INCORPORATING LITERACY AND NUMERACY INTO PLAYGROUND GAMES

NUMBER HUNT

**Equipment:** Number cards (1-30) or 3 x different coloured sets of number cards (1-10), chalk or skipping rope for variation game.

Hide a set of number cards (one per student) in the playground. The students have to find a number, bring it back to an agreed point and then arrange themselves in order.

**Variations:** Use three coloured sets of cards numbered 1-10 and have the students make 3 number lines based on the colour of their card. You could also ask the students to place the numbers along a number line (either chalk the line or use a skipping rope – label the ends 0 and 30).

![Number Line 0-30](image)

![Number Line 0-10](image)

**Questioning could include:**
- Which numbers will go before 7 / after 3?
- Hold up your number if it is less than 5.
- Which is the largest number on the line? How do you know?
- I’m thinking of a number. My number has a straight line at the top. Which numbers on the line might I be thinking of?

FIND THE NUMBER

**Equipment:** chalk or number cards

Chalk numbers on the playground or place number cards around the playground. There should be three or four copies of each number. To play, ask a question or give an instruction. The students have to stand by an appropriate number. Ask the children to explain their reasoning.
Instructions and questions could include:

- Skip, Run, Hop, Jump to a number that is smaller than 4 (vary loco motor each time).
- Run to number that is one more than 6?
- Skip to a number that comes between 5 and 8.
- Hop to a number that is amount of toes you have.
- Jump to a number that is double 3?
- Why did you choose that number?

SHAPE HUNT

Equipment: 1 x set of shape cards i.e. triangle, rectangle, square, circle, diamond, parallelogram, pentagon, and hexagon (make shape cards specific for stage).

Hide a set of coloured shapes (1 per student) in the playground, and then take the students on a hunt to find them. After a set amount of time, meet back together to talk about the shapes.

Variations: Students have to perform various loco motor skills when collecting the shapes, i.e. Skip, run, and hop. You could ask students to collect only one at time for each loco motor skill.

Questioning could include:

- How many shapes have you found?
- What can you tell me about this shape?
- How do you know this is a square?
- How do you know this shape is not a square?
- I’m thinking of a shape. It has 3 corners. Can you see the shape I might be thinking of?
- What is the same / different about these two shapes?
- How could we sort these shapes?
- Why does this shape belong in that group?
- Why doesn’t this shape belong?

PATTERNS

Equipment: dependent on choices below.

Provide a range of materials for children to use to make repeating patterns. These could include objects for printing or objects to be arranged e.g.

- Use people to make a pattern e.g. stand, stand, sit
- Use small apparatus – skipping ropes, quoits, bean bags etc – and arrange in a pattern on the playground
- Collect natural materials – sticks, pebbles, leaves etc- and make a repeating pattern around the edge of the playground.
- Dip old shoes with different patterned soles into water and print a pattern on the playground.
- Use fingers / tools (feathers, combs, cotton reels, glue spreaders etc) to make patterns in wet sand
CLUMPS

**Equipment:** hoops or chalk

Draw some large shapes on the playground or use hoops. The students move the playground about doing various loco-motor skills (run, jump, skip, hop, slide) until they hear the whistle. This is the signal to stand in a shape or hoop. Repeat asking different questions each time or giving different instructions (e.g. there must be three people in each shape, there must be 8 hands in each shape).

**Questioning could include:**
- How many people are in your shape?
- Which shape has the most / fewest people in?
- How many ears/feet/fingers in your shape? How did you count them? Can anyone think of a quicker way?
- How many groups of 3 can we make? How many children are left over?

BALL GAMES

**Equipment:** variety of balls (1 per pair),

Use a variety of balls to practise counting and estimating skills.

**Tasks could include:**
- Count how many times you and your partner can catch a ball without dropping it.
- Predict how many times you can bounce and catch a ball in a minute (each pair takes turns, helping their partner count, then swap roles)
- Can you and a partner roll a ball 20 times between you in a minute?
- Who can throw and catch a ball in the air the most times without dropping it? (Each pair takes turns, helping their partner count, then swap roles). You may want to put a time limit on this.
**SCORING GAMES**

**Hoopla**

**Equipment:** Chalk for writing down the scores, beanbags x 30, hoops x 6 and buckets x 6

Divide the class into 6 equal groups. Have each group line up behind a cone. Give each group 5 bean bags (or 1 per child if less than 5 in a group). Place a hoop 10 metres in front of each group. The students take turns to throw their beanbag towards their group hoop. One point is scored for every beanbag that lands in the hoop. Extend the game by increasing the hoop distance or placing a bucket inside the hoop – score two points for a beanbag in the bucket and one point for a beanbag in the hoop. Give them several rounds and get them to add up their total score from all rounds.

**Skittles**

**Equipment:** skittle/bowling sets, 1 ball per group.

Divide the class into equal groups. Give each group a skittle/bowling set and 1 ball. Students take turns to knock down the skittles. 1 point is scored for every skittle that is knocked down. Give them several rounds and get them to add up their total score from all rounds. (Make the scoring more difficult by increasing the bowling distance, numbering each skittle or changing the number of points each skittle is worth).

