



VELOCITY and SPEED: Dance and Movement



Movement/Dance



Non-Locomotor

Motions made while

Dancers using non-locomotor movements...

bend, stretch, twist, or swing their body.

MOTION with
No speed/no
velocity

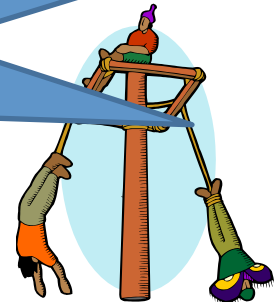
Locomotor

Motions created moving across SPACE

Dancers using

walk, run,
gallop.

MOTION with speed
and/or velocity



The SCIENCE OF DANCE



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Body

Parts: Dance can focus on different body parts: *legs, fingers, toes, head, elbows, shoulders* etc.

Body parts can be move in *isolation or jointly*

Body parts can be *open, closed or relaxed*

Shape: the body can contort itself into different shapes (i.e., *curves, angles*)



Energy

The use of energy while moving: expressivity of the movement

WEIGHT: Heavy or Light

FLOW: Free or Bound, Sharp or Smooth, Tense or Relaxed

SPACE: Direct or Indirect

TIME: Quick or Sustained

SPACE

Pathways – patterns the dancer takes in the air or on the floor:

VELOCITY

Planes: horizontal or vertical

Direction – forward, backwards, diagonally, sideways, up, down, place, middle

TIME

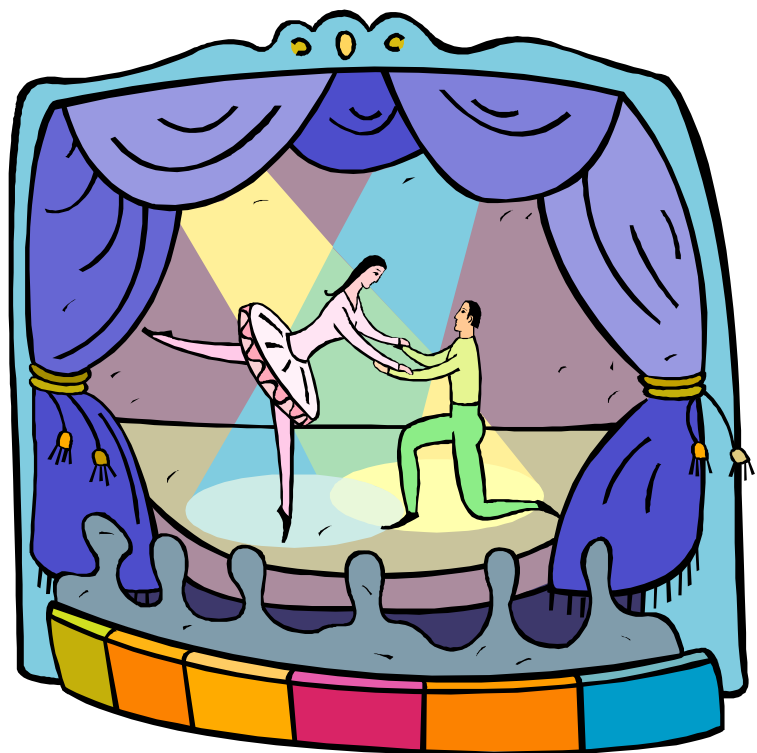
TEMPO - the speed of the movement: *fast, slow, triple*

SPEED

Accounting for the pattern of movement or shape performed in such a way as to give *emphasis*



Dance is often used to tell a story, convey a message



Like a story or a book,
each dance has a
beginning, middle and
an end. Dance is made
up “**movement
materials**”, connected
into “**phrases**” and put
together into a complete
dance.

Choreography is a matter of science

*A dancer or a choreographer communicates his/her ideas, thoughts, and feelings **through movements.***

These movements are structured and repeatable, in that they can be taught to others as a dance.



MOTION =
MOVEMENT



Choreograph a Dance and Measure it's Speed/Velocity

Determine and practice dance movement/ series of movements that you will perform in your dance.



Perform your dance in a straight pathway from the designated start and finish points.



