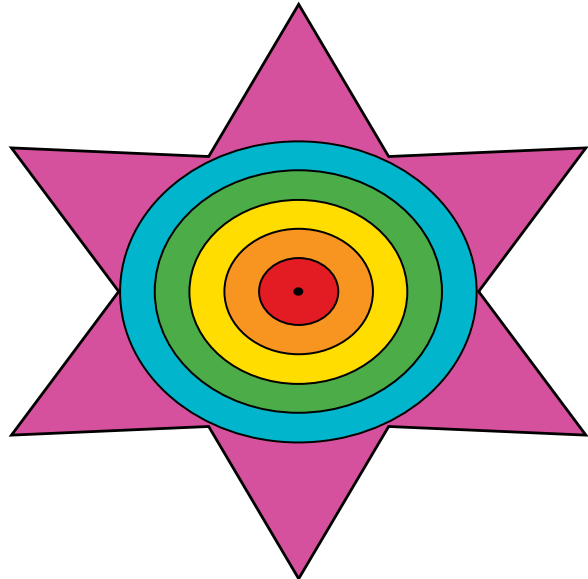
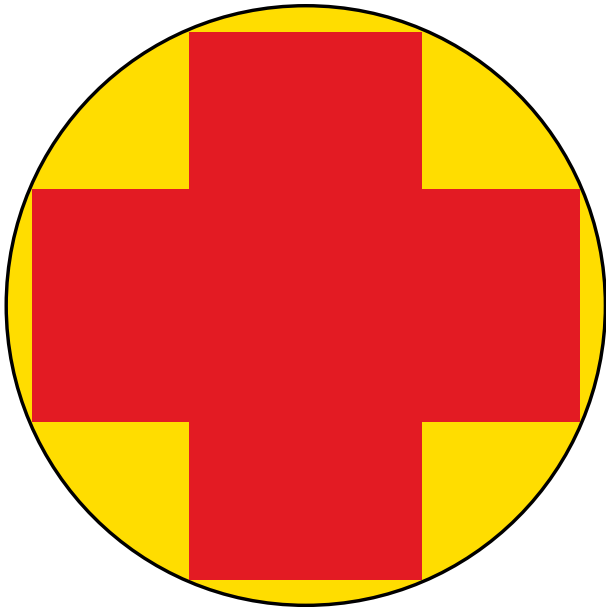
ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



MATHS 'N' MOVEMENT



NPV1
NPV2
NPV3
NPV4
FD1
FD2
MFM
PAA1
PAA2
MG1
MG2
MG3
SHP1
SHP2
LTF1
LTF2
GMR
SPB1
SPB2
DTA



LEVEL

5

ACMMG089

GEOMETRIC REASONING

In this Maths 'N' Movement activity students will compare angles and classify them as equal to, greater than, or less than, a right angle.

ACTIVITY

1. In pairs, students choose (within a given area of the school) 5 angles which they think are acute, 5 angles which they think are obtuse and 5 angles which they think are right angles.
2. Using the angles at the bottom of their GMR Recording Sheet students move, using the given movement, to each angle selected to check to see if they were correct.
3. Students score 3 points for a correct answer and add up their points to see how many points they scored for the activity and how accurate they were in their estimating skills.



Equipment Required:

- A GMR Recording Sheet and pencil per pair.



Notes:

To complete this task students will need to be given an area where there are more than just right angles. An area with trees or play equipment would be good as these can contain many unusual angles.



Mathematical Practices Covered:

Reasoning - Compares angles.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.

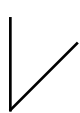

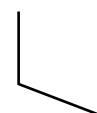


MATHS 'N' MOVEMENT

GEOMETRIC REASONING

- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTF1
- LTF2
- GMR
- SPB1
- SPB2
- DTA

Where the angle being used is located	Circle your prediction	Were you correct	Score 3 for each correct answer
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	
	Acute / 90° / Obtuse	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Acute Angle	90° Angle	Obtuse Angle
 <p>Less than 90°</p>		 <p>More than 90°</p>



LEVEL

5

ACMSP092

STATISTICS & PROBABILITY 1

In this Maths 'N' Movement activity students will describe possible everyday events and order their chances of occurring.

ACTIVITY

1. A long piece of rope is laid on the ground with the number '0' at one end and '1' at the other. Students are told that the numbers reflect the chance of events occurring and that they will move between these to cast their vote for each scenario.
2. If they think that there is no chance of the event occurring students move to stand at the 0.
3. If they think that there is a 100% chance of the event occurring students move to stand at the 1.
4. If they think that there is a 50% chance of the event occurring they stand in the middle of the rope.
5. As each scenario is read out students move, using the given movement, to their chosen position on the rope.



Equipment Required:

- A long rope.
- The SPB1 Numbers '0' and '1'.
- A copy of the SPB1 scenarios.



Notes:

Students standing at points on the rope not at the 0, 1 or midpoint can be asked to give a decimal number reflecting the likelihood of the event occurring. Similarly although a large selection of scenarios have been provided any of these can be omitted or additional scenarios added as students interest in the task waxes or wanes.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly and extends place value to decimals.

Problem-Solving - Formulates, models and records authentic situations.

Reasoning - Communicates information using graphical displays.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.



