



SLIIT

Discover Your Future

Describing graphs and charts



SLIIT
FACULTY OF COMPUTING

Learning outcomes



Identify the types of graphs and charts



Describe a line graph, pie chart and bar chart



Use appropriate vocabulary

Types of charts & graphs



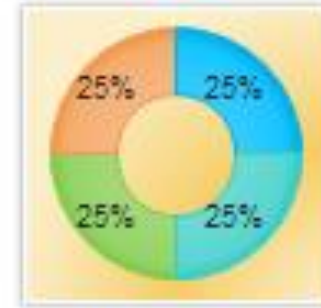
Column



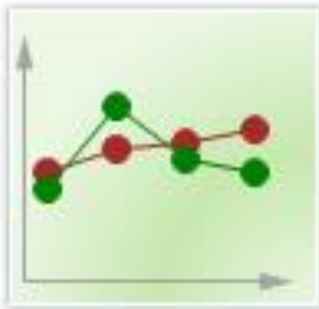
Bar



Pie



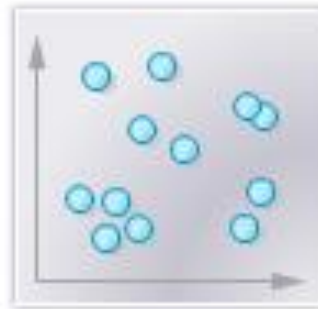
Doughnut



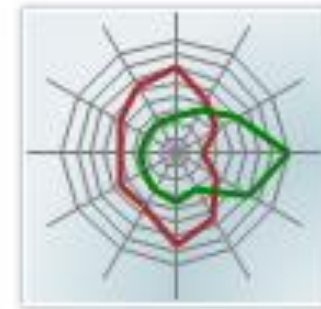
Line



Area



Scatter

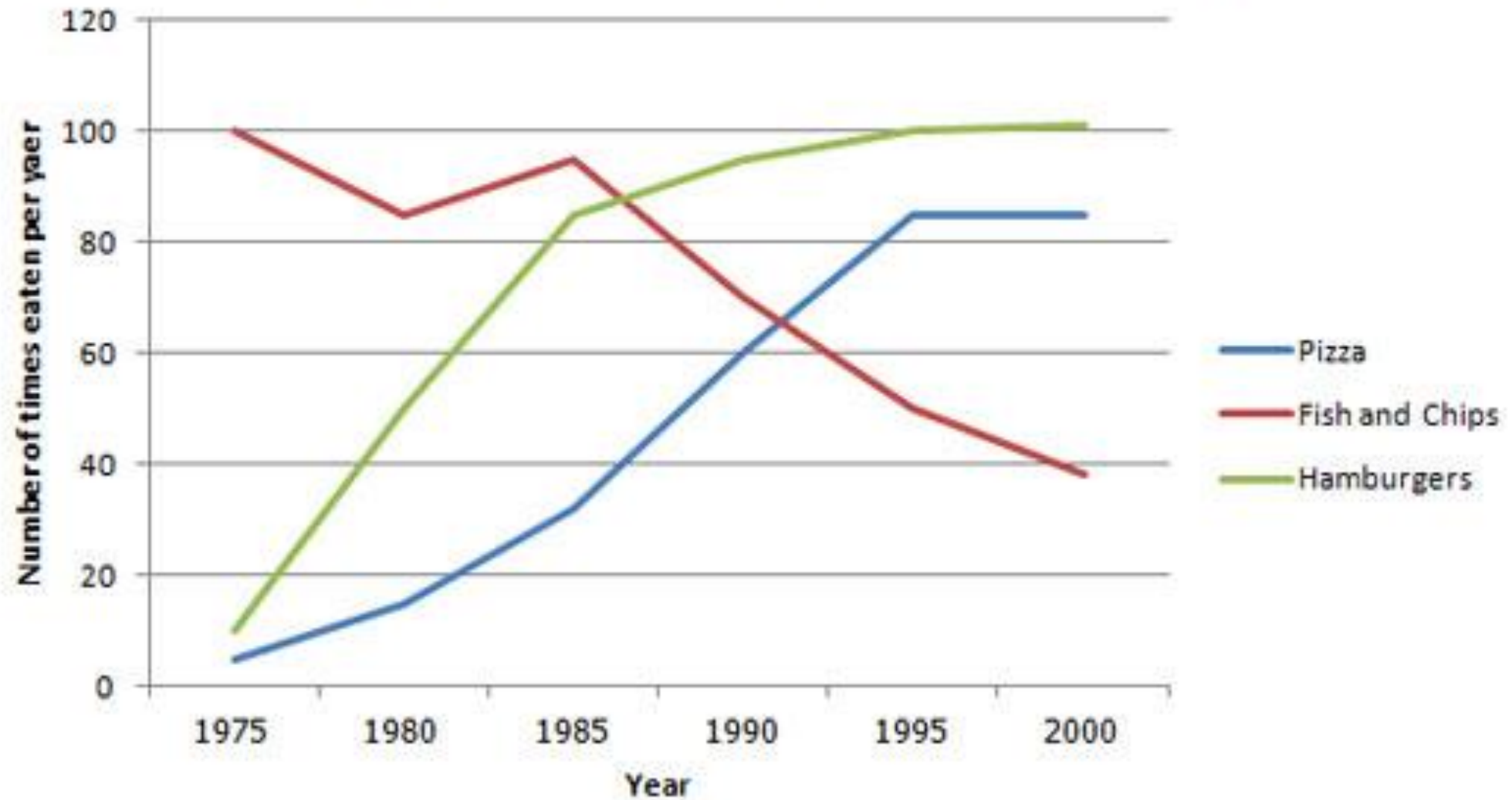


Spider

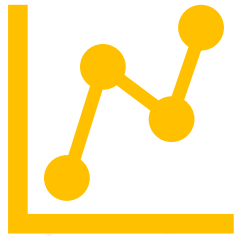
Let's describe a graph!



Consumption of Fast Food by Australian Teenagers

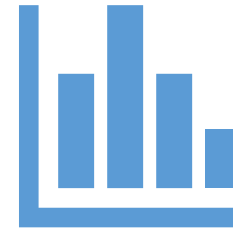


Step 1: What does the graph show?



What is the type of the graph shown?

What is the data?



What are the units of measurement used in the graph?

Is there a period of time?

Step 2 : Introduce the Graph

The graph shows ...

The graph illustrates...

The graph compares ...

The graph gives information about...

E.g. The line graph compares the fast-food consumption of teenagers in Australia between 1975 and 2000, a period of 25 years.

Step 3 : Give an Overview



An overview is a general statement, highlighting the most important information in the table. It should not include any numbers. This is just a summary of the main features.



E.g. Overall, the consumption of fish and chips declined over the period, whereas the amount of pizza and hamburgers that were eaten increased.

Step 4 : Give the Detail

Things that you should be looking for include:

- High/low values

- Biggest increase/decrease

- Volatile data

- Unchanging data

- Biggest majority/ minority (pie charts)

- Biggest difference/similarities

- Major trends

- Notable exceptions

The line graph compares the fastfood consumption of teenagers in Australia between 1975 and 2000, a period of 25 years. The X axis represents years, and the Y axis represents the measurement unit which is the number of times eaten per year. There are three lines depicting the consumption of pizza, fish and chips, and hamburgers. Overall, the consumption of fish and chips declined over the period, whereas the amount of pizza and hamburgers that were eaten increased.

In 1975, the most popular fast food with Australian teenagers was fish and chips, being eaten 100 times a year. This was far higher than Pizza and hamburgers, which were consumed approximately 5 times a year. However, apart from a brief rise again from 1980 to 1985, the consumption of fish and chips gradually declined over the 25-year timescale to finish at just under 40.

In sharp contrast to this, teenagers ate the other two fast foods at much higher levels. Pizza consumption increased gradually until it overtook the consumption of fish and chips in 1990. It then levelled off from 1995 to 2000. The biggest rise was seen in hamburgers as the occasions they were eaten increased sharply throughout the 1970's and 1980's, exceeding that of fish and chips in 1985. It finished at the same level that fish and chips began, with consumption at 100 times a year.

Tips



Use appropriate academic vocabulary



Use an appropriate tense base on the timeline of the data



Do not use expressions like “I can see, we can see”



Spend around 20 minutes to write the answer

Tenses

Present simple - to describe what the graph shows us now

the line graph compares
a strong correlation is suggested
(passive)

Present perfect tense-changes in the data that have happened over a period of time.

