A. **DISCUSSION**

Google have digitized 5 million books. Give the students a few minutes to think of many uses for this information as they can. Get feedback from them (this can be done as a competition, to see who can come up with the most ideas).

B. **PRE-TEACH VOCABULARY**

Write out the following words onto flashcards (using one colour for the new vocabulary and another colour for the synonym):

- cogitate
- startling
- strive
- retrieve
- hyperbole
- thrive
- passe
- sobering
- hallmark
- ponder
- surprising
- endeavor
- regain
- exaggeration
- flourish
- old-fashioned
- serious
- characteristic

Get the students to match the vocabulary with the synonyms. Once they have successfully done that, place the flashcards face down on the table. The first student picks up a card and starts a story using their word. The students then take turns picking up a card and using their new vocabulary words in the story.
C. **Listening**

The students are going to watch a video clip with an explanation of what Google have done with their 5 million digitized books. While watching they need to answer the following questions:

1. What has Google done with the information?
2. Give all the examples they mention of how the ngram can be used.
3. Do you think that all these digital books should be copyrighted, or do you think they should be free to the public?

[http://www.ted.com/talks/what_we_learned_from_5_million_books.html](http://www.ted.com/talks/what_we_learned_from_5_million_books.html)

D. **More Vocabulary**

The following phrases were used in the video clip. Write them on the board, and ask the students to try and describe in their own words what they think the phrases mean. Discuss with them and give them the correct definition.

1. a picture is worth a thousand words
2. since time immemorial
3. the bubble burst
4. put your best foot forward
5. the bottom line

**Answers**

<table>
<thead>
<tr>
<th>Phrase</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>a picture is worth a thousand words</td>
<td>a complex idea can be conveyed with one image</td>
</tr>
<tr>
<td>since time immemorial</td>
<td>since a very long time ago</td>
</tr>
<tr>
<td>the bubble burst</td>
<td>a successful and happy time suddenly ends</td>
</tr>
<tr>
<td>put your best foot forward</td>
<td>to try one’s best, to make the best possible impression</td>
</tr>
<tr>
<td>the bottom line</td>
<td>the main or essential point</td>
</tr>
</tbody>
</table>

The remainder of this lesson has to be done during a subsequent lesson, as it requires the students to do some homework at this point.

E. **Homework**

The students need to play around with ngram for homework ([http://books.google.com/ngrams/](http://books.google.com/ngrams/)), and produce at least 5 graphs with words, or word combinations of their choice. They need to print out (or copy onto paper) their 2 most fascinating graphs and bring them to the next lesson. Tell them that it can also be interesting to see which books contain their words – they can do this by clicking on the dates at the bottom of the page. They can also compare more than 2 words simultaneously by separating them in the search box with a comma (e.g. google, facebook or Eisenhower, Churchill, Hitler, Stalin).
F. **Graph vocabulary**

Each student needs to choose their most interesting graph. They must not show their graphs to any of the other students. They are going to describe their results to another student, who is going to draw the graph on the board. For larger classes, divide the students into smaller groups and get them to draw the graphs onto paper rather than on the board. After completing the description, the students can check the accuracy of their drawings. Here is some vocabulary that might come in handy:

The following words can all be used in conjunction with **fall, drop, rise and increase**.

- dramatic
- gradual
- marked
- rapid
- moderate
- significant
- slight
- sharp
- sudden

Other useful words:

- x-axis
- y-axis
- decline
- peaked
- decrease
- fluctuate
- plateau
- plummet
- level off
- plunge

The following tenses will be most commonly used in their description:

1. **Past Simple** – to describe the sequence in the past as it has happened *(in the 1920's the numbers decreased, but then just before the second world war the figures dramatically rose)*

2. **Past Perfect** – to refer back to something that has happened previously to what you are currently talking about *(I think it’s because the Nazi’s had been using propaganda even before the war started)*

3. **Present Perfect** – to talk about the recent past as it still effects us today *(the numbers have plateaued since then)*
LISTENING
You are going to watch a video clip with an explanation of what Google have done with their 5 million digitized books. While watching you need to answer the following questions:
1. What has Google done with the information?
2. Give all the examples they mention of how the ngram can be used.
3. Do you think that all these digital books should be copyrighted, or do you think they should be free to the public?

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VOCABULARY
The following phrases were used in the video clip, what do you think they mean?
1. a picture is worth a thousand words
2. since time immemorial
3. the bubble burst
4. put your best foot forward
5. the bottom line

HOMEWORK
http://books.google.com/ngrams/
Use the Google Ngram Viewer to produce at least 5 graphs with words, or word combinations of your choice. Print out (or copy onto paper) the 2 most fascinating graphs. You can also see which books contain your words by clicking on the dates at the bottom of the page. You can also compare more then 2 words simultaneously by separating them in the search box with a comma (e.g. google, facebook or Eisenhower, Churchill, Hitler, Stalin).

GRAPH VOCABULARY
The following words can all be used in conjunction with fall, drop, rise and increase.

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<td>rapid</td>
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<tr>
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<td>significant</td>
</tr>
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<td>sharp</td>
</tr>
<tr>
<td>sudden</td>
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Other useful words:

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<td>plunge</td>
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The following tenses are useful for describing your graphs:
1. **Past Simple** – to describe the sequence in the past as it has happened (in the 1920’s the numbers decreased, but then just before the second world war the figures dramatically rose)
2. **Past Perfect** – to refer back to something that has happened previously to what you are currently talking about (I think it’s because the Nazi’s had been using propaganda even before the war started)
3. **Present Perfect** – to talk about the recent past as it still effects us today (the numbers have plateaued since then)