MATHS 'N' MOVEMENT



0

1

It will rain today.	You are enjoying this lesson.
You will go home this afternoon.	You are a boy.
You will sleep tonight.	You are a girl.
You will go overseas this year.	You will get hurt today.
You will eat dinner tonight.	You will play football this week.
You will drink 6 glasses of water today.	You will get new shoes this week.
The sun will shine this week.	You will go shopping with an adult this week.
You will meet a dinosaur.	It will be dark at midnight tonight.
You will see a car today.	It will be a full moon tonight.
You will do Maths this week.	You will do half an hour of continuous exercise today.
<p>You can jump 10 times on the spot (This is a final fun one to see the students who move on the line and those who start jumping).</p>	

NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PA1

PA2

MG1

MG2

MG3

SH1

SH2

LTF1

LTF2

GMR

SPB1

SPB2

DTA



LEVEL

5

ACMNA093/4

STATISTICS & PROBABILITY 2

In this Maths 'N' Movement activity students will identify everyday events where one cannot happen if the other happens and where the chance of one will not be affected by the occurrence of the other.

ACTIVITY

1. Students stand as a group in the middle of 2 hula hoops with the words 'Do affect each other' and 'Don't affect each other' spread out with at least 7 metres between them.
2. When a scenario is read out students race, using the given movement, to the hoop which contains the words which best describe the relationship between the 2 events.
3. Students can be selected to explain why they have made that particular choice before the answer is revealed.



Equipment Required:

- A pair of hula hoops.
- The SPB2 words 'do affect each other' and 'don't affect each other'.
- A copy of the SPB2 scenarios.



Notes:

As students become proficient at this task they could be selected to create scenarios for other students to decide whether the 2 elements will or won't effect each other.



Mathematical Practices Covered:

Problem-Solving - Formulates, models and records authentic situations.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.





NPV1

NPV2

NPV3

NPV4

FD1

FD2

MFM

PAA1

PAA2

MG1

MG2

MG3

SHP1

SHP2

LTF1

LTF2

GMR

SPB1

SPB2

DTA

Do Affect
Each Other

Don't Affect
Each Other

It rained today - The ground got wet.

You got picked up from school today - You will get picked up tomorrow.

You love Maths lesson - You love English.

You went overseas this year - You have a passport.

You ate your lunch for recess - You have no lunch at lunchtime.

You had a shower - You are clean.

Your favourite colour is red - Your sister's favourite colour is red.

You got hurt yesterday - You got hurt today.

You got new shoes last week - You don't need new shoes this week.

You can jump and touch the netball hoop - You must be tall.

MATHS 'N' MOVEMENT

LEVEL

5

ACMSP095/6/7

DATA

In this Maths 'N' Movement activity students will construct suitable data displays including tables, column graphs and picture graphs and evaluate the effectiveness of different displays in illustrating data features.

ACTIVITY

1. As a class students measure a distance of 10 metres.
2. Each student predicts of their Data Recording Sheet how many leaps it will take for them to cover the 10 metres.
3. Students cover the 10 metres distance in the least number of leaps possible and record their number of leaps and that of 10 of their classmates on their Data Recording Sheet.
4. Students find the average number of leaps of the students they selected, the person they chose who covered the distance in the least number of leaps, the student who covered the distance in the most number of leaps and the average distance of each of their individual leaps.



Equipment Required:

- A tape measure.
- A Data Recording Sheet and pencil per student.



Notes:

Although 10 metres and leaping is suggested for this activity the length could be shortened or lengthened and the movement could be changed to side gallops or 2 feet jumps. Similarly you could test these movements against a leap and see which allows students to cover the distance in the least number of moves. The Recording Sheet given is just a suggestion and students could be asked to create their own with their own scale and axis labels.



Mathematical Practices Covered:

Understanding - Makes connections between representations of numbers, partitioning and combining numbers flexibly.

Fluency - Uses instruments to measure accurately.

Problem-Solving - Formulates, models and records authentic situations involving operations.

Reasoning - Communicates information using graphical displays and evaluates the appropriateness of different displays.



Health & Physical Education Standards Covered:

ACPM043 - Practises and refines fundamental movement skills in a variety of movement sequences and situations.

ACPM045 - Practises and applies movement concepts and strategies with and without equipment.

ACPM048 - Adopts inclusive practices when participating in physical activities.

ACPM050 - Applies basic rules and scoring systems, and demonstrates fair play when participating in physical activities.



LEVEL 5 - ACMNA095/6/7 - DATA

Australian Curriculum Edition

MATHS 'N' MOVEMENT



- NPV1
- NPV2
- NPV3
- NPV4
- FD1
- FD2
- MFM
- PAA1
- PAA2
- MG1
- MG2
- MG3
- SHP1
- SHP2
- LTf1
- LTf2
- GMR
- SPB1
- SPB2
- DTA

Leaps Students Required To Cover 10m											
Number of Leaps	20										
	19										
	18										
	17										
	16										
	15										
	14										
	13										
	12										
	11										
	10										
	9										
	8										
	7										
	6										
5											
X	You _____	Student _____	Student _____	Student _____	Student _____	Student _____	Student _____	Student _____	Student _____	Student _____	Student _____

Least number of leaps a student required: _____

Most number of leaps a student required: _____

Average number of leaps all students required: _____

Average length of each of your leaps: _____ (10m ÷ Number of Leaps)

