**Science Grade 8 - Elementary Curriculum**

Aim:

Do scientific experiments

Conduct investigations

Learn to scientific vocabulary and formats

Topics:

Life Systems: Cell biology

Matter and Energy Fluids

Structures and Mechanisms

Earth and Space Systems: Solar System

Goals:

Learn the basics of Cell Biology

Learn properties of chemical fluids

Create new structures in an environment

Assess the impact of human activities on Earth

Note: This level is the most important level in the game.

We should emphasize all these topics for grade 8 as they will be a pre-requisites for the next levels.

**Science Grade 9 - Secondary Curriculum**

Aims:

*to understand the natural and human-designed worlds*

*To develop scientific knowledge and understanding*

*To test scientific laws and theories*

*Topics:*

| ***Biology*** | Learn how to preserve ecosystems |
| --- | --- |
| ***Chemistry*** | Learn properties of elements and compounds  Learn the negative and positive effects of those chemical compounds |
| ***Earth and Space Science*** | Learn different types of celestial objects in the solar system and universe |
| ***Physics*** | Learn different forms of Energy: Renewable and Non-renewable sources  Learn static and current electricity |

Goals:

1. to relate science to technology, society, and the environment
2. to develop the skills, strategies, and habits of mind required for scientific inquiry
3. to understand the basic concepts of science

**Science Grade 10 - Secondary Curriculum**

Note: Students develop a much deeper understanding of concepts. So here the game will be

using concepts of Applied Science.

Aim:

Further develop scientific investigation skills

Develop understanding of scientific theories

*Topics:*

| ***Biology*** | Learn animal and plant cells, organs  Learn effects of \*technology to improve human health |
| --- | --- |
| ***Chemistry*** | Learn chemical reactions  Learn the process for making chemical products  Learn use of chemicals in daily life. |
| ***Earth and Space Science*** | Learn effects of global climate change on natural environment  Learn how climate change affects human beings |
| ***Physics*** | Learn properties of light and colors  Understand how light is produced  Learn how to use other forms of energy  Learn about the forms of force |

Goals:

Students will select appropriate instruments for specific tasks

Apply knowledge and understanding of safe practices when interpreting a challenge

**References**

http://www.edu.gov.on.ca/eng/curriculum/elementary/scientec18currb.pdf

http://www.edu.gov.on.ca/eng/curriculum/secondary/science910\_2008.pdf