- The price of oil has fallen by \$5 a barrel every week since July
-
-
-

Past simple - to describe past years

- the average global oil price was close to \$25

Past perfect - to describe what happened before and up to a past time

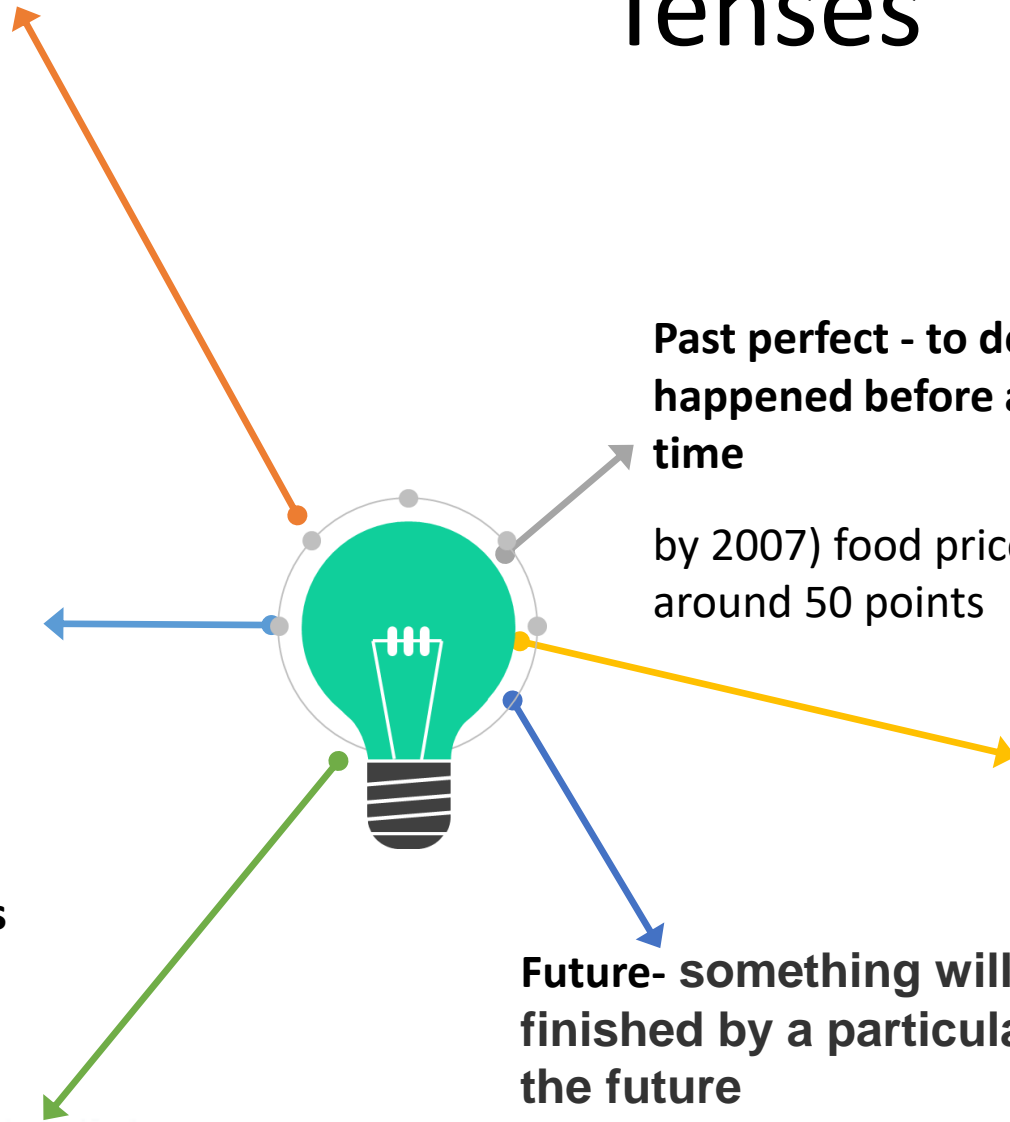
by 2007) food prices had risen by around 50 points

Future forms

- *will + infinitive*
- *is/are expected to + infinitive*
- *is/are predicted to + infinitive*

Future- something will be finished by a particular time in the future

The price of oil **will have reached** \$300 a barrel **by** 2020.

