

## A comparison of the features of walking & running – Instructor lesson plan

### Aims

To explore the key features walking & running and how they differ

Age range upper primary/junior or secondary school  
Numbers up to 30  
Duration approx. 30-60 mins depending on group size

### Equipment

- An open area suitable for walking and running
- Tape measure/ruler to measure step length
- Optional: protractor to measure foot angle
- Pupils own mobile phones/ school devices i.e. tablets

### Learning intentions

By the end of the session learners will be able to:

- Identify key features associated with walking
- Identify key features associated with running
- Compare how walking & running differ

### Introduction

Instructor to introduce themselves & aims from session  
Explain that learners will be working in pairs

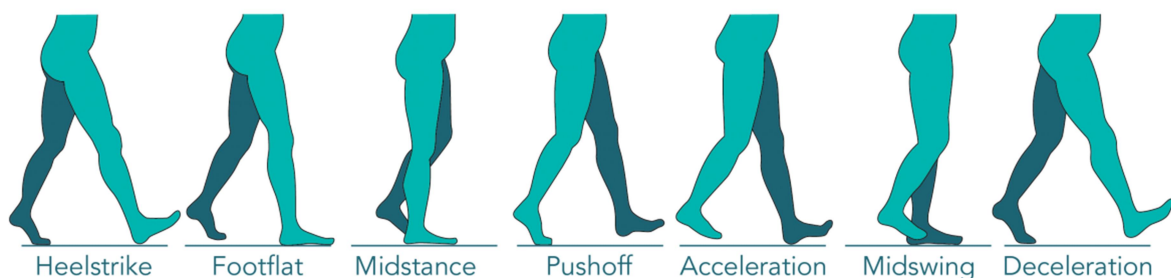
### Task 1 What constitutes the features of normal walking?

Ask learners if they have thought about the features of walking & note these in their workbook

Areas to prompt:

Cyclical activity with series of stages (see diagram)

### Gait cycle



Key features:

- i. Forward progression
- ii. Stability
- iii. Energy conservation

## Task 2 What features can you use to describe walking?

Using the framework, watch/video record on own phone each other walk & in their workbook note what they see. Use slow motion play back facility on phone to review running action.

Key areas to look at:

**Head position** (level or not)

**Arm swing** (equal on either side)

**Pelvic movement** (limited or exaggerated)

**Knee position** (knee pointed in or out)

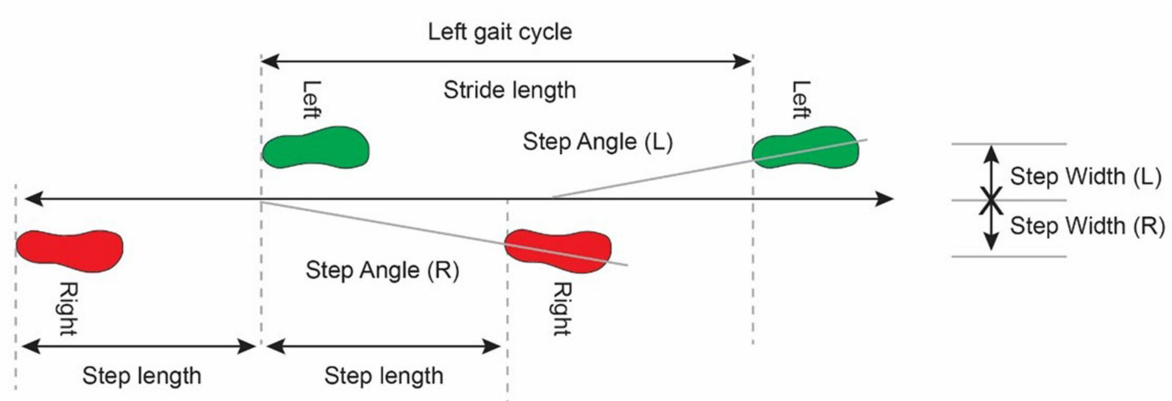
**Foot angle** (foot pointed in or out)

**Step length** (long or short)

**Stride length** (1 stride = 2 steps!)

**Base of gait** (feet close together)

### Step & stride length diagram



## Task 3 What features can you use to describe running?

Using the same framework, watch/video record on own phone each other run & in their workbook note what they see. Use slow motion play back facility on phone to review running action.

### Task 4 Comparing walking & running

Looking at results from tasks 2 & 3 – how does running differ from walking?

#### Hints:

- When walking, you always have one or both feet in contact with the ground during the gait cycle,
- In running you have a flight phase where both feet are off the ground + you never have both feet in contact with the ground at the same time.
- The faster to run, the more weight lands on the ball of the foot
- The arms swing faster & more to aid balance the faster you run