Calculate the speed (tempo) of your dance by dividing the distance by the time it took you to perform your dance.

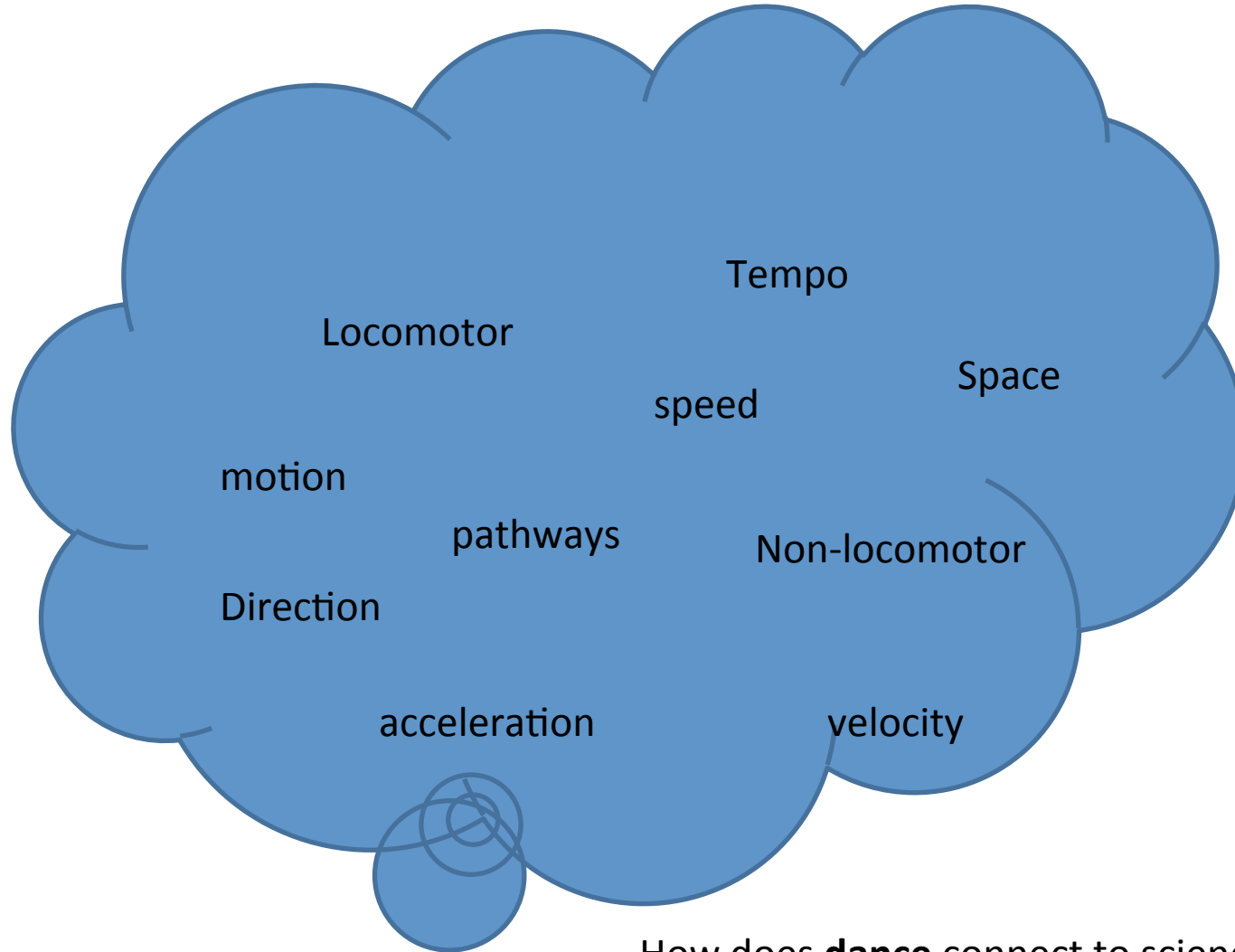


Change your velocity!
Line Dancing: go forward and backward by following the steps!



Now, calculate your acceleration while doing the dance.





How does **dance** connect to science.
Use at least FIVE (5) of the above words to
describe your dance in scientific terms.



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