## Component 2 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 | 4900-2000m | 1600-1899m | 1500-1599m | <1500m |
| 15-16 | $>2100 \mathrm{~m}$ | 2000-2100m | 1200-1999m | $1600-1699 \mathrm{~m}$ | $<1600 \mathrm{~m}$ |
| 17-20 | >2300m | $2100-2300 \mathrm{~m}$ | 1800-2099m | 1700-1799m | <1700m |
| 20-29 | >2700m | 2200-2700m | 1800-2199m | $1500-1799 \mathrm{~m}$ | $<1500 \mathrm{~m}$ |
| 30-39 | $>2500 \mathrm{~m}$ | $2000-2500 \mathrm{~m}$ | 1700-1999m | 1400-1699m | $<1400 \mathrm{~m}$ |
| 40-49 | >2300m | $1900-2300 \mathrm{~m}$ | 1500-1899m | 1200-1499m | $<1200 \mathrm{~m}$ |
| >50 | >2200m | $1700-2200 \mathrm{~m}$ | 1400-1699m | 1100-1399m | $<1100 \mathrm{~m}$ |

## Trends:

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

In information that compares different categories of data may be represented in a bar graph, such as the reason why males and female don't take part in physical activity.


Females find home \& family, lack of money and unsuitable facilities reasons why not to take part in physical exercise

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

