WOMEN OF VALOR
Jewish Heroes Across Time

Part of Sharing Stories/Inspiring Change: A Webinar Series for Jewish Educators
MEET THREE WOMEN OF VALOR

Gertrude Elion

Hannah Greenebaum Solomon

Ray Frank

GERTRUDE ELION

Born in 1918 in NYC

Gertrude and her mother, Bertha Cohen Elion

Photo courtesy of: The Estate of Gertrude Elion
### Elion’s report card from 1930.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>Grade</th>
<th>Preliminary</th>
<th>Mark</th>
<th>Exam.</th>
<th>Mid-Term</th>
<th>Mark</th>
<th>Exam.</th>
<th>Passed or Failed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effort</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct Self-Control</td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Habits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times Absent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Times Late</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading and Literature</td>
<td>3</td>
<td>93</td>
<td>95</td>
<td>95</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composition</td>
<td>1</td>
<td>85</td>
<td>90</td>
<td>75</td>
<td>75</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammar</td>
<td>1</td>
<td>90</td>
<td>90</td>
<td>92</td>
<td>99</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spelling</td>
<td>1</td>
<td>100</td>
<td>100</td>
<td>97</td>
<td>96</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral Expression</td>
<td></td>
<td></td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Penmanship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arithmetic and Algebra</td>
<td>3</td>
<td>91</td>
<td>74</td>
<td>95</td>
<td>92</td>
<td>94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shop Cooking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science Sewing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Training</td>
<td>4</td>
<td>90</td>
<td>80</td>
<td>70</td>
<td>70</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing</td>
<td>5</td>
<td>80</td>
<td>60</td>
<td>93</td>
<td>65</td>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>5</td>
<td>97</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology</td>
<td>5</td>
<td>79</td>
<td>82</td>
<td>86</td>
<td>86</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Civics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookkeeping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stenography</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typewriting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office Practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Winners of Medal**

- Glamour Camm Carr

**Magna Cum Laude**
Acid Reduction

1. Reactants: Metal + acid (e.g., Sn + HCl)
   SnCl₂ + alcoholic HCl

2. Leads to a complicated series of products.
   \[ \text{Product} \rightarrow \text{Product} \rightarrow \text{Product} \rightarrow \text{Product} \rightarrow \text{Product} \]

3. The \( \text{NH}_2 \) reacts with some \( \text{H}_2 \), which has also been formed.
   \[ \text{NH}_2 + \text{H}_2 \rightarrow \text{Product} \]

4. The \( \text{NH}_2 \) + \( \text{H}_2 \) + \( \text{Product} \)
   \[ \text{Product} \rightarrow \text{Product} \rightarrow \text{Product} \rightarrow \text{Product} \]

5. Principal product is \( \phi \text{NH}_2 \)
   \[ \phi \text{NH}_2 \rightarrow \phi \text{NH}_2 \]

6. In acid reduction, the \text{Semicl} is formed, which is easily oxidized, e.g., by \( \text{NO} \).
Gertrude Elion and Leonard Carter

Photo courtesy of: The Estate of Gertrude Elion.
Elion in the Burroughs Wellcome laboratory

Photo courtesy of: GlaxoSmithKline Inc. Heritage Center.
Gertrude Elion and George Hitchings
Elion’s notes on the preparation of 6-Mercaptopurine which became the first effective chemotherapy for childhood leukemia.
One of 45 patents obtained by Elion
Elion in the lab

Photo courtesy of: GlaxoSmithKline Inc. Heritage Center.
Elion wins the Nobel Prize, 1988

Photo courtesy of: GlaxoSmithKline Inc. Heritage Center.
Gertrude Elion, 1918-1999

Photo courtesy of: GlaxoSmithKline Inc. Heritage Center.
HANNAH GREENEBAUM SOLOMON

The Chicago Women’s Club in Action

Letter sent to potential speakers for the Jewish Women’s Congress

Jan. 1, 1892.

COMMITTEE OF JEWISH CONGRESS.

Dear Madam:

Your name has been given us to place upon our list of essayists for the Jewish Women’s Congress, which will be held in Chicago during the last week of September, 1892, under the auspices of the Religious section of the World’s Fair Congresses. The probable duration of the Congress will be three days, the first of which will be devoted to religious, the second to social and the third to philanthropic questions. The following subjects have been suggested and are submitted to you to choose from.

However, should any other occur to you upon which you would prefer to write, will you kindly inform us at your earliest convenience.

Religious.

The Jewish women of Biblical and Mediæval days (to 1500 A. D.).
Jewish women of Modern days (from 1500 to present time).
Life in the Ghetto.
Our pulpit and our Sunday-school.
The present status of the Jewesses (1) Educational, (2) Social,
(3) Religious - The present and future of Judaism.

Social.

The influence of the discovery of America on the Jews.
The position of women in the Orient.
The influence of the Jewish religion in the Home.
Woman in the synagogue.
Women as wage—workers with special reference to directing immigrants.
Mission work among the unenlightened classes of Jews.

Citation: American Jewish Archives
Citation: Alois Kaiser, ed. *A Collection of the Principal Melodies of the Synagogue, From the Earliest Times to the Present.* Chicago: T. Rubovits, 1893
Citation: National Council of Jewish Women
Greenebaum Solomon speaking at a synagogue

Citation: National Council of Jewish Women
Maxwell Street Market, Photo by Barnes-Crosby

Citation: Chicago Historical Society
“Sane 4th” Parade of Suffragists

Citation: Chicago Historical Society
Hannah Greenebaum Solomon, 1858-1942

Citation: National Council of Jewish Women
STATE EDUCATIONAL DIPLOMA

STATE OF NEVADA.

