

Suggested ideas for how to use the 'Moments of discovery - game changers and change makers throughout the ages' chart

This resource has been created to provide teachers with practical ideas to use in conjunction with the 'Moments of Discovery – game changers and change makers throughout the ages' chart.

Activity 1

Interview with a change maker

"Global trends tell us that the jobs of the future will increasingly require science, technology, engineering and math (STEM) skills, with an estimated 75 per cent of today's fastest growing occupations related to STEM", ASTA President says.

Some of the greatest STEM minds are integrated into the National Science Week 'Moments of discovery' – game changers and change makers throughout the ages' chart.

Investigate some of these people by researching their life and accomplishments, and present your interview with one of them by listing the questions you would want to ask them.

Activity 2

It's all about the data

How can we communicate the data that is captured in the 'Moments of Discovery- game changers and change makers throughout the ages' chart in a way that creates interest?

Your task is to choose a range of data sets and communicate the range of discoveries made by game changers and change makers in a way that creates greater interest.

Choose a range of data visualizations to communicate your findings. For example, a data plot, column graph, line graph, sector graph, divided bar graph, frequency distribution table, or a stem and leaf plot.

Activity 3

How can we use technologies to communicate game changers and their genius to others?

Imagine Galileo Galilei, Madame Curie, Alessandro Volta and others having access to the same technology we have available today.

How far could their discoveries have spread across the world?

In this activity, use the 'Moments of Discovery- game changers and change makers throughout the ages' chart and pick a point in history that was a defining moment for a game changer or change maker, and share their discoveries with your generation.

How might you use today's technologies (for example, email, social media, blogs, Snap Chat, YouTube, virtual reality, or augmented reality) to broadcast your chosen game changer's discoveries?

Activity 4

Comic relief

Show your support for National Science Week and entertain your friends and family at the same time by creating a comic strip or animated video about game changers and change makers throughout the ages.

Activity 5

Build a game

Imagine a video game producer invites you to produce a scenario, develop characters and create a story about five game changers and change makers and their scientific discoveries.

Develop and produce an idea for a video game that features five individuals cited on the 'Moments of Discovery- game changers and change makers throughout the ages' chart.

Might your video game include challenges and rewards?

Activity 6

Chart a timeline

Throughout history there have been many individuals who have become famous for their accomplishments.

Choose individuals in the same scientific field from the 'Moments of Discovery- game changers and change makers throughout the ages' chart, research their accomplishments and make a presentation to a panel using a timeline.

Present ideas about how one discovery (for example, in medicine) helped or improved upon another discovery in the same field.

Activity 7

Project on a page

Each game changer and change maker cited in the 'Moments of Discovery- game changers and change makers throughout the ages' chart had a personal motivation that drove their discoveries, and they used their discoveries to solve real problems and create solutions for their societies.

Use the 'Moments of Discovery- game changers and change makers throughout the ages' chart to find those who created solutions for their societies and create a project on a page that communicates what their solutions led to...perhaps a product, a technology or a system?

Activity 8

Science as art

Game changers like Leonardo da Vinci and Einstein are often regarded both as scientist and artists. Similarly architects and engineers use art to illustrate their theories and designs.

Visualization methods provide an important tool in science for the analysis and presentation of scientific work. Images can often convey information in a way that tables of data or equations cannot convey.

Use the 'Moments of Discovery- game changers and change makers throughout the ages' chart to locate other game changers who may have used art to illustrate their theories, then create your own art work to showcase what you have found.

Moments of discovery—game changers and change makers through the ages

A selection of game changers and change makers and their discoveries can be found below. These individuals have changed situations, activities and understandings in significant ways.











GAMECHANGERS & CHANGEMAKERS