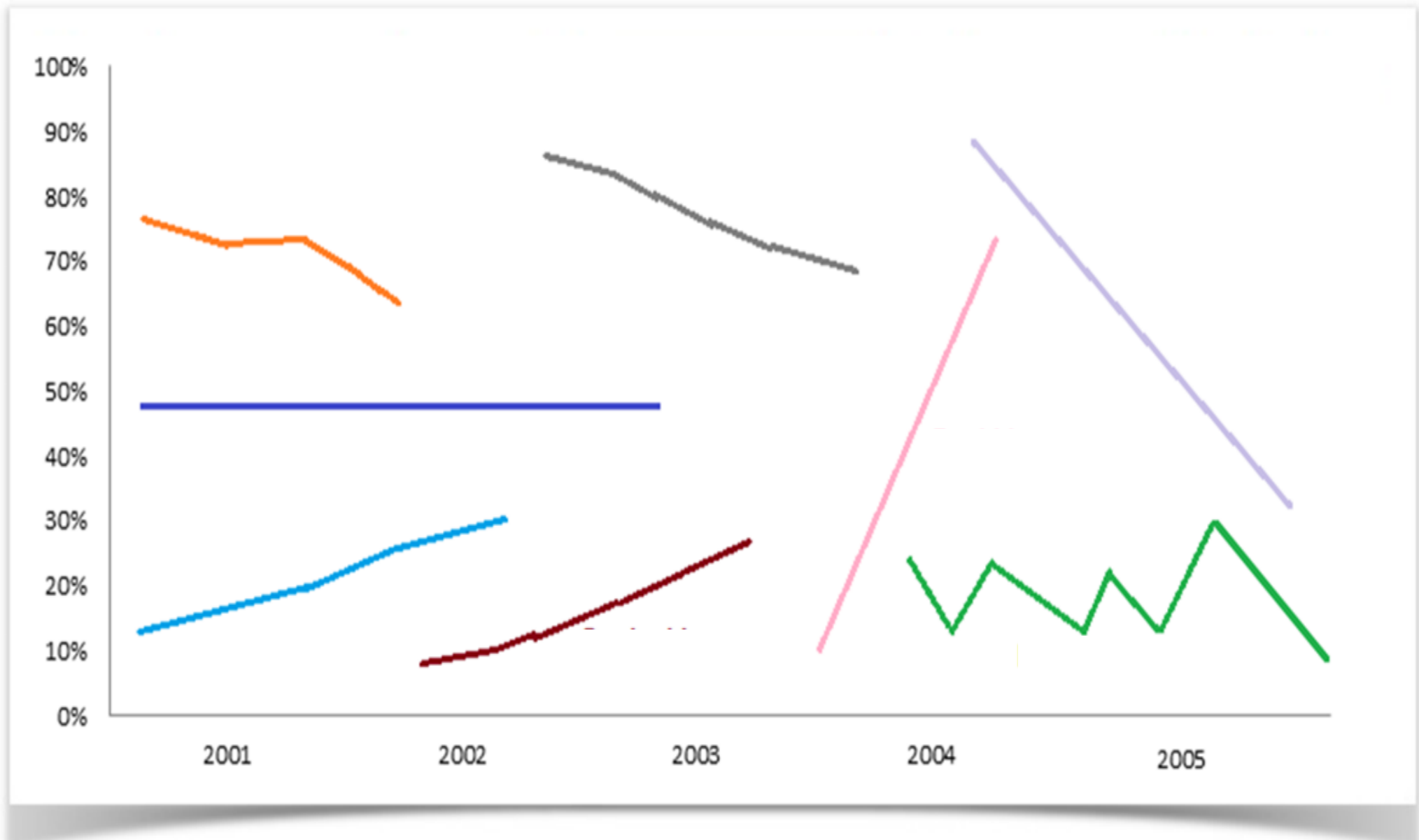


Important vocabulary

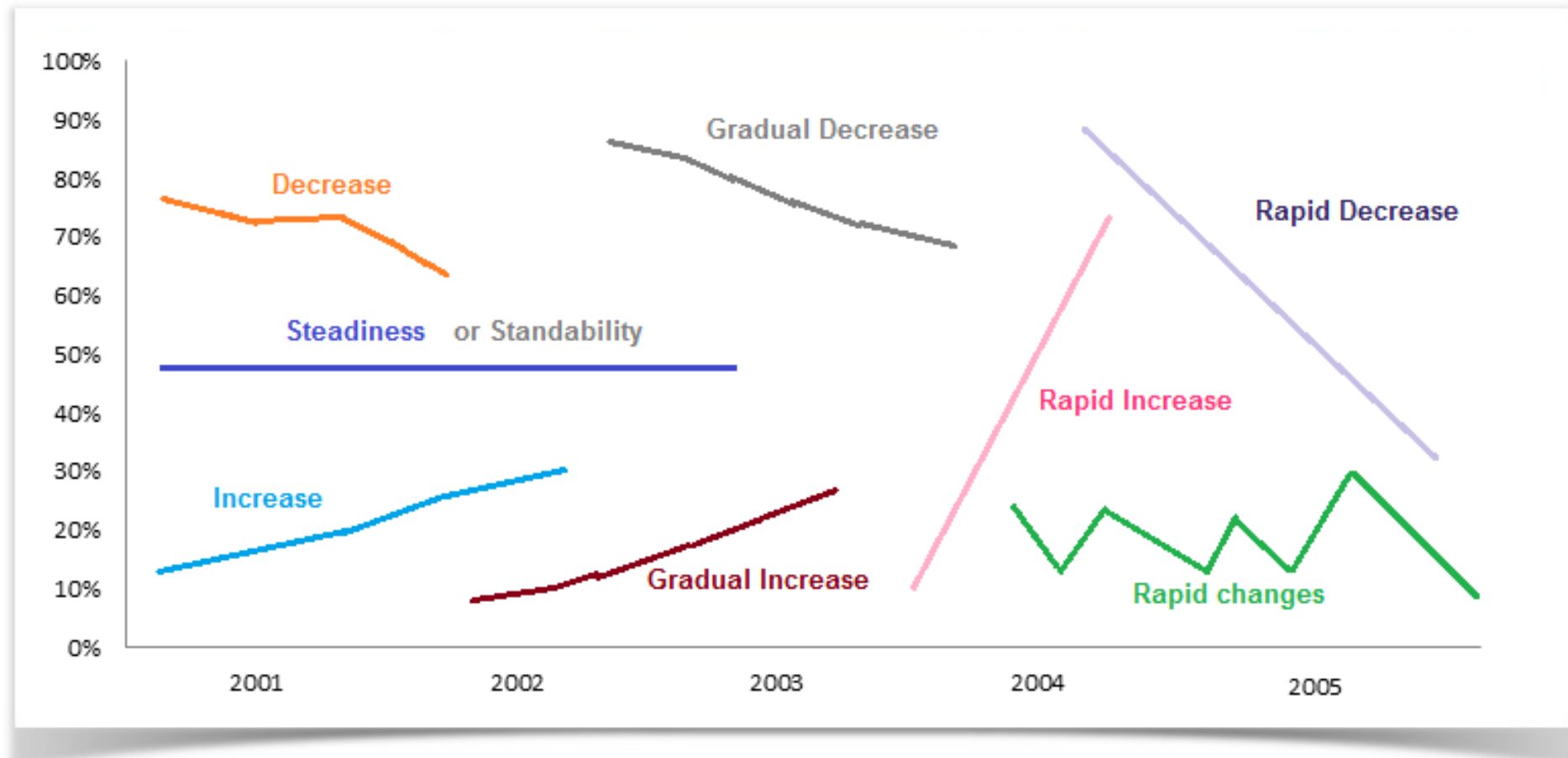
Presenting a graph

Introduction	Topic	Circumstances
This graph shows ...	the results of our products ...	over 10 years.
The diagram outlines ...	rates of economic growth ...	between 1990 and 1996.
This table lists ...	the top ten agencies ...	in the industrial world.
This pie chart represents	the company's turnover ...	for this year in our sector.
This line chart depicts ...	the changes in sales ...	over the past year.
This chart breaks down (ventile) ...	the sales of each salesman ...	during the past ten weeks.

Indicating the degree or the speed of change



Indicating the degree or the speed of change



Trends	Verb form	Noun Form
Increase	rise / increase / uplift / upsurge / soar/ improve/ move upward/ soar/ surge.	a rise / an increase / an upward trend / a growth / a leap / an improvement
Decrease	fall / decrease / decline / plunge / drop / reduce / collapse / deteriorate/ go down	a fall / a decrease / a reduction / a downward trends /a downward tendency / a decline/ a drop / a collapse / a downfall.
Steadiness	unchanged / remain constant / remain steady / plateau / remain the same / remain stable / remain static	a steadiness/ a plateau / a stability/ a static

Trends	Verb form	Noun Form
Gradual increase	-----	an upward trend / an upward tendency
Gradual decrease	-----	a downward trend / a downward tendency / a descending trend
Standability/ Flat	remain(ed) constant / remain(ed) unchanged / remain(ed) stable / prevail(ed) consistency / plateaued / reach(ed) a plateau / stay(ed) uniform /immutable / stabilise/ remain(ed) the same.	No change, a flat, a plateau.

Type of Change	Adverb form	Adjective form
Rapid change	dramatically / rapidly / sharply / quickly / hurriedly / speedily / swiftly / significantly/ considerably / substantially / noticeably.	dramatic / rapid / sharp / quick / hurried / speedy / swift / significant / considerable / substantial / noticable.
Moderate change	moderately / gradually / progressively / sequentially.	moderate / gradual / progressive / sequential.
Steady change	steadily/ ceaselessly.	steady/ ceaseless.
Slight change	slightly / slowly / mildly / tediously.	slight / slow / mild / tedious.
Rapid ups and downs	wave / fluctuate / oscillate / vacillate / palpitate	waves / fluctuations / oscillations / vacillations / palpitations

