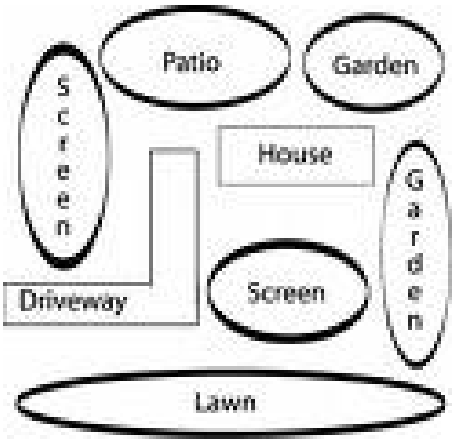
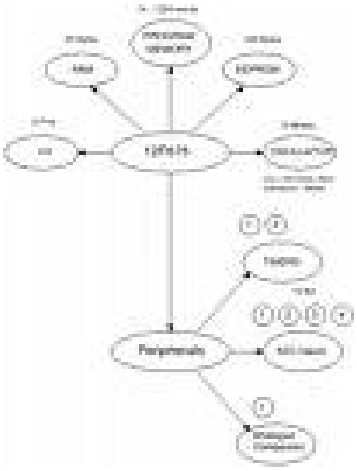
Design a Model of A Youth Centre Project





Bubble Diagram

Room & Floor Plan Design

Architecture & Environmental Design

Site Plan and Model

1844 - YMCA is founded in London, England by 22-year-old draper, called George Williams, as an alternative to the unhealthy social conditions during the Industrial Revolution. The Young Men's Christian Association, or YMCA, was response to unhealthy social conditions caused by the Industrial Revolution. The idea caught on, and soon Associations were springing up throughout England and Europe. By 1851, that same idea traveled across the seas. The first YMCA in North America opened in Montreal on November 25, 1851. At first YMCAs had strong links to the Protestant churches but this quickly changed as people from all churches were welcomed. The history of the Canadian YMCA is the story of countless Canadians who made, and continue to make, a difference in the lives of individuals, families and communities through their leadership and service. Today, the YMCA welcomes people of all ages, religions and walks of life.

Section A

This project will introduce students to the field of Architectural and Environmental Design. Students will be asked to sketch, draw, and construct a Youth Centre in a group.

Questions:

1) List a Youth Centre that you have been to or would like to go to.

_____

2) What is the main purpose of a Youth Centre?

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3) Can you list the most common areas/rooms in a Youth Centre.

_____ _____

_____ _____

_____ _____

4) Describe your Youth Centre, ie. is it …

Outdoor or Indoor _____ and City or Country _____

5) What is the theme/idea for your Youth Centre, Sports, Rock climbing, etc.

_____

Pick some group members who you would like to work with. The Youth Centre should include the following; **Kitchen, Washrooms, Gym, Swimming Pool, 3 Classrooms** and **Parking.** As a group, you will decide on the dimensions of the rooms. First, go around the school and measure some rooms to get an idea of sizes.

6) Front Entrance Doors _____m wide

7) Hallway _____m wide
8) Kitchen _____x_____
9) Boy or Girl Washroom _____x_____
10) Gymnasium _____x_____
11) Classroom Rm 140 _____x_____
12) Laundry Room _____x_____
13) Door _____m wide
14) Ceiling _____m high

Parking Space	3m x 6 m	Swimming Pool	25 x 50 m
Soccer Field	90 x 100 m	Hockey Rink	30 x 60 m
H.C. Cafeteria	20 x 20 m (200 people)	H.C. Stage	10 x 14 m
Gym (Small)	14.6 x 20.5 m	Gym (Large)	18.0 x 30.0 m
Swimming Pool (Small)	12 x 21m	Swimming Pool (Large)	15 x 25m

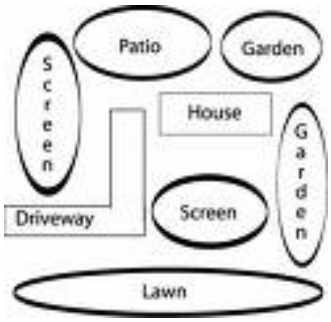
15) What is the name of your Youth Centre? _____

List **5** Professionals who will be involved in the construction / design of your Youth Centre.