**Target**

**Equipment:** Chalk and a wall or hoops tied to a fence

Draw a number of shapes on a wall or tie hoops on the fence. Split the class into equal groups. Student within each group take turns to throw a ball against the wall and score a point each time a shape/hoop is hit. Give them several rounds and get them to add up their total score from all rounds.

**Variations:** Use the ground if a wall is not available. Change the scoring system by writing a number in each shape

*For all scoring games encourage the students to record their scores in some way e.g. by using numerals or tally marks or by drawing pictures.*
ROUTES

Provide a range of opportunities for students to hear and use words describing position, direction and movement.

Equipment: Chalk for drawing, obstacle equipment, blindfolds

Tasks could include:

- Drawing a track on the playground (right-angled turns only) and giving their partner directions to move from the start of the track to the end (your partner could close their eyes to make this more difficult).
- Laying out a number of pieces of apparatus and giving instructions to move through the obstacle course e.g. go between the cones, over the bench and under the bar. (The children could also make up their own sequence of actions and then give instructions to others).
- Playing a game of ‘Simon Says’ e.g. Simon says stand opposite your partner / stand between the benches / hop on your left foot / run around the outside of the playground

SYMMETRY

Equipment: skipping rope or chalk,

Lay a skipping rope on the ground to represent the mirror line or draw a line with chalk. Two children stand opposite each other on either side of the rope (imagining they are looking in a mirror). One child makes a shape and the other child makes the reflection.

Variations: The students could make a symmetrical pattern by laying out objects on either side of the mirror line. You may wish to take photos of the shapes/patterns to record the children’s work.

SOUNDS

Equipment: Have an object that makes a clear sound e.g. a drum, a whistle, a puppet that squeaks, coins dropped into a cup.

The students count the sounds (making the sounds in an irregular rhythm makes the counting more difficult).

Some ways of response are suggested below:

- The students jump or hop the same number of times
- They get into groups of that number
- They collect that many beanbags or markers (place these around the playground)
- They put the same number of feet in a hoop (place hoops at regular intervals around the playground – students can put one or two feet into it).
THE COMPASS/DIRECTIONS

Equipment: Chalk or compass playground marking

Use chalk or cones to mark out a compass on the playground, make it as large as you like. Label the compass with N, S, E, W, NE, SE, SW, and NW. The students move about the playground doing various loco-motor skills (run, jump, skip, hop,) in the direction called by the teacher e.g. run to N, skip to SE, Jump to W. You may wish to start by labelling each point of the compass with chalk or cards. Once the students get the hang of it take the labels away so they have to remember where the direction on the compass is.

Variations: Use numbers or shapes instead of directions.

Progression: Include counting, i.e. take 5 steps north, and jump 10 times S

Fun alternative: Alongside calling directions given them instruction to:
- Climb the riggings: pretend to climb rope
- Scrub the decks: on hands and knees pretending to scrub the deck
- Captains coming: stand tall and salute
- Man the life boat: form one line and pretend to row, or forms lines of any chosen number.

HOPSCOTCH RELAYS

Equipment: Chalk, bean bags x 4

Using chalk set up 4 hopscotch markings either in the shape of a cross or just spread out alongside each other. Split the class into 4 even teams and get them to stand in relay formation at the start of each hopscotch marking. The first student in each team throws a bean bag onto number one. The student moves along the numbers using one foot on single squares and two feet on double squares until they reach the number ten. The player turns around, hopping on one foot and returns to the start in the same way, picking up the bean bag once they reach it. Upon return they tag the next student in their team who then throws the bean bag to number 2, repeating the sequence until each team has thrown the bean bag to number 10. To help learn the numbers students are call each number out as they hop over it.

Rules: The bean bag must land on the correct number to jump along the hopscotch grid. If they miss they go to the end of the relay line and wait for their next turn. They are not allowed to jump on the square with the bean bag.

Variations: Throw to even numbers only, throw to odd numbers only.
**ENDURANCE AND SPEED SKIPPING**

**Equipment:** 1 skipping rope per person.

**Activities:**
- Counting: how many consecutive skips (without tripping) can you perform forwards? Backwards?
- Endurance: can you skip for one minute without a rest? Teacher to time group or get the students in pairs timing each other.
- Estimating: how many consecutive skips do you think you can you perform on your own, then with a partner?
- Counting: how many consecutive skips can you perform on your own then with a partner? Calculate the difference between estimated and achieved skips. Was it less or more?
- Speed: count how many skips you can do within 15 seconds. Teacher to time group.

**MEASURING**

Measure the length of the playground / how far from the door to the gate / how far around the grassy area:
- Using footsteps (giant/fairy)
- By putting people in a line touching hands
- By laying out skipping ropes / lengths of ribbon / paintbrushes

See how many children can fit:
- In a hoop (sitting down, standing up)
- In a ‘shape’ drawn on the playground with chalk (standing up, sitting down). Can you draw a ‘shape’ that exactly 7 children will fit in?