The State Board of Education hereby issues to Miss Rachel Fine this Diploma, valid for Six Years from date, which Diploma is issued in consideration of her good moral character, educational qualifications and successful experience in the Profession of Teaching.

July 10, 1885

Carnio City, Nevada.
A LAY SERMON BY A YOUNG LADY.*

Ladies and gentlemen, and—considering this is Yom Kippur eve, I know you will permit me to say—friends, brothers and sisters; for surely to-night is one of the most solemn and sacred periods in the lives of Israelites, for to-night, at least, we must be brother and sister in letter and spirit. My position this evening is a novel one. From time immemorial the Jewish woman has remained in the background of history, quite content to let the fathers and brothers be the principals in a picture wherein she shone only by a reflected light. And it is well that it has been so; for while she has let the stronger ones do battle for her throughout centuries of darkness and opposition, she has gathered strength and courage to come forward in an age of progressive enlightenment and do battle for herself if necessary, or prove by being a noble helpmeet how truly she appreciates the love which shielded her in the past.
THE MAIDEN IN THE TEMPLE.

The First Woman Since Deborah to Preach in a Synagogue.

A YOUNG OAKLAND JEWESS MAKING A STUDY OF THEOLOGY.

Miss Ray Frank, on Whom the Eyes of the Hebrews of This Coast Are Turned - A Significant Declaration From a Fair Young Enthusiast Who Is Now Lecturing on Hebrew Poetry.

Miss Ray Frank, a daughter of Israel, has addressed a congregation in a synagogue. That a woman should preach to the Jews in one of their temples is more than unusual; it has but one precedent in all

Citation: American Jewish Historical Society
Woman in the Synagogue.

1. How can she best serve its interests?
2. Should she take an active part in the administration of its affairs? If so, in what capacity?
3. How can she best co-operate with the Sabbath School?
4. Should she occupy the pulpit?
5. How can societies composed of Jewish women be made of greater benefit to the Synagogue?

The prominent part assumed by the Jewish woman of our day in religious matters has suggested the desirability of a symposium on “Woman in the Synagogue.” Invitations were therefore sent to a number of prominent Jewish women to express their views upon the subject generally and upon the questions as above set forth. The following responses have been received:
WORK OF A WOMAN RABBI

Ray Frank’s Opinions on Large Subjects.

Believes in the Intellectual Woman at Home.

A Young Jewish Enthusiast Who Lectures on Art, Religion and the Family.

"The home before everything," says Miss Ray Frank, the remarkable young woman who is journalist, author, priest, lecturer and orator, and who has been many other things that have taken her far from the domestic hearth; and yet the contradiction between herself and her theory is only seeming.
Simon Litman

Citation: University of Illinois at Urbana-Champaign
Ray Frank, 1861-1948
THREE EXAMPLES OF HOW CHANGE IS MADE

• How do you fight for access and new rights for women or for Jews?
• How explicit should you be?
• How and when should you avoid discussing women’s issues? What kinds of privilege (class geography, family name) make that work easier?
• How does the fight for change for some Jews expand possibilities and strengthen community for all Jews?
INTRO ACTIVITIES

• Gauge what/who students already know
• Call out gaps in knowledge
• Get participants thinking about values and role models in different areas
• More description here: http://jwa.org/teach/bestpractices#boys
• Can make a list as a group or do it as competition with teams
ALL AGES

• Study photos using Visual Thinking Strategies (VTS)
  – What is going on in this picture?
  – What do you see that makes you say that?
  – What more can we see?

• Play Celebrity/20 Questions
  – Fun way to synthesize learning
  – Can give participants a cheat sheet with facts
  – Great way to bring in comparisons with other role models or highlight connections to history, events, and people (e.g. was I a Zionist? Did I believe in women’s suffrage? Did I know Martin Luther King, Jr.?)
ELEMENTARY-WAX MUSEUM

• Students research and curate the museum
• Can have guides, do audio recordings that play at each stop, add in video, etc.
• Bring in parents or other classes
• Have the actors/exhibit creators answer questions in a panel discussion as a means of reflection.
ELEMENTARY-BOARD GAME

- Make a timeline of events
  - Highlight decisions and important events
- Using timeline as a guide, create a Candyland style game
- Kids can design own boards and pieces
- Take turns playing the games in small groups
MIDDLE SCHOOL-TOUR

- Allows students to move from place to place
- Facilitates inclusion of pictures, text, and primary sources
- Particularly useful for history based on geography or time
- Can be self guided
- Can include crafts
- Great for family programs
HIGH SCHOOL-TEA PARTY/DEBATES

- Students can explore the motives of historical players
- Discuss a past or contemporary issue in character
- Use real people to create discourse—differing opinions
- An excuse to eat food!
HIGH SCHOOL-GRAPHIC NOVELS

• Follow a whole life or just one event
• Can be done as drawings, on the computer, or multimedia art pieces
• Explore conflicts or difficult decisions
• Highlight the impact of an individual on the community by bringing in other characters
OTHER IDEAS ON JWA.ORG

• http://jwa.org/teach/bestpractices/ideasfromfield
• http://jwa.org/teach/bestpractices/ideasfromjwa
• http://jwa.org/teach/bestpractices

OR, share your ideas with us by leaving a comment on the March Webinar Webpage!

http://jwa.org/teach/profdev/webinars/march13