**Independent Practice:**

Students will work independently, due to the nature of the assignment. Groups will be created after the worksheets have been created to conclude the lesson.

**Conducting a Research Using a Step-by-Step Process:**Read through all the instructions and complete the activities included for each of the steps.

**………………………………………………………………………………………………………………………**

**STEP 1: Choose a topic and state it in question format.** *What problem are you facing or what is an issue you are trying to resolve? The question should be as specific as possible and relate to an important personal or business issue.*

**Activity #1-2.01 Assess information needs**

**Directions:**

1. Using the **2.01 Self-Assessment Handout** (provided by your teacher) rate your current level of research knowledge.
2. Read through “[The difference between a subject and a topic.](http://www.infoplease.com/cig/writing-well/subjects-vs-topics.html)

**How to Choose a Subject or Area of Interest**

The first step in the research process is to decide on a tentative subject or area of interest. At this point in your research, it is perfectly acceptable if you only have a very general idea of what you'd like to pursue. For example, you may decide you'd like to research illegal immigration, alcoholism, freedom of speech, computer networks, elementary education, or astronomy. Ultimately, though, each of these subjects is far too broad for a single research project. Even though you have started by thinking only of a general subject area, your goal is to narrow and focus your subject until you come up with a research topic, which is often stated in the form of a question. What is the difference between a subject and a topic? A subject is a broad area of interest from which a more specific topic can be chosen. A research topic, therefore, is a relatively narrow area of interest that can be thoroughly researched and discussed within the page-length guidelines given by your instructor. Examples of subjects and topics are given below:

|  |  |
| --- | --- |
| **SUBJECT**  | **RESEARCH TOPIC** |
| Elementary education | "What are effective methods for teaching children how to read?" |
| Journalism | "What are the effects of corporate ownership and media monopolies on news reporting and editorial freedom?" |
| Astronomy  | "What are the latest speculations about the origins of the universe?" |
| Economics  | "How does illegal immigration affect the United States' economy?" |
| Law/Political Science/Sociology | "What steps, if any, should the government take to censor pornography and hate speech on the Internet?" |

Notice that each of the five research topic examples is an open-ended question, i.e. they are phrased in such a way that the researcher is deliberating different perspectives. This open-minded approach to all viewpoints is essential.

4. **Take the 5 Question Quiz** [Brainstorming a topic](https://www.youtube.com/watch?v=EBwPb7XhQuY)

5. **Take the 5 Question Quiz** [Narrowing your topic](https://www.sophia.org/tutorials/choosing-and-narrowing-a-topic-to-write-about-for) (<http://www.questia.com/research-tutorials/1/363/quiz/narrowing-your-topic>)

**Steps to Narrowing a Topic**

1. First start out with a general topic. Take the topic and break it down into categories by asking the five W's and H. ...
2. Now consider the following question areas to generate specific ideas to narrow down your topic. ...
3. Finally, refine your ideas by considering the S.O.C.R.A.P.R .

**6. Write your selected topic in question format here:** *Write your subject and topic on index cards and give to Ms. Blount for approval. Hold on to it until the end of class. Ms. Blount will provide you with the additional instructions.*

**………………………………………………………………………………………………………………………**

**STEP 2: Gather and review information related to the question*.*** *Determine if others have studied the same problem and if they have reported on the results of their study. This step usually involves a careful search of library information including books, magazines, and documents.*

**Activity #2-2.01-Obtain needed information efficiently**

**Directions:**

1. **View the video,** “Developing a Search Strategy” <https://www.youtube.com/watch?v=bLorRf3fRU0>
2. 2. Using your topic from the previous activity ***as the basis for obtaining information efficiently:*** [Go to Noodletools.com](http://www.noodletools.com/) (http://www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html)
Click on the [noodle quest](http://www.noodletools.com/noodlequest/) link, complete the short form to allow Noodle tools to choose the best search strategy for your topic. *For every question, you can check any number of boxes (or none).*
3. 3. View the video “[What is Primary and Secondary Sources](https://www.youtube.com/watch?v=cqXHO7bTPnw)?”
4. 4. **Identifying Primary and Secondary Sources Activity**. The items listed below are examples of primary and secondary sources. Write P for each primary source and S for each secondary source.