- **Great change / Huge difference:**

Adjectives

Overwhelming
Substantial
Enormous

Adverbs

Overwhelmingly
Substantially
Enormously

- **Big change / Big difference:**

Adjectives

Significant
Considerable

Adverbs

Significantly
Considerably

- **Medium change / Moderate difference:**

Adjectives

Moderate

Adverbs

Moderately

- **Minor change / Small difference:**

Adjectives

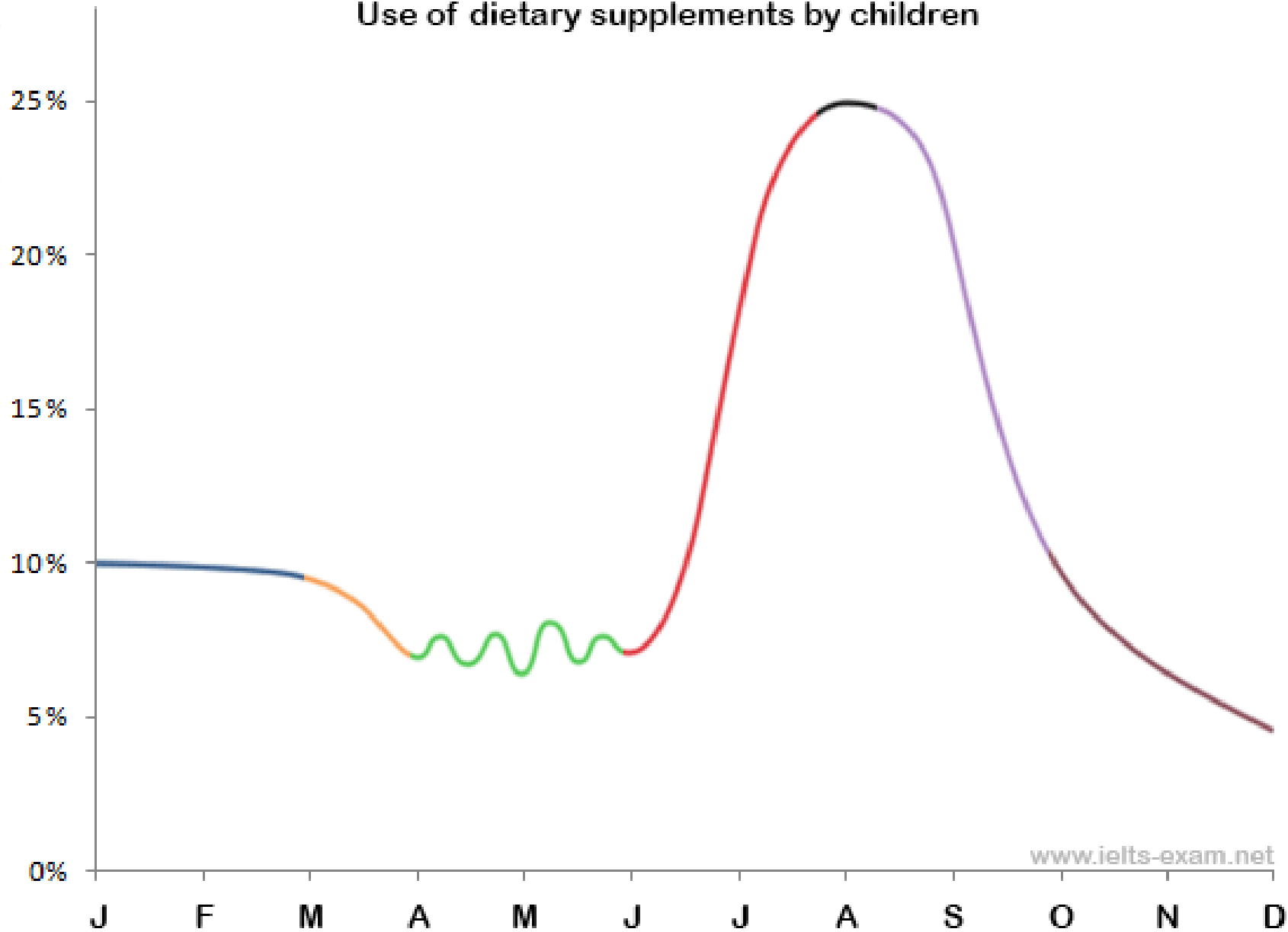
Fractional
Marginal
Slight

Adverbs

Fractionally
Marginally
Slightly

y

Use of dietary supplements by children



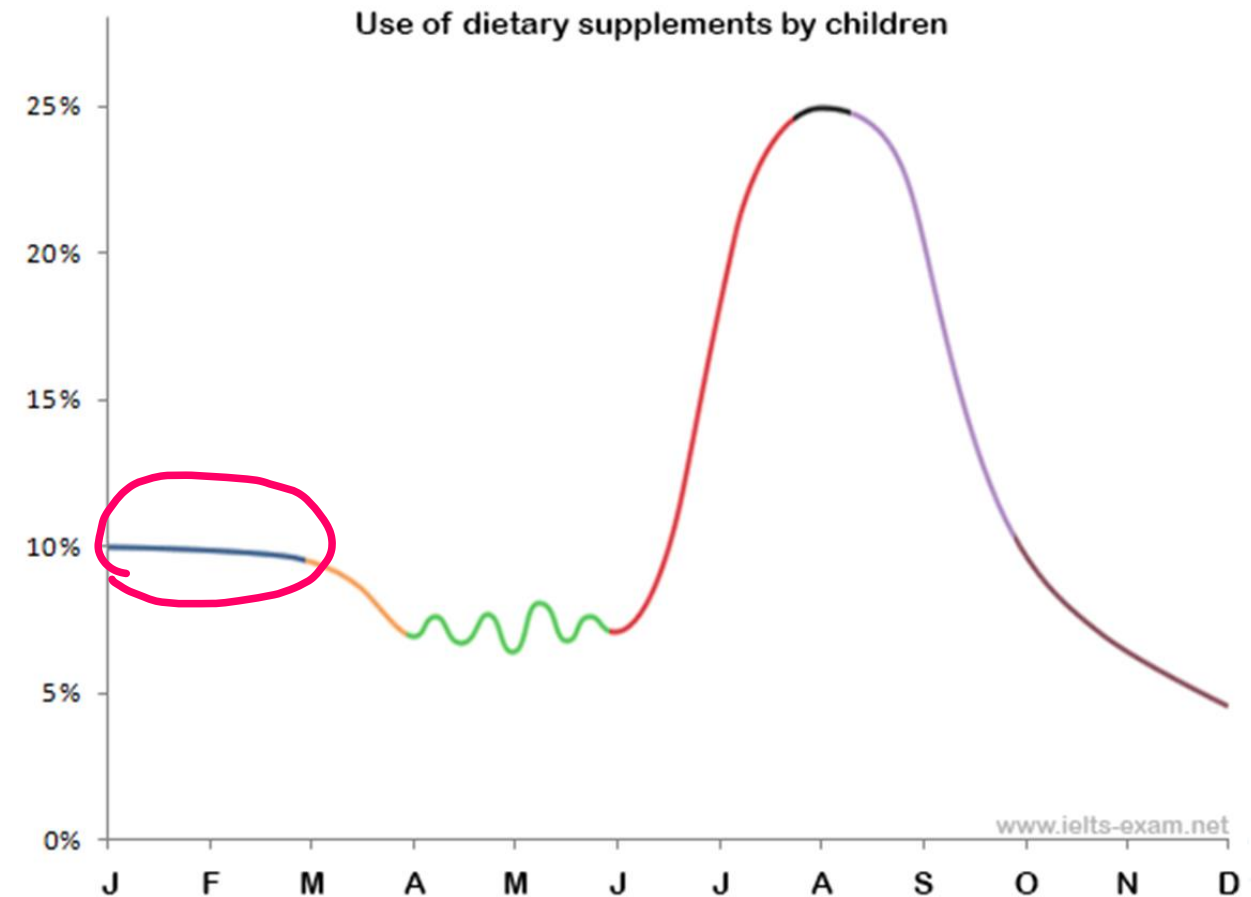
www.ielts-exam.net

x



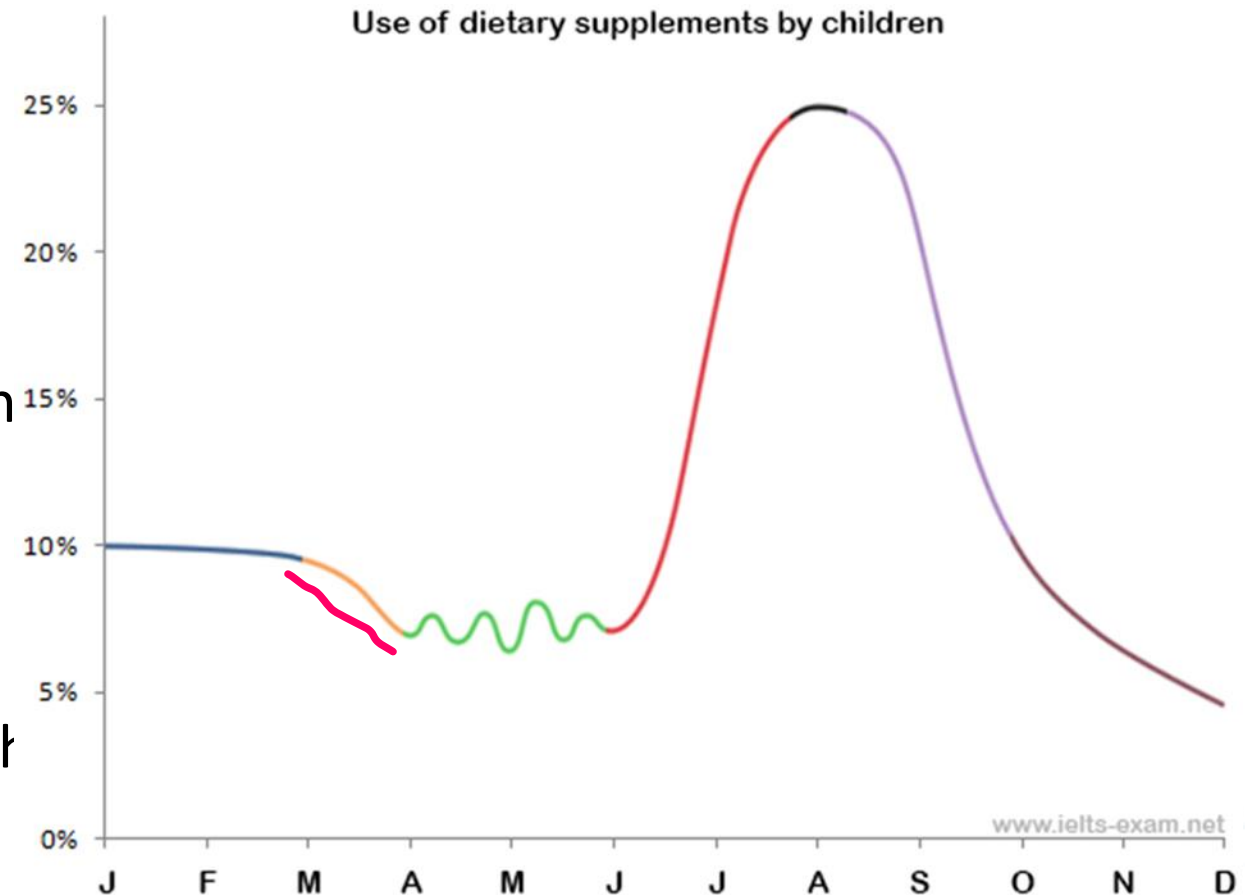
- remain (-ed, -ed)
- unchanged, steady, stable, constant, plateau, fixed/static

- From January to March the percentage of children using supplements remained fairly static at approximately 10%.
- The percentage of children taking dietary supplements was relatively stable during the first two months of the year.
- During the first two months, supplement use remained fairly unchanged.



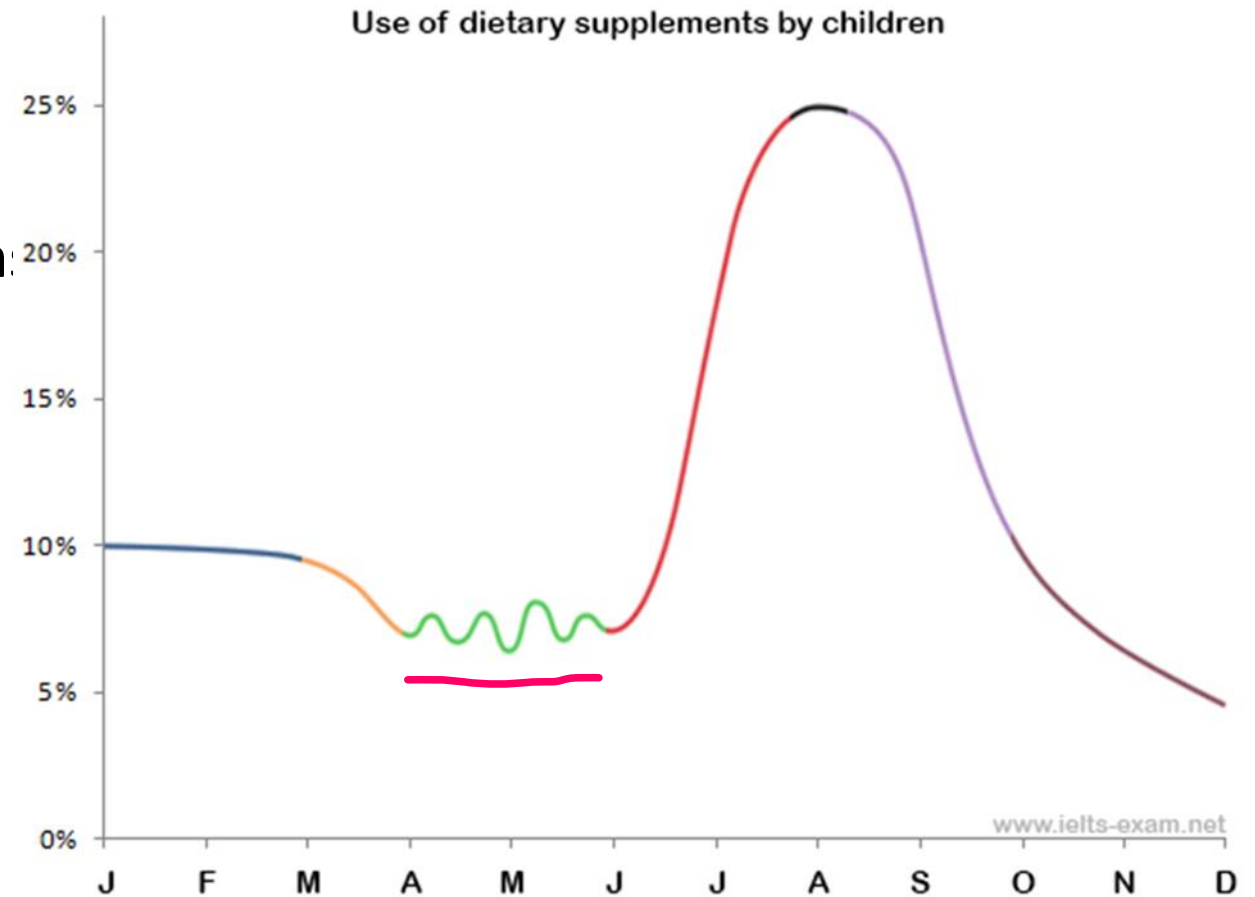
- fall (fell, fallen), decrease (-ed, -ed), drop (dropped, dropped), plunge (-ed, -ed), decline (-ed, -ed)
- slight (slightly), steady (steadily), gradual (gradually), gentle (gently), slow (slowly) downward trend

