Thinking while Moving - Mathematics

Climbing the number ladder

Early Stage 1 mathematics

Content areas: whole number, addition, subtraction

Activity set-up

- Set up ladders in parallel and spaced apart in a large flat area.
- Place a set of numbered bean bags at the end of each ladder.
- Play Link Up to form student groups of 4.

How to play

Student:

- selects a bean bag from the pile
- states the number represented on the bean bag
- hops through the ladder counting to the number they said
- write the number in chalk on the corresponding rung of the ladder
- run back on the left-hand side of the ladder.

- Group members take it in turns repeating the above steps.
- Encourage students waiting in line to perform a physical activity while their peer is moving through the ladder. For example, if a 5 is selected, other students can complete 5-star jumps.
- The game is finished when the ladder has all numbers 1 – 20 written on it.

Increase/decrease challenge

- Students select 2 bean bags. Place the largest number on the ladder (number line) and count on to perform addition.
- Students select 2 bean bags. Place the largest number at the end of the ladder (number line) and count back to subtract.
- Use bean bags labelled 1 – 10 or 1 – 30.

Variation

- Provide students with a pile of number words they flip over to determine which numeral to write. (e.g. cards that say 'one', 'two' etc.)
- Have a pile of 10 frames showing 1-10. Student flips over to determine which numeral to write.

Equipment/Resources

Agility ladders (enough for 4 students per ladder)
Bean bags numbered 1 – 20 with numerals or dots
Chalk

What's some of the maths

Mathematicians discuss, reason, explore and compare strategies when playing games.
Mathematicians use a range of strategies with solving problems with addition and subtraction such as:

- Thinking about relationships between numbers
- Using place value knowledge.

Let's talk and think like mathematicians

How did you quantify the amount on the bean bag by looking and thinking?
How many different ways can we represent a number?

Suggested mathematics outcomes

MAe-1WM describes mathematical situations using everyday language, actions, materials and informal recordings
MAe-2WM uses objects, actions, technology and/or trial and error to explore mathematical problems
MAe-3WM uses concrete materials and/or pictorial representations to support conclusions
MAe-4NA counts to 30, and orders, reads and represents numbers in the range 0 to 20

NSW GOVERNMENT

THINKING while MOVING