\_\_\_\_\_ 1. A newspaper article

\_\_\_\_\_ 2. A private journal

\_\_\_\_\_ 3. A government document

\_\_\_\_\_ 4. An editorial cartoon

\_\_\_\_\_ 5. A medieval tapestry

\_\_\_\_\_ 6. A textbook on the history of Asia

\_\_\_\_\_ 7. A photograph of a family vacation

\_\_\_\_\_ 8. An autobiography

\_\_\_\_\_ 9. A property deed

\_\_\_\_\_ 10. A documentary film

**SUMMARY/CLOSURE: Exit Tickets:** Differentiate among factual information, criticism, and opinions.

**Day 2:**

**Bell Ringer:**

**2.02 Avoiding Information Management Risks**

Put simply, when you can't get your hands on the information you need, or when the information you have isn't protected appropriately, you can miss opportunities, decisions can be compromised, performance drops, customers suffer, and you can lose a competitive advantage.

**Directions:** Read 2.02 Avoiding Information Management Risks- Reading: [“Data and Information Management-Protecting an Important Organizational Asset”.](http://www.mindtools.com/pages/article/data-information-management.htm) *(*[*http://www.mindtools.com/pages/article/data-information-management.htm*](http://www.mindtools.com/pages/article/data-information-management.htm)*)*

Listed below are 7 scenarios of potential risk and challenges companies may face regarding information management.

Once you’ve reviewed the article, brainstorm ways of initiating or improving an information management program that can be of benefit in the situations below.

Then write a brief proposal outlining your ideas, explaining how your proposed improvements will help the organization and eliminate the consequences of poorly managed data and information. "

|  |  |  |
| --- | --- | --- |
| Business Scenario | Identified Risks | Way(s) of improving an information management program  |
| 1. Your organization's headquarter is flooded unexpectedly. Your backup system is outdated, and, as a result, you lose months of data, worth millions of dollars to your organization.
 | Financial lossesDisaster losses |  |
| 1. Hackers access your customer database, which includes addresses and credit card numbers. These customers are now at risk of identity theft, and they decide to sue you for violation of their privacy.
 | Litigation riskSecurity breach |  |
| 1. Your organization has no process for data cleansing – replacing or deleting inaccurate, incomplete, or outdated information. Consequently, your data storage costs and IT resource needs double each year.
 | Excess data storage costs |  |
| 1. Your team members can't find the information that they need to do their work, because each department has its own database, and none of these systems communicate with one another.
 | Inefficient workflow processes |  |
| 1. Your sales reps struggle to access the inventory database, which informs them of product availability and delivery dates. Competitors win sales from you, because they have immediate access to this information.
 | Missed opportunities |  |
| 1. Customers are frustrated, because departments can't communicate effectively with one another. As a result, your organization's reputation and sales suffer.
 | Brand/reputation loss |  |
| 1. One of your team members loses their laptop, which contains information about a well-known client. As a result, your organization receives negative media coverage and you lose a number of clients.
 | Negative press/publicity |  |
| 1. A major tobacco company failed to save emails per its own information-management policies.
 | Not in compliance  |  |
| 1. A music artist recognizes portions of their original work being replicated by a modern day song writer.
 | Copyright infringement |  |

**Guided Practice**

**2.02 Avoiding Information Management Risks- Reading**

Data and Information Management

Protecting an Important Organizational Asset

A client has just contacted you with a billing question, but, while you can view her bill, you can't access her order because it's held on a sales database that isn't synced with yours.

To help her, you need to speak with someone on the sales team, but he's out in the field, and three days pass before you have the information you need to resolve the issue. By this time, the customer is understandably upset.