- It then fell gradually in March.
- There was a slight decrease in the use of dietary supplements in March.
- The graph shows a slight decrease in March
- Supplement use experienced a steady decrease in March.
- Supplement use decreased slightly in March



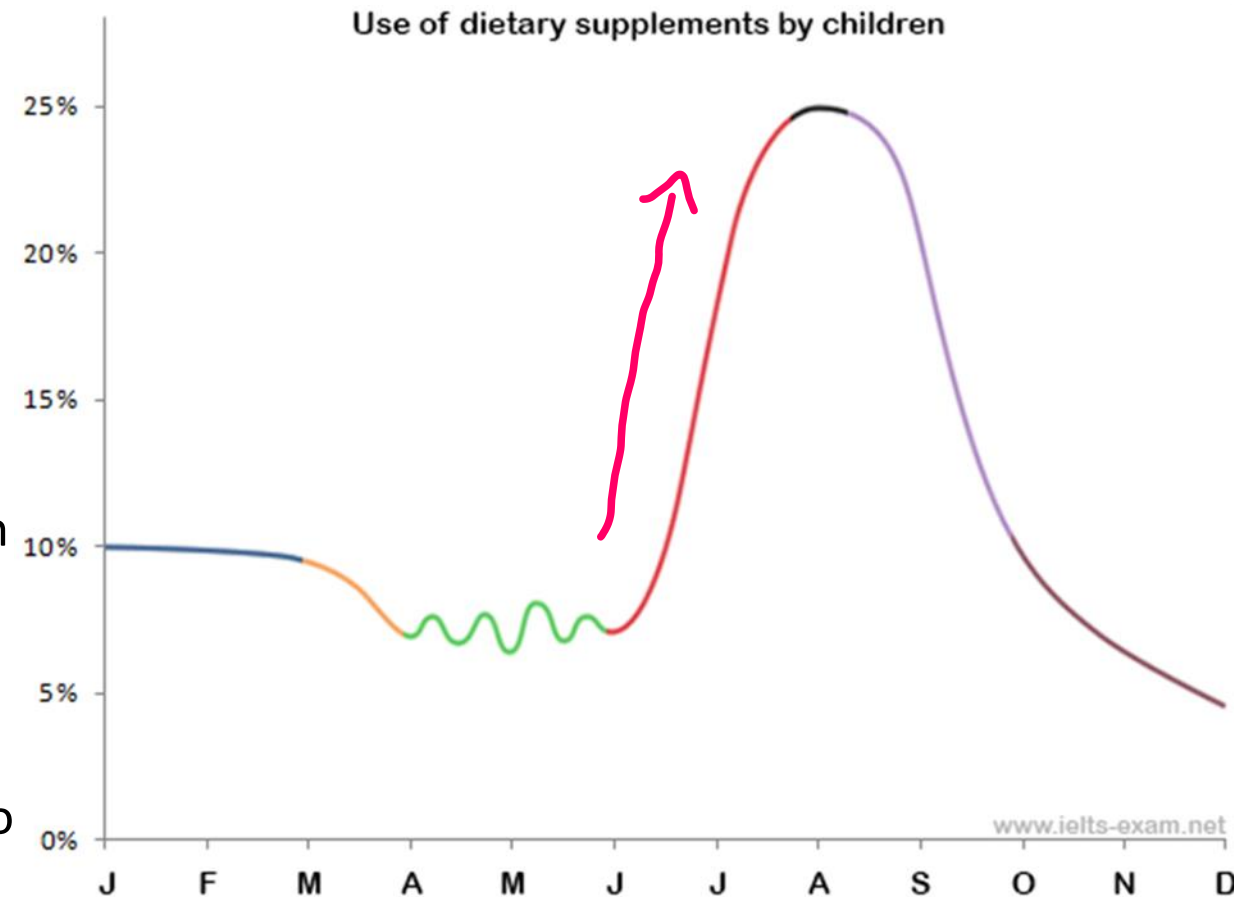
- fluctuate (-ed, -ed)

- It fluctuated for the following two months:



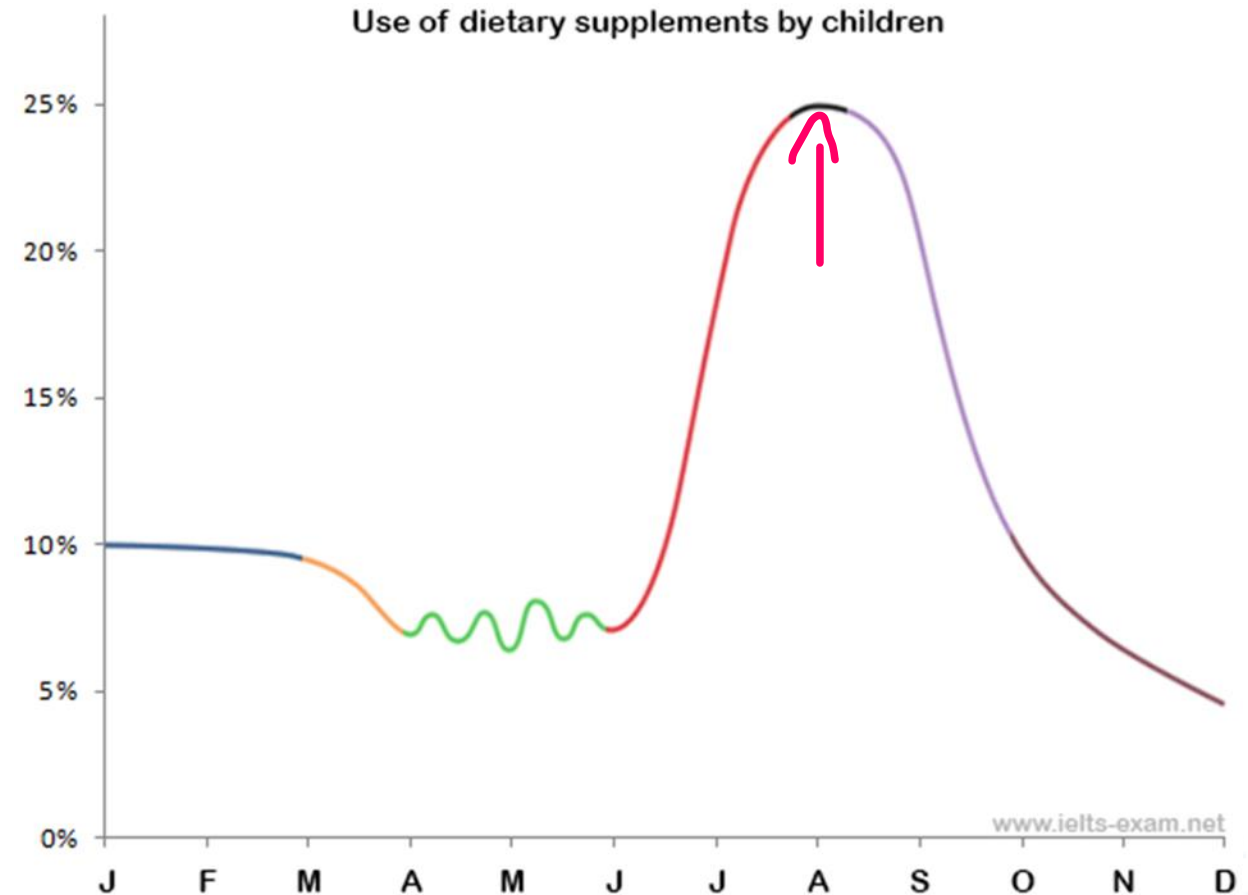
- **rise (rose, risen), grow (grew, grown), climb (-ed, -ed), shoot up (shot up, shot up)**
- **dramatic (dramatically), sharp (sharply), significant (significantly), rapid (rapidly) upward trend**

- There was a significant increase in the percentage of children taking dietary supplements between June and August.
- The period between June and August saw a dramatic growth in the use of dietary supplements.
- Between June and August, the percentage of children taking dietary supplements shot up dramatically.
- The greatest rise was from June to August when it rose by 22% for two consecutive months from June to August.