Compare how far two objects travel. This could include:
- Rolling two different cars down the same slope
- Rolling two identical cars down different slopes (e.g. make one slope out of a piece of cardboard and the other out of a piece of sandpaper)
- Rolling two different balls down a path
- Throwing a beanbag or javelin (a soft one!)

Lie on a large piece of paper and ask a partner to draw round your body outline. Dip your hand in paint and use handprints to measure:
- How many handprints tall you are
- How many handprints long your leg is
- How many handprints fit on your body

All of these activities provide the opportunity to discuss the difficulties with the use of non-standard units.
ONE HUNDRED

**Equipment:** Cones for the designated catching area, a wall and a tennis ball

The thrower tosses the tennis ball against the wall so it lands beyond the 5m line. If a player catches the ball the class gets 10 points, if the ball hits the ground within the playing area the ball thrower gets 10 points, if they catch it off one bounce they get 5 points. If the ball thrower gets to 50 points they win, if the class gets to 100 points they win.

**Variations:** Change the points scored, the number of throwers, make it an individual attempt to get the 100 points, split into smaller groups and repeat set up for one multiplied by how ever many games you want.

FARMER, FARMER, MAY WE CROSS YOUR GOLDEN RIVER?

One student is named as the farmer who stands in the middle of the designated playing area. The other players stand at one end of the playing area. Give each student a number i.e. from 1-30 if there are 30 children. The players call out “farmer, farmer, may we cross your golden river?” The farmer replies with a response such as “if your number has a 2 in it, is odd, even, a multiple of 5, equals 20 when added to 8”. The player(s) of the numbers called get a free run to the other side. On the teachers command, the remaining players must run to the other side without being tagged by the farmer. If a player is caught, they join the farmer (build up tag) and they take a turn at deciding the maths equation/ numbers to be called.

**Variation:** use letters instead of numbers e.g. “If your letter is a” or “If your letter is in the word Playground”. If you choose the words make the students arrange themselves to spell the word once they have made it to the other side.
**ALPHABET SKIPPING**

**Equipment:** large skipping rope

Select 2 players to turn the rope and the other players form a line. The first player jumps in and calls out “A”, jumps out and runs around to the end of the line. The next player repeats the pattern except they call out “B” and so on. Any player who interrupts the rhythm in anyway becomes the rope turner. Continue till you get to “Z”.

**Progression:** The students must call out a word starting with their letter.

**Variations:** Use numbers, see how high you can count without stopping the rope.

**LETTER RUSH**

**Equipment:** 1 set of letter mats with pop out letters, or letter cards x two full sets, 6 pieces of paper and pens to record team points in progression activity.

Place the pop out letters all around the playground with their corresponding mats also scattered around the playground. On the whistle the students have to find a letter, run to its corresponding mat and place the letter inside. Time the students to see how quickly they can do it.

**Variations:** an easier version is to have the mats in alphabetical order in a line, rather than having them scattered.

**Progression:** scatter one set of letters then split the class into even groups of 5-6 and line them up in relay formation. On the whistle, the first person from each team runs to collect a letter, brings it back to their group, tag the next team mate who runs to collect another letter until there are no letters left to collect. The team must then try to spell out a word with the letters their team has collected (some teams may have more letters then others if they ran faster). Each group gets 2 points for words with 2 letter e.g. at, in. 3 points for words with 3 letters e.g. ran, she. 4 points for words with 4 letters and so on. Have the students tally up and record their points for each round.
READY SET SPELL

**Equipment:** Exercise book per student open to a new page or a blank page on a clip board for each student, enough crayons for each child in the class.

Create a starting line, where all students are spread out with their clipboard/book. Scatter the crayons an equal distance away from each student (along a line approx 20-30 metres away). The teacher calls out a word and on the command “Ready, set, spell” the children run to the crayons, selecting one and then run back to their clipboards/books, write the word down, run back to the middle to place the crayon back and return to the start. Continue on until they have spelt out 10-20 words.

**Variations:** Call different types of locomotion along with the spelling word. E.g. Teacher calls out, "Skip, Banana" or” Hop, exercise”.

**Progression:** Instead of spelling the word called, the students write a word which rhymes with the word that was called. Or students write a sentence for the word that was called.

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POP STARS/FILM STARS

One person is the games leader and stands on one side of the designated area, while the others students stand at the other end (approx 20-30 metres away). The games leader calls out the initials of a film or pop star. As soon as players think they know who the initials stand for, they race to the front and back again, once they have returned they shout out the name. If he or she is correct they become the next games leader. If the group is having trouble guessing the name, the games leader can slowly spell out the name until someone guesses it.
**SPUD**

**Equipment:** one large and soft ball

Assign each player a number and one person to be “in”. The person who is “in” throws the ball in the air and calls out a number. The players take off in all directions as the player whose number was called tries to get to the ball. When he or she catches the ball, he/she calls out “SPUD” and the other players freeze. The ball holder takes two or three (depending on age) giant steps towards anyone and tries to hit the person below the knees with the ball by rolling it underarm. The thrower earns an S if he/she misses and remains in. The targeting student earns the S if she or he is hit and this person becomes the new “in” person. The game continues until someone has earned the full SPUD.