Data and information management isn't just the responsibility of your IT department; it affects everyone in an organization. It can determine how well you communicate with your customers, how safe and secure your data is, how safe your customers are, and how efficiently everyone can meet their goals and achieve performance metrics.

In this article, we'll look at why data and information management can be so important, and we'll explore ways that you can organize data more effectively in your organization.

**Note:**

This is highly important in many businesses (for example, in banking), but is not as relevant in others (for example, in a design agency). Use your own best judgment when thinking about data and information management within your own organization.

What is Data and Information Management?

The [**Data Management Association**](http://www.dama.org/) (DAMA) defines data and information management as "… the development, execution, and supervision of plans, policies, programs, and practices that control, protect, deliver, and enhance the value of data and information assets."

Data management has existed in some form since the 1950s. It emerged in the late 1970s as a distinct discipline when information began to move from paper to tape, and then to disk. Over the past decade, data management has become important for organizations of all sizes, in many different industries.

The Importance of Data Management

Effective data and information management is a concern for many organizations. The amount of digital information in the world is increasing tenfold every five years, and organizations are having a difficult time managing this data and keeping it secure.

In a [**study**](http://aiken.isy.vcu.edu/professional/publications/papers/Measuring%20Data%20Management%20Practice%20Maturity%20%28Green%29.pdf) conducted by Virginia Commonwealth University, fewer than 10 percent of organizations use documented processes to manage their data, and fewer than one in three organizations claim confidence in their own data.

The consequences of poorly managed data can be significant. Consider the following examples:

* **Financial losses:** Your organization's headquarters are flooded unexpectedly. Your backup system is outdated, and, as a result, you lose months of data, worth millions of dollars to your organization.
* **Litigation risk:** Hackers access your customer database, which includes addresses and credit card numbers. These customers are now at risk of identity theft, and they decide to sue you for violation of their privacy.
* **Excess data storage costs:** Your organization has no process for data cleansing – replacing or deleting inaccurate, incomplete, or outdated information. Consequently, your data storage costs and IT resource needs double each year.
* **Inefficient workflow processes:** Your team members can't find the information that they need to do their work, because each department has its own database, and none of these systems communicate with one another.
* **Missed opportunities:** Your sales reps struggle to access the inventory database, which informs them of product availability and delivery dates. Competitors win sales from you, because they have immediate access to this information.
* **Brand/reputation loss:** Customers are frustrated, because departments can't communicate effectively with one another. As a result, your organization's reputation and sales suffer.
* **Negative press/publicity:** One of your team members loses their laptop, which contains information about a well-known client. As a result, your organization receives negative media coverage and you lose a number of clients.

Put simply, when you can't get your hands on the information you need, or when the information you have isn't protected appropriately, you can miss opportunities, your performance drops, your projects and customers suffer, and you lose competitive advantage.

Security is a key element in data management. The 2013 [**Global State of Information Security Survey**](http://www.oxfordeconomics.com/my-oxford/projects/128940) reports that although more than 70 percent of organizations surveyed are "very” or "somewhat” confident in their information security strategies, that confidence has declined steadily since 2008. Data theft and security issues are increasing each year, leading to financial losses, intellectual property theft, identity fraud, and compromised reputations.

Improving Your Information Management

If effective data and information management is important within your industry, then it should be given serious, long-term attention from everyone from the CEO and CIO down to the newest employee on the team.

Keep in mind that overhauling an existing system or syncing all of the databases in an organization can be an enormous, costly, and difficult project that can take months or years to implement – this may make it impractical, particularly if other projects will deliver a bigger business benefit.

**However, you can take other steps to improve data management for your team, and for your organization.**

1. Identify Frustrations

Start by listing the frustrations, [**bottlenecks**](http://www.mindtools.com/pages/article/newTMC_76.htm)  , and inefficiencies that you experience regularly with information and data availability. (To do this, it can be helpful to use[**Flowcharts**](http://www.mindtools.com/pages/article/newTMC_97.htm)   and [**Swim Lane Diagrams**](http://www.mindtools.com/pages/article/newTMC_89.htm)   to map how information moves through your department or organization.)