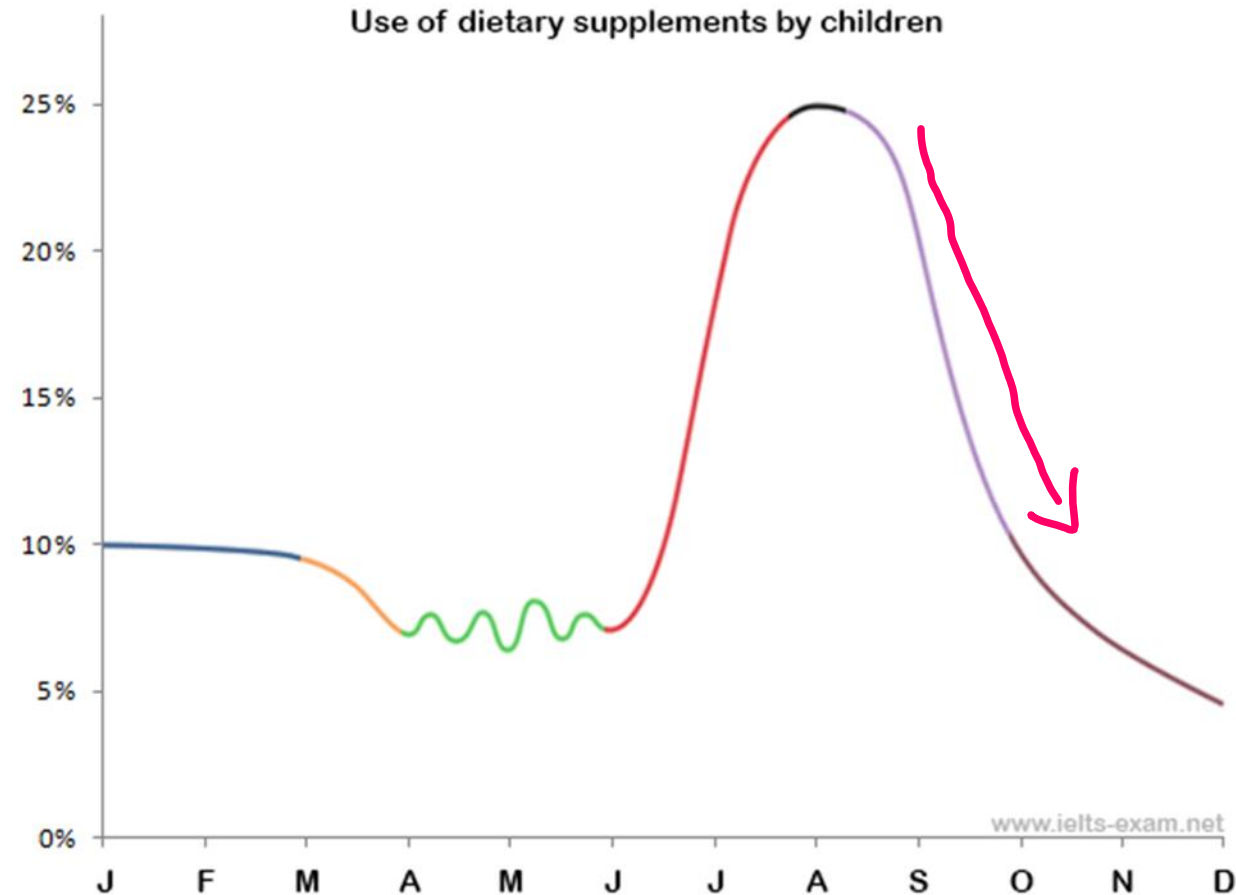
- peak (-ed, -ed), reach (-ed, -ed)

- The percentage of children taking dietary supplements was at its highest level in April.
- Supplement use peaked at close to 25% in April.
- It reached a peak of 25% in April.



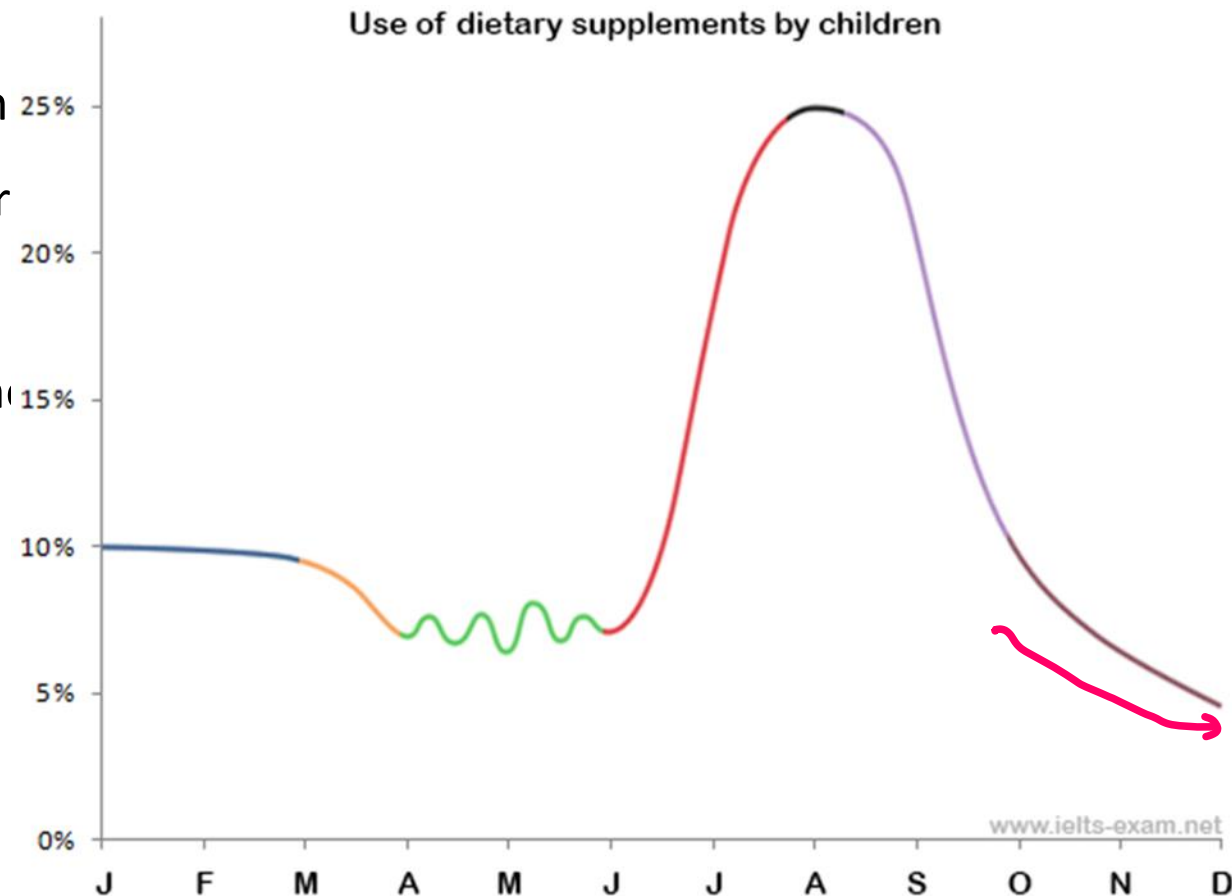
- **fall (fell, fallen), decrease (-ed, -ed), drop (-ed, -ed)**
- **dramatic (dramatically), sharp (sharply), significant (significantly), rapid (rapidly)**

- Between August and October, this figure dropped dramatically to 11%.
- From August to October, there was a drop of 14% in the percentage of children taking dietary supplements.
- Between August and October, There was a considerable fall in the percentage of children using supplements.
- This was followed by a sharp drop of 14% over the next two months.
- Supplement use experienced a dramatic fall between August and October.



- **fall (fell, fallen), decrease (-ed, -ed), drop (dropped, dropped), plunge (-ed, -ed), decline (-ed, -ed), reach (-ed, -ed) its lowest point**
- **slight (slightly), steady (steadily), gradual (gradually), gentle (gently), slow (slowly) downward trend**

- Between October and December, the decrease in use of dietary supplements was at a much slower pace than in the previous two months.
- Supplement use continued to fall steadily over the next two months until it reached its lowest point in December.
- It fell to a low of only 5% in December.

