

GAMES FOR TEACHING SCIENCE AND MATH CONCEPTS

(1) **Games in the single computer classroom:** Design a lesson to use a computer game (Graphing Equations, Geoworld, Castles, Mastermind, Puzzle Tanks, The Factory, Tetris, Fife Stones, Connect Four, etc.) in a classroom with only one computer and a large display unit. Include the following:

- Major concepts
- Performance objectives (what will students be able to do when the lesson is completed?)
- Detailed handout that will lead students through the lesson

Game: Element Hangman

- *By Jefferson Lab*

(<http://education.jlab.org/elementhangman/index.html>)

- **Major Concept:** Students will learn the names of the Elements of the Periodic Table.
- **Performance Objective:** students will be able to recall the names of the Elements and relate the names with their physical and chemical property, application etc.
- **Handout:**
 - Teacher will divided the class in to two groups
 - Teacher will discuss the reasons and the rules to play the game
 - Students will have a pre-designated order in which they will provide each “letter” to identify the element
 - Teacher will control the computer and one students from each group will guess each letter of the element’s name
 - Teacher will decide the difficulty level of the game
 - Teacher will start the game by reading the given “clue” (element’s property, application etc.) from the webpage for the element
 - When the first group wins or losses, teacher will switch the game to the second group

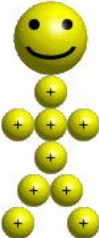
Jefferson Lab
HOME | SEARCH | CONTACT JLAB

Science Education

Education Home | Teacher Resources | Student Zone | Games & Puzzles | Programs & Events | Search Education

Element Hangman

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



Name this element!

Clue: This element is a component of didymium glass, a glass used to make some types of welder's goggles.

[Table of Elements](#)

[Skip this problem...](#)

This page is maintained by [Steve Gagnon](#). [Citation and linking information](#)

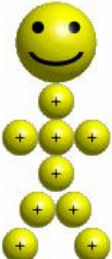
Jefferson Lab
HOME | SEARCH | CONTACT JLAB

Science Education

Education Home | Teacher Resources | Student Zone | Games & Puzzles | Programs & Events | Search Education

Element Hangman

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



Name this element!

CONGRATULATIONS! You won!

N E O D Y M I U M

Clue: This element is a component of didymium glass, a glass used to make some types of welder's goggles.

[Tell me more about...](#)

[Next question, please!](#)

(2) **Games in a small group setting:** Design a lesson to use a computer game in the small groups. Include the following:

- Major concepts
- Performance objectives (what will students be able to do when the lesson is completed?)
- Detailed handout that will lead students through the lesson

Game: Interactive Body – Organs Game

- **By The British Broadcasting Corporation**

(http://www.bbc.co.uk/science/humanbody/body/index_interactivebody.shtml)

- **Major Concept:** Students will learn the names of the human organs and their proper position and place within the human body.
- **Performance Objective:** students will be able to identify the organs of the human body. They will also be able to rotate to align those organs and place those in the proper position within the human body.
- **Handout:**
 - Teacher will divided the class in to groups of three to four
 - Teacher will demonstrate how to play the game
 - Teacher will discuss the reasons and the rules to play the game
 - Students will have a pre-designated order in which they will be able to participate in the game (Depending on the number of computers)
 - Students will choose organs from the list and properly position them in the correct place.