Next, ask your team members to describe their frustrations regarding data and information. Lack of access or inefficiencies may be affecting their work in ways that you are not aware of.

Once you have a list of current issues, perform a [**Root Cause Analysis**](http://www.mindtools.com/pages/article/newTMC_80.htm)   to trace each issue to its origin. This analysis can help you determine whether these problems, errors, or inefficiencies are the result of technical, maintenance, or human issues.

2. Review Security

The frustrations that you listed above could be a result of valid data security measures. For example, most organizations restrict access to personal information, such as employee salaries and vacation schedules, customer credit card data, or sensitive sales and financial data – clearly, you need to think carefully about who can access this information.

Start by conducting a [**Risk Analysis**](http://www.mindtools.com/pages/article/newTMC_07.htm)   to identify any data security issues. Talk to other departments within the organization – particularly accounts, internal audit, compliance, and legal – to see if there are any issues that you need to be aware of.

Ask your IT department about information security. You and your team could be putting vital information at risk unknowingly, especially when you're working offsite on a laptop, smartphone, or tablet. Ask what you can do to keep your organization's information safe and secure, and communicate these best practices to your team.

3. Streamline Processes and Systems

Talk to your IT department about the problems, inefficiencies, and security points that you have identified. They might be able to fix some of these issues, or they might be able to suggest new ways to access the data that you need. At a minimum, letting IT staff members know about your frustrations gives them important feedback that they can consider during system upgrades and redesigns.

Your IT department might have a list of best practices and guidelines that you can use to streamline information, avoid duplication, protect sensitive data, and use existing systems more efficiently.

Talk to your team members about steps that they can take to improve their own data and information management. Do they have files or software that they are no longer using that can be deleted? Are they taking unnecessary risks with sensitive information? Do they keep files and folders organized, well-maintained, and up-to-date?

Think about the steps that you can take to improve data "housekeeping." Routinely going through your files and deleting old, inaccurate, or incomplete documents and programs can help reduce data storage costs for your organization; it's also a smart way to [**manage your electronic files**](http://www.mindtools.com/pages/article/managing-electronic-files.htm)  . There may also be a central database that you could update, so that others in your organization can access your department's information.

4. Create Business Cases for Systems Improvements

For some organizations, data and information management may not be a high priority, and, for some, it may not seem relevant at all. If data management isn't as high a priority as it should be within your organization, you might have trouble getting buy-in for your proposed improvements.

[**Brainstorm**](http://www.mindtools.com/brainstm.html)   the ways that improving data and information management could benefit your organization. If appropriate, write a [**business case**](http://www.mindtools.com/pages/article/newPPM_62.htm)   outlining these ideas and proposals, and explain how your proposed systems improvements will help the organization and eliminate the consequences of poorly managed data.

Key Points

Data and information management is the development of policies and systems that protect and deliver the information that your organization needs in order to operate.

In-depth data and information management is crucial to the success of some organizations, but for others it may not be a priority. When data is inaccurate, inaccessible, lost, or incomplete, your organization can suffer from financial losses, missed opportunities, low productivity, and a poor reputation.

To help your organization manage its data and information more effectively, list the frustrations, bottlenecks, and inefficiencies that you and your team members experience. Then, review the risks that you need to protect against.

When you've identified the changes that you want to make, talk to IT professionals about these issues, and find out what you can do to streamline processes and systems within your organization. Finally, write a business case to outline how your proposed improvements will benefit the organization.

This site teaches you the skills you need for a happy and successful career; and this is just one of many tools and resources that you'll find here at Mind Tools. Subscribe to our [**free newsletter**](http://www.mindtools.com/subscribeProblem.htm?tag=upsp), or [**join the Mind Tools Club**](http://www.mindtools.com/rs/clubupsp) and really supercharge your career!