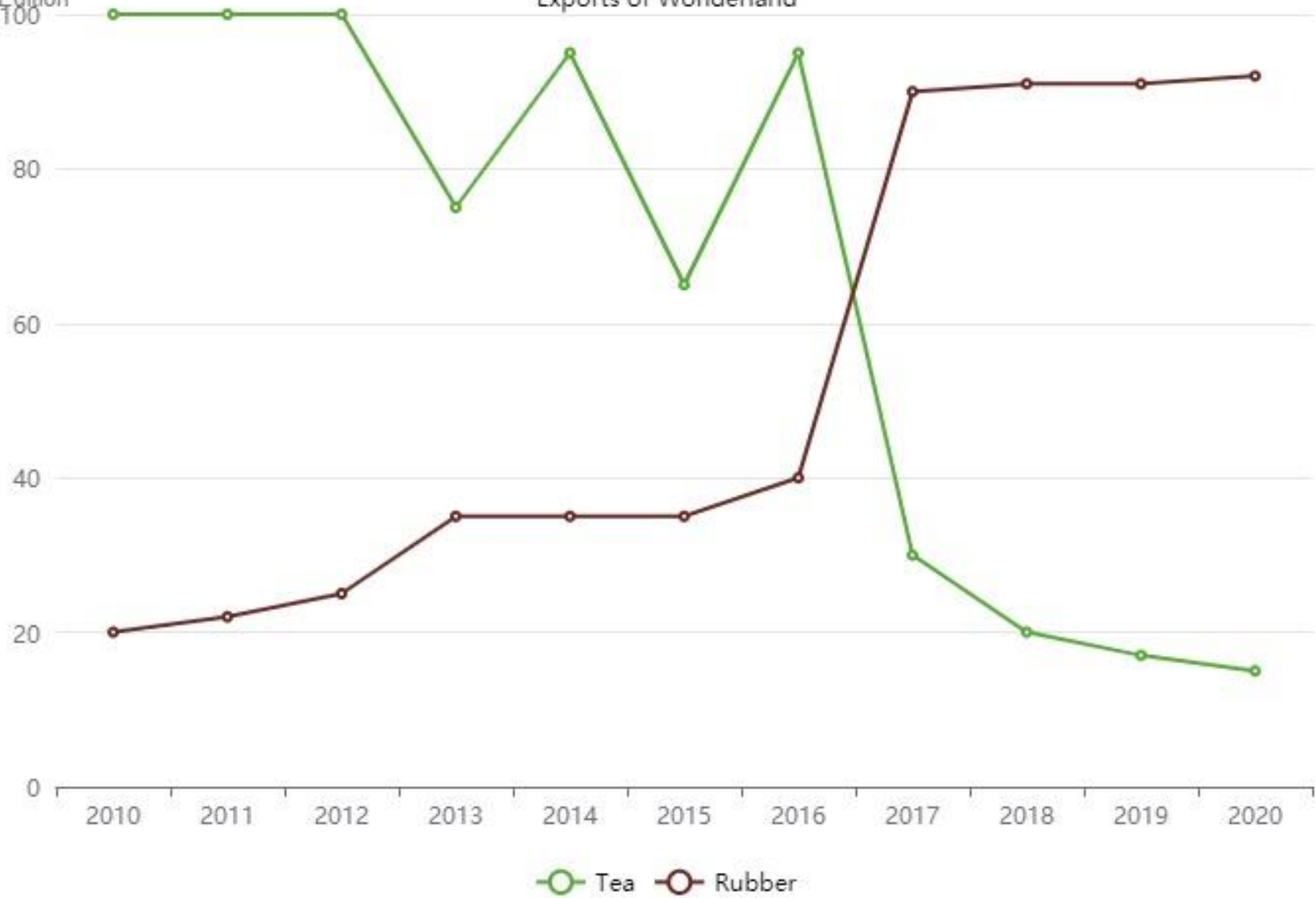


Activity

- Describe the given line graph.



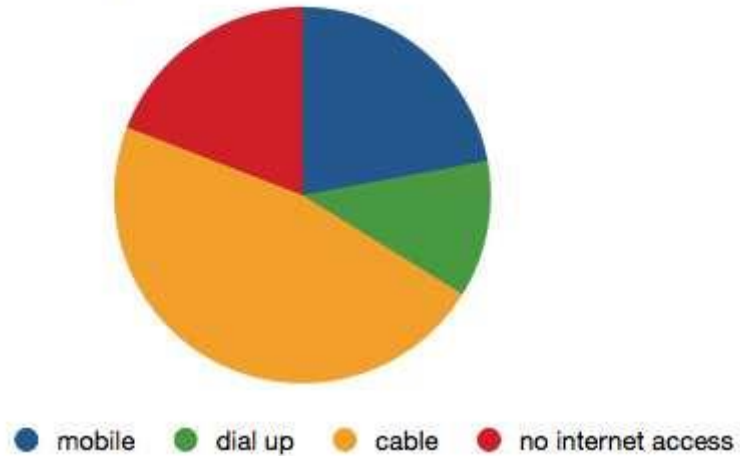
Metric Tons



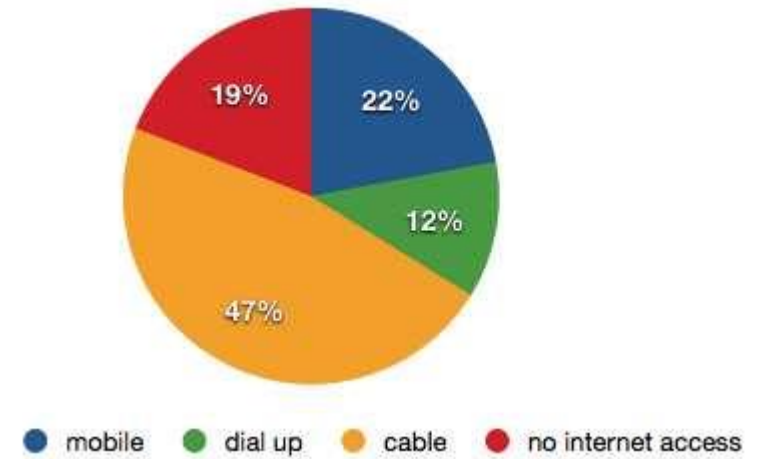
Years

Pie charts

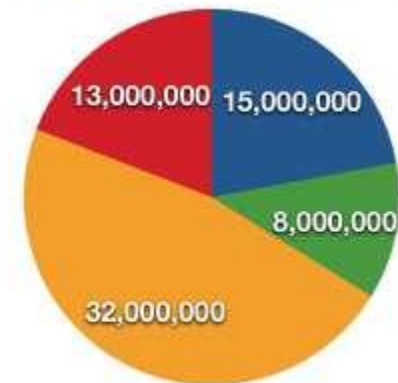
How the British accessed the internet in 2010



How the British accessed the internet in 2010



How the British accessed the internet in 2010



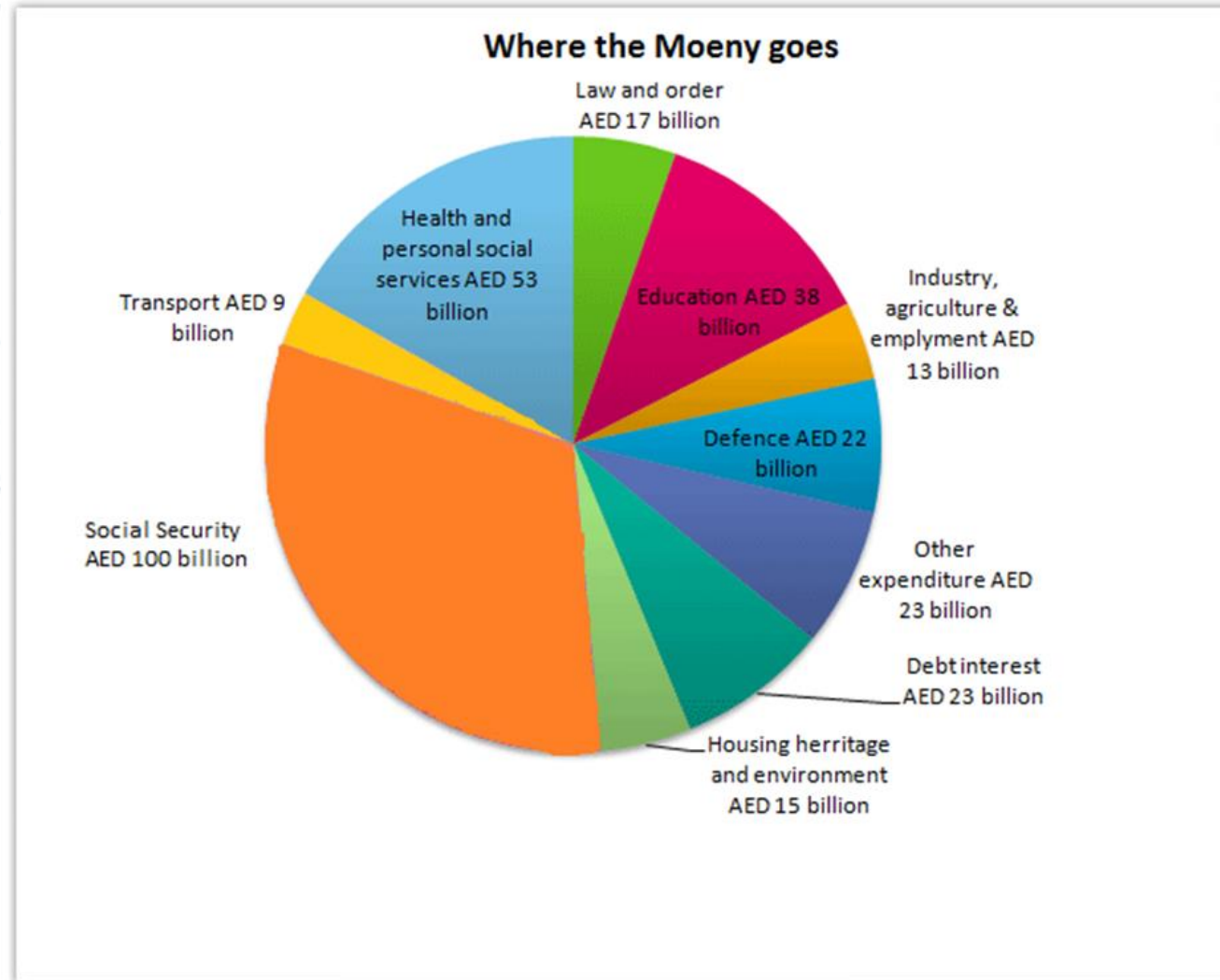
- The key language when you write about pie charts is proportions and percentages.
 - Common phrases are "the proportion of..." or "the percentage of..."
 - However, you can also use other words and fractions.
-
- A large number of people
 - over a quarter of people
 - a small minority
 - A significant number of people
 - less than a fifth

