## How to Describe Trends

In order to get a good mark, you need to describe the most important changes in a chart or graph.

To do this, you need to describe trends. These are movements in data. To make them easier to see, try to outline the trends in your mind. You should describe three or four trends in your answer. Look at this example:


There are four main trends here:
-Thailand has an upward trend.

- Japan has a downward trend.
- Both Thailand and Japan move up and down.
- Japan started with the higher number of students, but Thailand overtook them.

First, let's look at the vocabulary needed to describe basic movements in data. This list of words is illustrated by describing this line graph.


The trends are:
Up: 2010-2011
Down: 2011-2012
Up and down: 2012-2015
No change: 2015-2016
The highest point: 2015

## Upward movements

There are grammatical differences when using these words as either verbs or nouns. First, let's look at verbs. In the graph the timeline ends in 2016, so we need to use the past tense of the verbs.
of Preposition - 'by' and 'to'. 'By' tells you the size of the change. 'To' tells you the figure at the end of the change.

| Verb | By | To |
| :--- | :--- | :--- |
| Rise | It rose by 3\% | It rose to 9\% |
| Grow | It grew by 3\% | It grew to 9\% |
| Increase | It increased by 3\% | It increased to 9\% |

You can also use the same words as nouns. When using the words as nouns, you generally use the present tense form.

Preposition - 'in' and 'of'. We use 'in' to describe changes in things and 'of' to describe changes in number or amount.

| Noun | Of | In |
| :--- | :--- | :--- |
| Rise | There was a rise of 3\% | There was a 3\% rise in the rate <br> of car theft. |
| Grow | There was a growth of 3\% <br> (Note- the past participle is <br> used here). | There was a 3\% growth in the <br> rate of car theft. |
| Increase | There was an increase of 3\% | There was a 3\% increase in the <br> rate of car theft. |

## Downward movements

The grammar is the same for downward movements.

| Verb | By | To |
| :--- | :--- | :--- |
| Decrease | It decreased by 5\% | It decreased to 4\% |
| Fall | It fell by 5\% | It fell to 4\% |
| Decline | It declined by 5\% | It declined to 4\% |


| Noun | Of | In |
| :--- | :--- | :--- |
| Decrease | There was a decrease of <br> $5 \%$ | There was a 5\% decrease in <br> the rate of car theft. |
| Fall | There was a fall of 5\% | There was a 5\% fall in the rate <br> of car theft. |
| Decline | There was a decline of <br> $5 \%$ | There was a 5\% decline in the <br> rate of car theft. |

## Up and down

When describing a period when the data goes both up and down, you can use the word 'fluctuate'. The word can be used as a verb and a noun.

| Verb | Example | Purpose |
| :--- | :--- | :--- |
| Fluctuate | (2012-2015) It fluctuated <br> between 3\% and 5\% | Tells the highest and lowest point <br> of the movements. |


| Noun | Example | Purpose |
| :--- | :--- | :--- |
| A fluctuation | There was a 2\% <br> fluctuation. | The difference in size between <br> the highest and lowest points. |

## No change

At - introduces a stable number.

| Verb | Example |
| :--- | :--- |
| Stabilise | It stabilised at 6\% |
| Remain steady | It remained steady at 6\% |

## The highest point

| Verb | Noun | Example |
| :--- | :--- | :--- |
| Peak | (reach) a peak | It peaked at 9\% / It reached a peak of 9\% |

## Patterns to Compare Two Data Points

From ... to ... / Between ... and ... Used to show a period of time.


Between 2011 and 2014, the proportion of female students fluctuated between 8\% and 11\%.
From 2014 to 2016, the proportion of female students grew by 5\%.

## Size of Change

It is important to describe the size of a change. This is the key vocabulary.

## Large

| Adjective | Adverb | Example |
| :--- | :--- | :--- |
| Dramatic | Dramatically | There was a dramatic growth in price <br> / The price grew dramatically |
| Significant | Significantly | There was a significant fall in price / <br> the price fell significantly |

## Medium

| Adjective | Adverb | Example |
| :--- | :--- | :--- |
| Moderate | Moderately | There was a moderate fall in price / <br> The price fell moderately |

## Small

| Adjective | Adverb | Example |
| :--- | :--- | :--- |
| Slight | Slightly | There was a slight fall in price / The <br> price fell slightly |

## Choosing the Correct Tense

To get a good grammar score in this task, it is vital to work out which tense you should use. Usually, the charts and graphs are dated in the past, so you need to use the past tense. However, sometimes a graph or chart is set at a future date. In the below example, one of the pie charts is labeled for the year 2050.

Projection. An estimate or forecast of a future situation or trend based on a study of present ones.

Below are two pie charts providing demographic (population) information about Mongolia in 2000 and projections for 2050.


Skill: Relabeling indexes. It is a good idea to describe the indexes (the categories of information). For instance, here one age group is 0-14, but instead we may just write 'children'. Another is '60+' but we may say 'elderly people'.

The proportion of children is projected to fall dramatically.
The proportion of elderly people is projected to grow slightly.
The proportion of people aged $15-59$ is projected to rise moderately.

## Using Multiplication

Another way to describe the size of change is to state how many times a figure has increased or decreased.

| Times 2 | double | the figure doubled from five to ten percent |
| :--- | :--- | :--- |
| Times 3 | triple | the figure tripled from five to 15 percent |
| Times 4 | quadruple | the figure quadrupled from five to 20 <br> percent |

The household recycling rates (\%) in three European countries


From 2008 to 2014, the recycling rate in France doubled, rising from 40 to 80 percent.

Between 2008 and 2012, the recycling rate in Germany halved, falling from 60 to 30 percent.

Over the period, the recycling rate in France tripled, rising from 30 to 90 percent.

## The Speed of Change

## Fast

| Adjective | Adverb | Example |
| :--- | :--- | :--- |
| Fast | Quickly | There was a fast growth in price / The <br> price grew quickly |
| Rapid | Rapidly | There was a rapid growth in price / <br> The price grew rapidly |

## Medium

| Adjective | Adverb | Example |
| :--- | :--- | :--- |
| Steady | Steadily | There was a steady growth in price / <br> The price grew steadily |
| Gradual | Gradually | There was a gradual growth in price / <br> The price grew gradually |

## Slow

| Adjective | Adverb | Example |
| :--- | :--- | :--- |
| Slow | Slowly | There was a slow growth in price / The <br> price grew slowly |

$\rightarrow$ Look at how the vocabulary is used for the following graph.


Overall / Over the period. The whole timeframe of the graph, so in this instance it means from June to September.

From June to August the number of visitors to the Museum of Natural History grew slightly.

Overall, the number of visitors to the National 9/11 Museum increased gradually.

Between August and September, the number of visitors to the Museum of Modern Art fell rapidly.

Between June and August, the number of visitors to the Museum of Modern Art grew slowly.

## Skill: State the Period, the Change and Data

This is a way to use all the vocabulary you have learned in this lesson in one sentence. First, you state the time period, then the trend and then describe the data. For example, for the following line graph, you could write.

Between 1970 and 1990, the amount of energy used by the industry sector fell rapidly by just over 20,000 (to finish at approximately 40,000)//from just over 60,000 (to finish at approximately 40,000).

© Amount / number of. Use 'amount of' for uncountable nouns, and 'number of' for countable nouns. In this case, 'energy' is an uncountable noun so we must use 'amount'.

Between 1970 and 1990, the amount of energy used by the industry sector declined significantly by approximately 20,000 tonnes.