**Independent Practice:**

**STEP 3: Separate fact from opinion.** *Effective research relies on objective data. The opinions of others may provide interesting ideas to consider but should not be relied on for answers to your question. Consider if the sources of information are credible and if the information provided is factual.*

**Fact:** a piece of information presented as having an objective reality; knowledge or information based on real occurrences

**Opinion:** a view, judgment, or appraisal formed in the mind about a particular matter; a belief or judgment that rests on grounds insufficient to produce complete certainty

**Bias:** an inclination of temperament or outlook, especially a personal and sometimes unreasoned judgment

**Activity # 3 Determining Facts, Opinions, and Bias in a Nonfiction Article**

**Directions:**

**Part 1-** Read each paragraphs (adapted from: Laying the Foundation, Inc. Dallas, TX); try to determine whether there is bias, using the information, questions, and suggestions 1-7. If so, what might be creating the bias? Write your answer in space provided below.

1. Highlight the facts in the article. Can they be validated?
2. Identify opinions using boxes or circling around the text

Reading for pleasure is a waste of time. People who spend hour upon hour reading don’t get to live in the real world. They don’t really learn anything that is useful about how to deal with everyday people and problems. Plus, teachers always make us read things that are boring.

Parents always talk about how if schools had uniforms, everything would be so much easier. You wouldn’t get caught up on looks and would learn the skills you need. I disagree with this. I think that school uniforms would put a restriction on our creativity. We dress the way we do for a certain reason. Clothes give us expression and the ability to use color and patterns. The first impression we get of people is usually clothes, facial expression and language. If we all wear the same thing we don’t get to really see what people are like on the inside. Usually girly girls wear pink and frilly things. Skaters wear baggy pants and Goths usually wear black. Clothes don’t distract us from learning the studies we need to, it simply lets us inspire our imaginations and lights up our worlds.—*Anonymous writer on TeenInk.com*

**Write your answers to questions 3-7:**

3. Looking at the opinions, what is the prevailing tone? Is it positive or negative?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. What do you know about the writer of the article?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. How might experiences or objectives “color” this writer’s opinion?
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Do you think the writer intentionally uses bias to persuade, or is it unintentional?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. How biased is the article? Can the writer be trusted, or is the bias too strong for a clear understanding of the topic?

**Part 2 - Directions:** Read the next two examples. Answer the questions afterwards.
1. Is there bias in both?

Eating tomatoes is one of the best things you can do. These beautiful, red fruit not only thrill your taste buds and brighten your plate, they help fight disease. Studies show that people who eat tomatoes, and lots of them, lower their risks of cancer because tomatoes contain lycopene, a powerful antioxidant.—*Dr. Joe Medicine*

Eating tomatoes is one of the best things you can do. These beautiful, red fruit not only thrill your taste buds and brighten your plate, they help fight disease. Studies show that people who eat tomatoes, and lots of them, lower their risks of cancer because tomatoes contain lycopene, a powerful antioxidant.—*Tomato Farmers of America*

2. Is it perceived in the same way?

3. Why or why not?

4. Which article is more reliable?

**Part 3**

**Directions:**

Using a non-fictional source of material selected for your selected topic (Cite your source).

1. List the opinions included in the first paragraph.
2. List the facts used in the first paragraph.
3. Write comments determining how the writer uses facts and opinions and whether bias is present in the article.

**Type your comments and submit your responses in Unit 2 folder labeled, titled Activity #3 Part 3.**

............................................................................................................................................

**Activity # 4-2.01-Evaluate quality and source of information**

**Directions:**

1. **Watch this video on** Evaluating Sources <https://www.youtube.com/watch?v=FKaH7PlXx1Q>
2. From a source you believe is appropriate to answer your research question, use the Easy Bib Website Evaluation Guide found at (<http://media.easybib.com/ebook/mla_websiteeval.pdf>) to determine the website’s credibility.
3. Compose three paragraphs for your research question.

