

Component 1 Effective Use of Warm-up & Cool-down

Warm-up

A warm-up has three phases:

Warm-up



Phase 1 Pulse raiser

To raise the heart rate and speed up oxygen delivery to the working muscles. E.g. jogging a lap of the pitch

Phase 2 Stretching

Stretching the muscles and soft tissues you are about to use increases their elasticity and range of movement

Phase 3 Drills

These are more intense practices relating to the main session, such as dribbling if you are playing basketball

Why we warm-up

To physical and mentally prepare for exercise

To increase oxygen delivery to the working muscles

Increase temperature of muscles, tendons, and ligament. Reducing the chance of injury

Increase flexibility which will aid performance prepare for exercise

Cool-down:

A cool down has two phases:

Cool-down



Phase 1 Light exercise

e.g. slow jogging at a much lower intensity you have been working

Phase 1 Stretching

Stretch the muscles you have used in the main activity

Why we cool-down

The removal of lactic acid

The removal of carbon dioxide

Bring heart and breathing rate slowly back to resting

Helps avoid dizziness due to blood pooling

Improves flexibility

A cool down is **NOT** designed to prevent injury it is to return the body to its resting levels

Component 1 Use of Data

The use of data

Data can be collected in many ways

- Data can be collected on the quality that you see, e.g. how well a skill is performed (qualitative)
- Data can be collected based on numbers e.g. how many press-ups completed (quantitative)

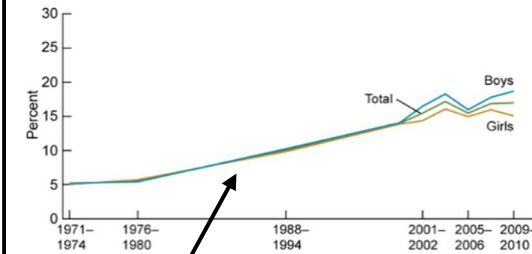
Tables:

Below is a table showing lots of data in a normative table for a 12-minute cooper run test. There are lots of numbers, all you have to do is locate the age group and the score. For example, a 17-year-old scored 1750m

Age	Excellent	Above Average	Average	Below Average	Poor
13-14	>2000m	1900-2000m	1600-1899m	1500-1599m	<1500m
15-16	>2100m	2000-2100m	1700-1999m	1600-1699m	<1600m
17-20	>2300m	2100-2300m	1800-2099m	1700-1799m	<1700m
20-29	>2700m	2200-2700m	1800-2199m	1500-1799m	<1500m
30-39	>2500m	2000-2500m	1700-1999m	1400-1699m	<1400m
40-49	>2300m	1900-2300m	1500-1899m	1200-1499m	<1200m
>50	>2200m	1700-2200m	1400-1699m	1100-1399m	<1100m

Trends:

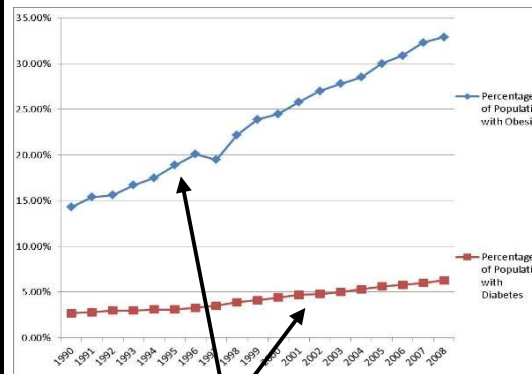
Below is a graph showing trends in obesity of young children aged 2-19. You need to analyse the data and identify the trends in data.



The overall trend is that obesity is rising steadily from 1971-1974 to 2009-2010. It has risen from 5% to 15%. Boys are more obese than girls

Graphs and Charts

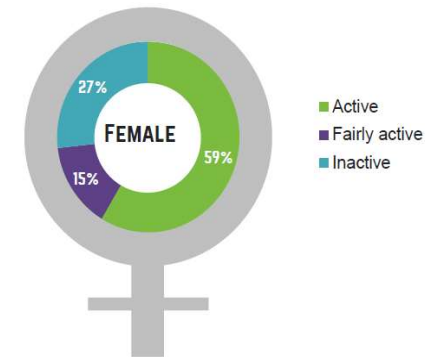
Some information that happens over time will be represented as a line graph, such as the correlation between obesity and diabetes over time



Obesity and diabetes have both risen from 1990-2008.

Obesity levels have risen at a greater rate than diabetes

If you are trying to compare parts of a whole you may use a pie chart such as a pie chart to show the percentage of women who are active, fairly active and inactive.



59% of females are active

15% are fairly active

27% are inactive