

2.1 - Developing a Thesis

MDM4U
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Part 1: ISU Intro

This chapter will prepare you to begin your ISU that is worth 10% of your final grade. For the ISU you will be required to choose a topic that interests you and conduct a study that analyses large amounts of data using:

- one-variable statistics tools (chapter 3)
- two variable statistics tools (chapter 1)
- probability (chapter 4/5)

Part 2: Mind-Map

Before you can begin your project, you must create a thesis:

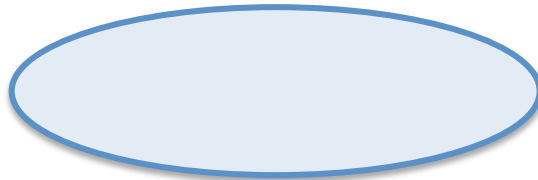
thesis:

To begin creating a thesis, you must first determine what topics interest you and then determine what concepts related to that topic you want to study. A useful brainstorming tool that can illustrate how a topic relates to other concepts is a _____.

mind map:

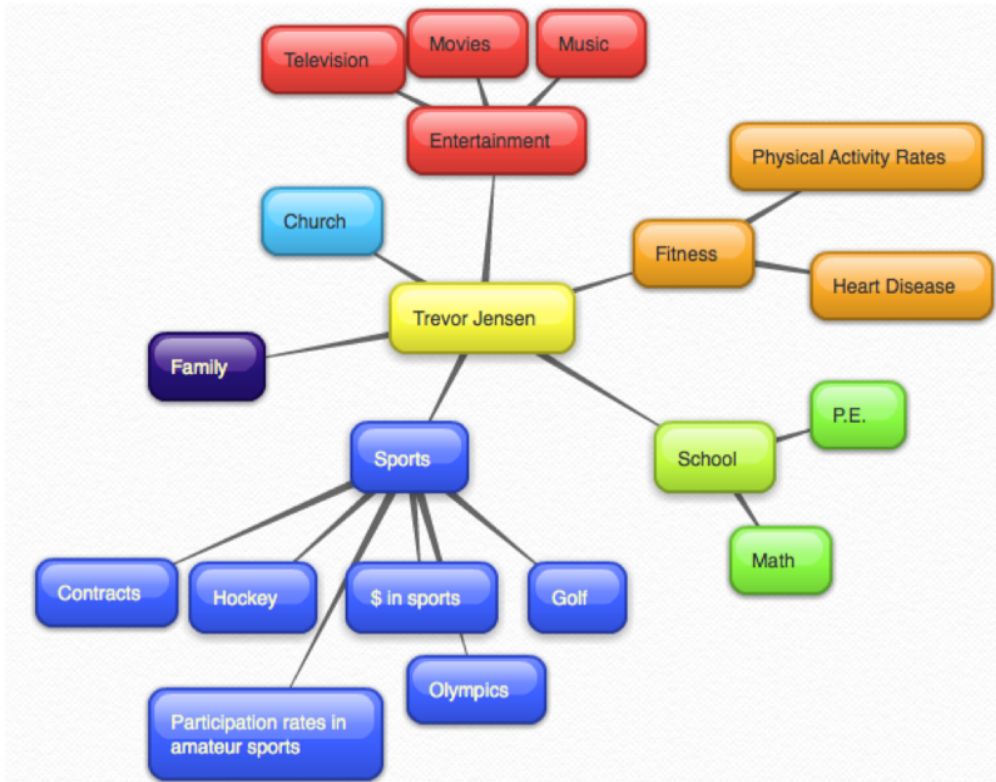
Constructing a Mind Map

1. Start by making a mind map of your interests with you at the centre. Start off as simple as possible and draw arrows to show how topics are connected. Work from the inside out.



Extended Mind Map

2. Pick one of the topics from your mind map and extend it with sub-topics.



Part 3: Thesis Question Development

Once you have narrowed down your topic, you will need to pose a problem that you plan to investigate.

3. Brainstorm and create number of questions that can be explored with the use of statistical information

Thesis Question Analysis

Questions to ask of your Thesis:

4. Once you have chosen your thesis, analyse it using the three questions above to make sure your study will be able to provide an insightful answer.

Thesis:

Analysis:

Project tips:

One way of posing a problem is to generate questions from data. For example, once a topic has been identified, do a preliminary data search. The type and quantity of available data may indicate some possible questions. Data from print sources, the Internet, and E-Stat are some resources that may be used.