• First paragraph: Present your research question
• Second paragraph: Present the website that you believe is credible and how you found it.
• Third paragraph: Taking cues from the Easy Bib Website Evaluation Guide, describe how you know that the website is a credible source.

**Type your three paragraphs and post in Unit 2 folder and padlet labeled, titled Activity # 4.**

**………………………………………………………………………………………………………………….…………**

**STEP 4: Propose a hypothesis.** *A hypothesis is a prediction about the answer to your research question. The hypothesis can be based on the information gathered, your experience, or your beliefs. You will conduct a study to gather information that will ether support the hypothesis or determine that it is wrong.*

***Activity #5-Stating the hypothesis***

**Directions:**

1. ***View video on*** *“*[*Challenge Your Questions and Hypothesis*](https://www.youtube.com/watch?v=6PgQuDjnq64)*”*
2. **State the hypothesis for your topic question here:**

Adopted from: <http://www.mindtools.com/pages/article/data-information-management.htm>

**Exit Ticket**

**Day 2:** Explain how to detect bias or prejudice in information sources.

**Day 3**

**STEP 5: Collect data to test the hypothesis.** *Researchers carefully design studies to gather information related to the question and hypothesis. The common methods of collecting data are the use of surveys, making observations, or conducting an experiment.*

**Activity #6 Describe the method of data collection you plan to use for research.**

**Directions:**

**1.** Go to [www.google.com](http://www.google.com). Search for data by entering your full name in the search bar to see how many pieces of information (data) come up with your given name.

How many results returned? \_\_\_\_\_\_\_ (Try using another search engine to many results returned\_\_\_\_\_\_\_

What percentage of the information is actually referring to you?

Is it referring to someone else with the same name? \_\_\_\_\_\_\_\_\_\_.

This kind of search is similar to those who use untrusted data in their data collection.

**2.** Do an Internet search on your topic to see if they can find any data to support your hypothesis. Be prepared to share your findings with the class (topic search, location of information, what information was found, how you know this information be trusted?

**State the data collection plan here and submit your responses on a separate page in your Unit 2 folder, titled Activity # 6.**

Exit Ticket

**Day 3:** Describe the need to modify the information-development process in order to use the information in a new product or process.

**Day 4**

**Activity #7 Analyzing the Data**

**Directions:**View the Gap minder World Poster below.

**Analysis of the Data:**
The chart compares Life Expectancy & GDP per capita of 182 nations in the year 2013. Each bubble is a country. Size is population. Color is region

People live longer in countries with a higher GDP per capita. No high income countries have really short life expectancy, and no low income countries have very long life expectancy. Still, there is a huge difference in life expectancy between countries on the same income level. Most people live in Middle Income countries where difference in lifespan is huge between countries; depending on how income is distributed and how it is used.
[Click here to download](http://www.gapminder.org/GapminderMedia/wp-uploads/gapminder_world_2013_v8.pdf)  the Gamier poster suitable for print. (http://www.gapminder.org/GapminderMedia/wp-uploads/gapminder\_world\_2013\_v8.pdf). The chart was produced in November 2014 and revised in March 2015.

**Data Sources
Income Data:** World Bank’s GDP per capita, PPP (constant 2011 international $), Jan 14 2015, with a few additions by Gap minder. The x-axis uses a log-scale so that doubling incomes show the same distance on all levels.

**Life Expectancy:** IHME 2014, available at http://vizhub.healthdata.org/le/, Jan 14 2015.

**Population:** UN World Population Prospects: The 2013 Revision.
**“Based on a free chart from** [www.gapminder.org](http://www.gapminder.org)**”**

**Activity #8 Learning how to analyze data**

**Directions:**Go to [www.gapminder.org/world](http://www.gapminder.org/world), which lets you view historic time series & compare other indicators. Click on the tab at top “How to Use”. Find the answer to the following questions using the Gap minder Data Explorer.

