

**Heartquake**

**Primary School Lesson Plan**

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| ***Data*** |
| **Overview:**  Mathematics can appear to be an abstract, irrelevant subject to some students. Through engaging students in the real life applications of mathematics students can understand the practicality behind learning maths. |
| **Objectives:**   * To use information to create a bar chart * To use the internet to find information. |
| **Australian Curriculum Links:**  ACMSP119 Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies. |
| **Prerequisites:**   * A basic understanding of how to search the internet. |
| **Hook:**  On the whiteboard have a bar graph axis drawn with an interesting heading such as “Class 5/6’s favourite TV show”. Ask students to write their favourite TV show on a post it note. Ask one student what their favourite was and write it on the x axis and have them place their post it note on the graph. Ask if any other students have the same show, have them add theirs. Continue until finished. Discuss the features of the bar graph. |
| **Activities:**  *Heartquake*  On an interactive whiteboard show students the facts and figures page from heartquake. Ask them what each one means e.g. richter scale.  *Challenge*  Place the following challenge on the board  Firstly, choose one fact from the heartquake website e.g. 7.2 on the Richter scale. I challenge you to find the same fact for nine other earthquakes e.g. 1960 Chile 9.6.  *Bar Graph*  Once students have completed the challenge ask them to show their information in a bar graph. Recap the features such as equal increments on the y axis. A template can be used for students who are struggling.  *Reflect*  Bring the class together to share their experience and the result. |
| **Resources:**  Heartquake website  Devices with access to the internet |
| **Assessment/home work:**  The students completed bar graph. |

**Teacher Notes**

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| **Duration of the Lesson:**  45 minutes | | |
| **Topic:**  Heartquake | **Lesson Heading:**  Bar Graph | |
| **Background of the importance of the topic:**  Mathematics can appear to be an abstract, irrelevant subject to some students. Through engaging students in the real life applications of mathematics students can understand the practicality behind learning maths. | | |
| **Things to think about when preparing your lesson:**  Not all students have equal ability or experience in using the internet to find information – some students can find this overwhelming. | | |
| **Challenges which may be faced and coping strategies:** | | |
| Potential Challenges:  Students not being able to locate information | | Coping Strategies:  Provide students with some search terms to use  Provide some helpful websites if after providing the search terms students are still struggling. |
| **Useful tips:**   * An easy way for students to remember the direction of the axis: x to the left and y to the sky. | | |
| **Useful resources:**   * <http://www.mathgoodies.com/lessons/graphs/bar_graph.html> * <https://nces.ed.gov/nceskids/graphing/classic/bar.asp> | | |