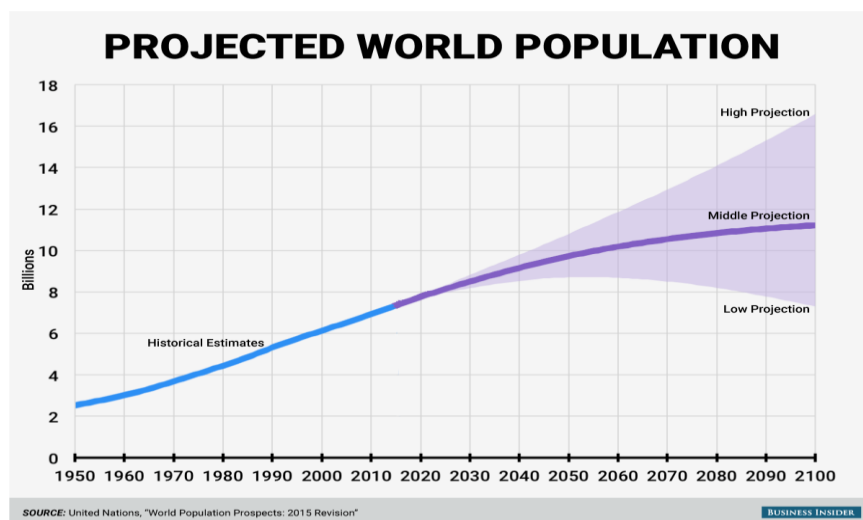Week 11     **GRAPHS AND CHARTS**

*A picture is worth a thousand words.*

This is certainly true when you're presenting and explaining data. Put up a graph or a chart, and suddenly everything you're saying makes sense. Graphs or charts help people understand data quickly. Whether you want to make a comparison, show a relationship, or highlight a trend, they help your audience "see" what you are talking about.

Read more: https://www.mindtools.com/pages/article/Charts_and_Diagrams.htm

**1. What are graphs used for in geography?**
  **What information do we have to include when plotting a graph?**



**PROJECTED WORLD POPULATION**

SOURCE: United Nations, "World Population Prospects: 2015 Revision"    BUSINESS INSIDER

**Which of the verbs below are used to refer to graphs?**

illustrates       shows

believes          suggests

indicates     represents

states     argues     reflects

**2. Complete the gaps with the verbs below, use the right forms:**

   *range     see     show     remain     experience     stand     decline     increase     peak*

The world population has (1) _____ continuous growth since the end of the Great Famine and the Black Death in 1350, when it (2) _____ at around 370 million. The highest rates of growth – global population increases above 1.8% per year – were (3) _____briefly during the 1950s, and for a longer period during the 1960s and 1970s. The growth rate (4) _____ at 2.2% in 1963, then (5) _____ to below 1.1% by 2012. Total annual births were highest in the late 1980s at about 138 million, and are now expected to (6) _____ essentially constant at their 2011 level of 134 million, while deaths number 56 million per year, and are expected to (7) _____ to 80 million per year by 2040.

Current UN projections (8) _____ a continued increase in population in the near future (but a steady decline in the population growth rate), with the global population expected to reach between 8.3 and 10.9 billion by 2050. UN Population Division estimates for the year 2150 (9) _____ between 3.2 and 24.8 billion; mathematical modeling supports the lower estimate. Some analysts have questioned the sustainability of further world population growth, highlighting the growing pressures on the environment, global food supplies, and energy resources.     (http://en.wikipedia.org/wiki/World_population)

**Now fill in the missing prepositions:**

        To peak _____ 17%          To increase _____ 2%  /  to increase _____ 2%

        To range _____ 4.5 and 5.3 billion   /   to range _____ A to Z

**3. Video  Graphs and charts**   http://www.bbc.co.uk/skillswise/video/graphs-and-charts

- Give examples of three types of graphs
- How are graphs helpful for businesses?

**4. Complete the following table supplying the appropriate vocabulary.**

| VERB | NOUN | ADJECTIVE | ADVERB |
|---|---|---|---|
| RISE | | SLIGHT | |
| INCREASE | | SHARP | |
| DECREASE | | DRAMATIC | |
| IMPROVE | | STEADY | |
| RECOVER | | SUDDEN | |
| DROP | | ABRUPT | |

**5. Match the types of graphs with their representative charts and complete the sentences.**
https://support.office.com/en-us/article/Available-chart-types-in-Office-a6187218-807e-4103-9e0a-27cdb19afb90?CorrelationId=75cebd13-9682-4ce3-8257-783efa8aa8e8&ui=en-US&rs=en-US&ad=US&ocmsassetID=HA010342187
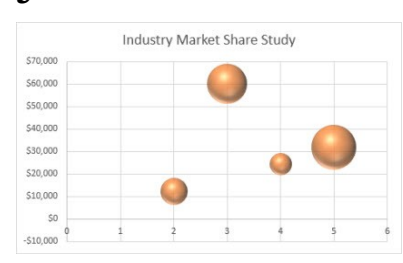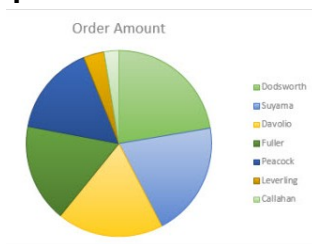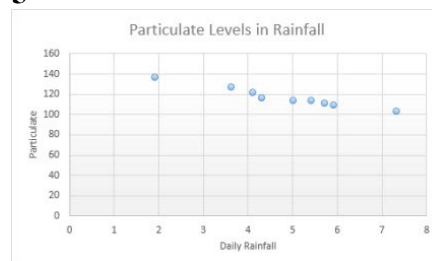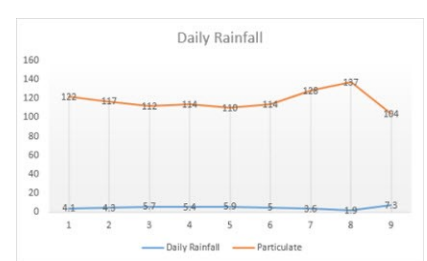
**1**



**2**
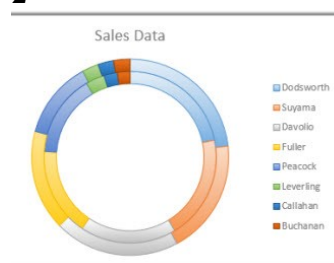


**3**



**4**



**5**



**6**



- *A doughnut chart*
- *A line chart*
- *A pie chart*

- *A bubble chart*
- *A scatter chart*
- *A bar chart*

a) …………….. are often a good choice to show **comparisons** among data

b) You can use …………... to indicate the **fluctuation** of daily or annual temperatures.

c) …………….. are well suited to show **proportion to the sum** of items

**d)** …………… are often a good choice for showing **change over time**

**6. Now transform these sentences using the given word so that they mean the same:**

A. There's been a slight decline in sales.
   Sales ……………………………………

B. We made a sharp increase in investment.
   Investment ………………………………

C. There was an abrupt drop in sales in March.
   Sales………………………………………

D. Unfortunately, consumer interest suddenly decreased.
   There…………………………………………

E. Profit has been flat over the past two years
   There………………………