1. Which country has today the lowest death rate during the 1st year of life (i.e. infant mortality): Singapore, Sweden or Venezuela?
* For Y-axis select: “Infant mortality rate (per 1,000 births)”
* Select Singapore, Sweden and Venezuela
* Pull back the time bar to 1930, then hit play button
1. Which country has the lowest infant mortality today: Nicaragua, Sri Lanka or Turkey?
* For Y-axis select: “Infant mortality rate (per 1,000 births)”
* Select Sri Lanka and Turkey
* Pull back the time bar to 1960, then hit play button
1. In which country is the average income per person highest today: Botswana, Egypt or Moldova?
* For Y-axis select: “Income per person (GDP/capita, inflation adjusted $)”
* Select Botswana, Egypt and Moldova
* Pull back the time bar to 1950, then hit play button
1. In which country do people live the longest on average today: Botswana, Egypt or Moldova?
* For Y-axis select: “Life expectancy at birth (years)”
* Select Botswana, Egypt and Moldova
* Pull back the time bar to 1950, then hit play button
1. In which country today do women on average marry at the oldest age: Algeria, Canada or the Philippines?
* For Y-axis select: “Age at 1st marriage (women)”
* Select Algeria, Canada and the Philippines
* Pull back the time bar to 1966, then hit play button
1. Which country has the fewest number of children per woman today: Tunisia, Bangladesh or Argentina?
* For Y-axis select: “Children per women (total fertility)”
* Select Argentina, Bangladesh and Tunisia
* Pull back the time bar to 1950, then hit play button
1. Which country emits most tones of CO2 per person today: China, France or USA?
* For Y-axis select: “CO2 emissions (tons per person)”
* Select Argentina China, France and USA
* Pull back the time bar to 1900, then hit play button

**Extended Activity:**
For one of the most comprehensive collections of statistical and demographic databases and of data visualization tools and sites on the Internet, ideal for researchers, students, journalists and anyone searching for indicators and statistics or looking to visualize such data etc. Go to: <https://crisismaven.wordpress.com/references/>

…………………………………………………………………………………………………………………….…………

Exit Ticket

**Day 4:** Use the information obtained through your research to make a decision about the topic. Share your decision and rationale with the class.

**STEP 7: Report the results.** *It is important that researchers document and report the results of their research. The report will help others understand the research and repeat it or improve upon it. It will also provide evidence that you were objective in the way your completed your research.*

**Activity #9- Reporting the results**

**Directions:**Compose a brief report that has an introduction paragraph which describes the purpose of the report. In the body, explain the results from the data used to support your argument. Include in the summary an overall conclusion realized from the data gathering and analysis.

**Write your report here and submit your responses in your folder for Unit 2, titled Activity # 9**

**.…………………………………………………………………………………………………………………….………**

**STEP 8: Put the research results into practice.** *You began the research process to answer or solve a problem. You need to apply what you learned and determine if what you learned makes difference. No matter the results, you will want to continue to conduct research and study the research of others. It will help you make sound decisions and have confidence in your knowledge and abilities.*

**Activity #10-2.01 Apply information to accomplish a task**

**Directions:**Use the information obtained through your research to make a decision about the topic with your members. Share your decision and rationale with the class.

**Type your subject, topic and answer to your topic. Sent to the LJ printer and place in your class tray in the front of the class. Place in your folder for Unit 2, titled Activity # 10.**

**Activity #11-2.01 Store information for future use**

**Directions:**

Decide what methods you will use to save or store your sources, information from the research so that it can be accessed and updated at a later date. Store/record the information that you obtained. Discuss different methods of storage/recording with the class.

**Type your decision on how you plan to store your research information here. Sent to the LJ printer and place in your class tray in the front of the class. Place responses on a separate page in your folder, titled Activity # 11.**