Percentage	Fraction	Percentage	Qualifier
80%	four-fifths		
75%	three-quarters	77%	just over three quarters
70%	seven in ten		
65%	two-thirds	77%	approximately three quarters
60%	three-fifths	49%	just under a half
55%	more than half	49%	nearly a half
50%	half	32%	almost a third
45%	more than two fifths		
40%	two-fifths		
35%	more than a third		
30%	less than a third		
25%	a quarter		
20%	a fifth		
15%	less than a fifth		
10%	one in ten		
5%	one in twenty		

Percentage	Proportion/amount/number/ majority/minority	Fraction
66	A large proportion	Precisely two thirds
73	A significant majority	Approximately three quarters
25	A small number	Exactly a quarter
5	An insignificant amount	A small fraction
48	-	Almost a half
35	A good proportion	Just over a third
15	A small minority	

The pie chart gives information on UAE government spending in 2000. The total budget was AED 315 billion.

Summarize the information by selecting and reporting the main features, and make comparisons where relevant.



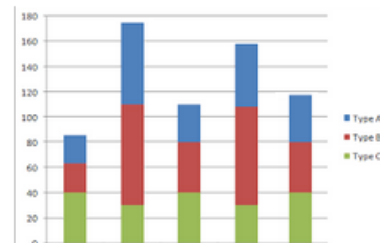
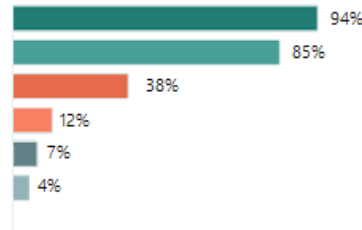
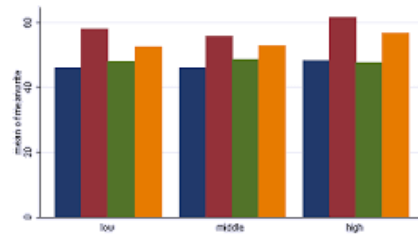
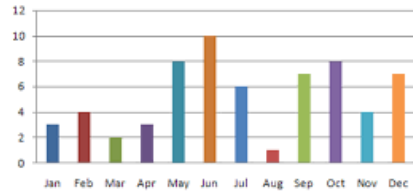
The given pie chart shows the UAE government's spending in different sectors for the year 2000. As is given in the presentation, the UAE government had AED 135 billion budget for the year 2000 and they used the highest amount in Social Security.

According to the pie chart, the UAE government spent AED 100 billion in social security from their total budget of AED 315. This single sector that cost the UAE government almost one-third of the total budget. This year the government's cost was 53 million on health and personal social services which was the second largest sector in terms of expenditure made by the UAE government in this year. 38 million AED was spent on education while 23 billion was spent both in debt and other expenditures. The government used 22 billion in Defense sector while 13 billion was spent for the industry, employment and agriculture sectors. The lowest amount of money went to the transport sector which was only 9 billion. Finally, 15 billion of the budget was spent on housing and environment.

In summary, UAE government's maximum spending went in social security and healthcare sectors while the least amounts were spent on transport, law and order, housing and industry/agriculture and employment sectors.

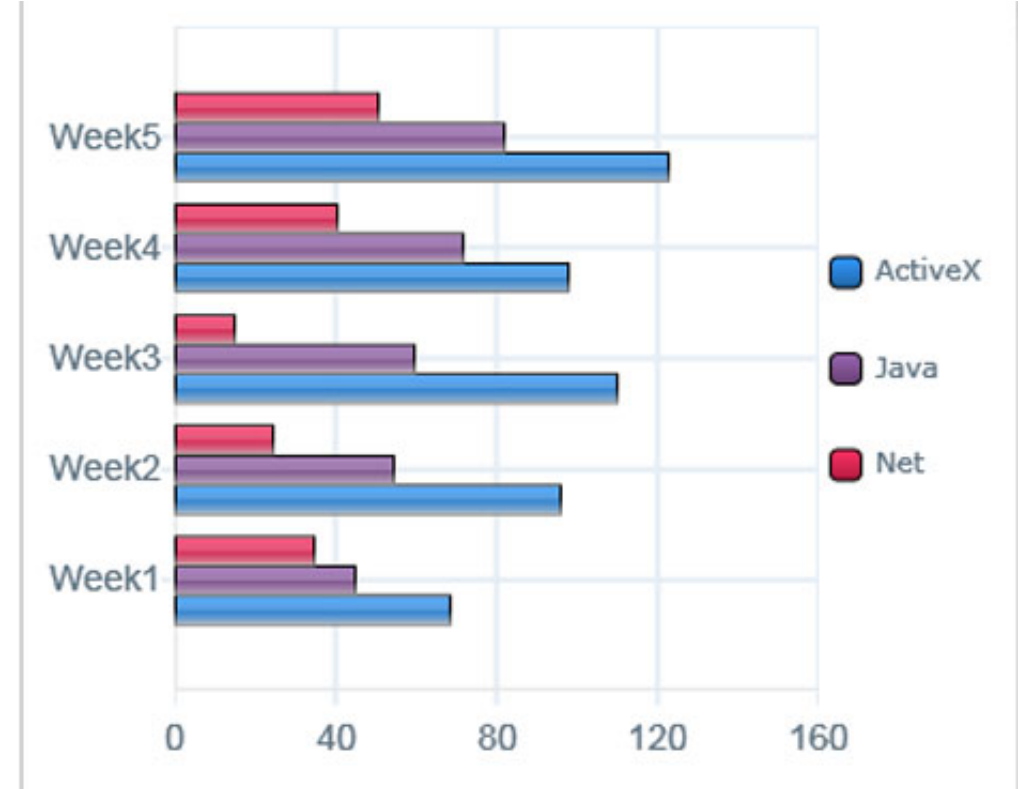
Bar charts

contain either horizontal or vertical bars to present data comparison or contrast among categories or variables



Summarize the information by selecting and reporting the main features and make comparisons where relevant.

- The bar chart shows the number of times per week (in 1000s), over five weeks, that three computer packages were downloaded from the internet.



The bar chart illustrates the download rate per week of ActiveX, Java and Net computer packages over a period of five weeks. It can clearly be seen that ActiveX was the most popular computer package to download, whilst Net was the least popular of the three.

To begin, downloads of ActiveX and Java showed similar patterns, with both gradually increasing from week 1 to week 5. However, the purchases of Active X remained significantly higher than that of the other product over this time frame. In week 1, purchases of ActiveX stood at around 75,000, while those of Java were about 30,000 lower. With the exception of a slight fall in week 4, downloading of ActiveX kept increasing until it reached a peak in the final week of just over 120,000. Java downloads also increased at a steady rate, finishing the period at 80,000.

The product that was downloaded the least was Net. This began at slightly under 40,000, and, in contrast to the other two products, fell over the next two weeks to reach a low of approximately 25,000. It then increased sharply over the following two weeks to finish at about 50,000, which was well below that of ActiveX.

References

- [Gillett, A. \(2009\). Using English for Academic Purposes. Retrieved from http://www.uefap.net/](http://www.uefap.net/)
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- <https://www.ielts-exam.net/ielts-preparation-tips/describe-a-line-graph.html>
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- <https://www.ieltsadvantage.com/2015/03/09/ielts-writing-task-1-charts-lesson/>
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- <http://www.ielts-mentor.com/48-ielts-vocabulary/vocabulary-for-academic-ielts-writing-task-1/528-vocabulary-for-academic-ielts-writing-task-1-part-1>
- <http://www.dcielts.com/task-1-2/ielts-barcharts-patterns/>

A photograph of a cream-colored rectangular card with the words "Thank You" printed in a large, bold, black serif font. The card is placed on a light brown wooden surface with a vertical grain. A black fountain pen with gold-colored accents is positioned diagonally to the right of the card.

**Thank
You**

