Biocomplexity Research: WANTED: Biocomplexity Scientist

**Objective:** To use the internet to research and create a Biography of a Biocomplexity Scientist.

**Warm Up:** Name 1 scientist that you have learned about in the past few years and explain what they did.

**Materials:**
1) Directions Worksheet (1 copy for each student)
2) List of scientists (1 per class)
3) Computer use (internet access) - 2 class periods or 3 nights at home
4) "WANTED" Paper (1 copy for each student)
5) Construction Paper
6) Printed Poster for Hallway "HAVE YOU SEEN THESE PEOPLE?"

**Background:**
Included in this lesson is a list of 30 scientists that have been involved in groundbreaking research. Also attached is a website for each scientist that includes the pertinent information for this project as well as a rubric to grade the students work. You will need at least 2 class periods of computer use or you can assign this as a research project to do at home.

**Procedure:**
1. Distribute the “directions” hand out and read aloud the instructions for this project.
2. Hand out the "WANTED" Worksheet that each child will use for their final project and explain each section aloud.
3. Photocopy the list of all the scientists, cut them up and put them in a hat - call up each student to pick a scientist out of the hat and instruct them to write down their scientist on their “directions” hand out with the correct spelling.
4. Students will need either 2 class periods of computer time or you can assign this to be done at home and to handed in 3 days later.

**Assessment:** Students will present their WANTED posters to the class. They will be graded using the attached Rubric and then hung on the wall in hallway for display with a sign above stating: "HAVE YOU SEEN THESE PEOPLE?"
Biocomplexity “WANTED” Poster Directions

1) Must be done in pen.

2) The final copy MUST be done on the “WANTED” worksheet given to you.

3) The picture can photocopied, printed out or hand drawn and colored (hand drawn will earn you 5 extra points) and is to be drawn in the big rectangular box on the “WANTED” worksheet.

4) The Final Copy MUST be backed with construction paper (either stapled or glued on).

5) Below explains each section and what needs to be researched:

   **Name:** Give the scientists full name (first, middle (if possible) and last)
   **Dates:** State the years the scientist lived (Birth date and year of death or if they are still alive)
   **Location:** Where did the scientist live and do his/her research
   **Type of Scientist:** What field was the scientist in? (Geology? Microbiology? Etc.)
   **Description:** Describe in at least 1 paragraph the groundbreaking research that the scientist is known for and why this is important to us (this should be 5-8 sentences in your own words).
   **Interesting Fact:** Describe 1 fact that you found interesting or write a quote by that person

6) Your name needs to be written clearly on the bottom right corner.

**ASSIGNED SCIENTIST:** __________________________

**DUE DATE:** ______________

** Most of the biographies were found on the following site:**
http://www.biography-center.com/cqi-bin/cherche.eur
List of Scientists and Websites

1) Louis Pasteur
   http://www.accessexcellence.org/AB/BC/Louis_Pasteur.html
2) Charles Darwin
3) Hermann von Helmholtz
   http://www-groups.dcs.st-and.ac.uk/~history/Mathematicians/Helmholtz.html
4) James Watson
5) Alexander Fleming
   http://www.time.com/time/time100/scientist/profile/fleming.html
6) Georges Cuvier
7) Ernest Rutherford
   http://scienceworld.wolfram.com/biography/Rutherford.html
8) Frederick Soddy
   http://www.nobel.se/chemistry/laureates/1921/soddy-bio.html
9) Robert Koch
   http://www.nobel.se/medicine/laureates/1905/koch-bio.html
10) Robert Holley
11) Peter Mitchell
12) Stanley Cohen
    http://www.nobel.se/medicine/laureates/1986/cohen-autobio.html
13) Jons Jakob Berzelius
    http://scienceworld.wolfram.com/biography/Berzelius.html
14) Paul Ehrlich
    http://www.nobel.se/medicine/laureates/1908/ehrlich-bio.html
15) Wendell Stanley
    http://www.nobel.se/chemistry/laureates/1946/stanley-bio.html
16) Francis Crick
17) Hans Krebs
    http://www.nobel.se/medicine/laureates/1953/krebs-bio.html
18) Francis Jacob
    http://www.nobel.se/medicine/laureates/1965/jacob-bio.html
19) Christian Huygens
    http://www-history.mcs.st-and.ac.uk/~history/Mathematicians/Huygens.html
20) Theodor Schwann
    http://scienceworld.wolfram.com/biography/Schwann.html
21) Jewel Plummer Cobb  
   http://www.princeton.edu/~mcbrown/display/cobb.html
22) Sylvia Earle  
   http://www.achievement.org/autodoc/page/ear0bio-1
23) Honor Bridget Fell  
24) Maria Sklodowska-Curie  
25) Antony van Leeuwenhoek  
   http://www.ucmp.berkeley.edu/history/leeuwenhoek.html
26) Alfred Wegener  
   http://www.ucmp.berkeley.edu/history/wegener.html
27) Alice Wilson  
   http://www.nlc-bnc.ca/2/12/h12-416-e.html
28) Maria Goeppert-Mayer  
29) Irène Joliot-Curie  
30) Alfred Nobel  
   http://sunsite.bilkent.edu.tr/oldnobel/alfred/biography.html
31) Rita Colwell  
32) Helen Berman  
   http://rutchem.rutgers.edu/faculty/berman.html
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<th>SCIENTISTS</th>
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<td>Louis Pasteur</td>
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D. Gioffre, Hillsborough Middle School, Hillsborough, NJ 08844
Funded by the National Science Foundation, Biocomplexity in the Environment Program, Award #0120453
WANTED
BIOCOMPLEXITY
SCIENTIST

Name _____________________________

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WANTED: BIOCOMPLEXITY SCIENTIST

GRADING RUBRIC

1) Picture
   - Copied 10 Points
   - Hand Drawn +5 Points

2) Full Name 5 Points

3) Dates 5 Points

4) Location
   - Home 5 Points
   - Research 5 Points

5) Type of Scientist 5 Points

6) Description (1 Paragraph) 30 Points

7) Interesting Fact 20 Points

8) Backed with Construction Paper 5 Points

9) Name in the Bottom Right Corner 5 Points

10) Neatness/Final Copy Format 5 Points

100 Points

Grade
Description: Einstein pointed out problems with Newton's theories which ended the reign of classical physics. He also devised the Theory of Relativity and proved that space and time are curved. He proposed that it is impossible to travel at the speed of light. While alive he continued to make important contributions to Quantum Theory. He was also well known for continuously arguing for World Peace.

Interesting Fact: "Science without religion is lame, religion without science is blind."

Name: Ms. Gioffre