16) _____ 19) _____

17) _____ 20) _____

18) _____



Q 1 Re-sketch the Bubble Diagram above and add connectors.

Section B

List 4 of the largest rooms your group want to have in the Youth Centre.

2) _____ 4) _____

3) _____ 5) _____

List 2 of the medium-sized rooms your group will have.

6) _____ 7) _____

List 2 of the smallest sized rooms your group will have.

8) _____ 9) _____

List 2 outdoor rooms or spaces ie. Sports field, parking lot etc.

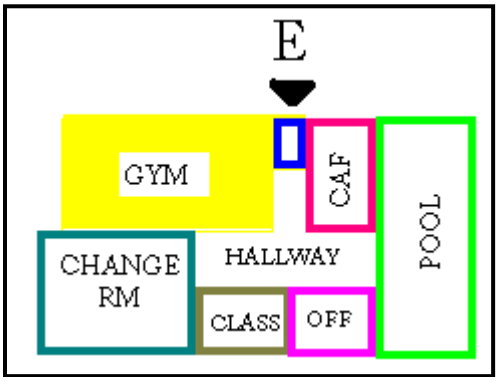
10) _____ 11) _____

Bubble Diagram

12-15) Sketch a Bubble diagram with the above rooms. Use different colours, hatch patterns, connectors, show the entrance and label the rooms with room sizes. Consider using different colours for a Boys room group or a bigger circle for a bigger room.

16-20) Re-draw your Bubble Diagram on the computer. Label the rooms, colour them, use connectors and use an arrow to indicate the entrance.

Section C Schematic Floor Plan



Sample Block Floor Plan

Q1-3) Re-sketch and label the above floor plan.
Place an E in front of the Entrance, a W for a Window, K for Kitchen and B for Bathroom.

4-12) Based on the Bubble Diagram, sketch a Block Floor Plan on Grid paper.

Set a scale ie. (1 square = 5m or 10m).
Try to make your Outside Walls thicker than your Inside Walls.
Use colour and label the rooms. (Use green for grass or blue for water). Where possible, show windows, doors and use an arrow for the entrance. Indicate overall dimensions. Once complete, redraw your floor plan on a larger scale base page.




13-15) Sketch one of the buildings above or another from the internet.

Show colours, landscape materials etc. where indicated.

List materials used in construction for;

16) Roofing _____

17) Roofing _____

18) Exterior Wall _____

19) Exterior Wall _____

20) Exterior Wall _____

Section D **Brochure**

1-10) Design a Youth Centre Brochure (Individually). It should contain;

- Three columns (minimum),
- Youth Centre Logo
- Go on to Mapquest and copy and paste a Map with your address, (Print Screen, Paste to Paint Doc't, Edit, Copy and Paste to Brochure)
  (1085 Woodbine Road, Kingston, Ontario K7L 4V2
  T# (613) 384-1919 F# 384-1919)
- Two Images from the Internet to explain your Youth Centre (ie. sports, camping)
- A short description of the Youth Centre (50 words),
- Cost per day, per week & per month (Adult and Student Rate)
- Youth centre size (fictional) m2
  (same for each group member)
- Youth Centre construction cost. Multiply: Bldg. area x $1,000/ m2, Outdoor area x $100/ m2
- List of Group Members with titles ie. Architect, Engineer, Construction Manager, etc.

Blank Application Form such as:

Name: _____
Address: _____
City: _____
Postal Code: _____
Phone #:_____
Date(s):_____
Payment Method: _____

Site Plan and Model

11-20) In groups construct a Site/Building model with classroom materials.
Select materials, paint etc. to display characteristics ie. brick is brown, red or yellow. Think about the height of rooms ie. gym or office.

Section E Question Sheet

Mr. Bufflalo`s class is **3.6 m high**, **3.2 m wide** and **4.4 m long**.
The school measures **25m long** x **30m wide** and **5m high**.
The schoolyard measures **130 m long** and **100m wide**. (One Hectare is 10,000 m2)

1) What is the classroom area? _____m2

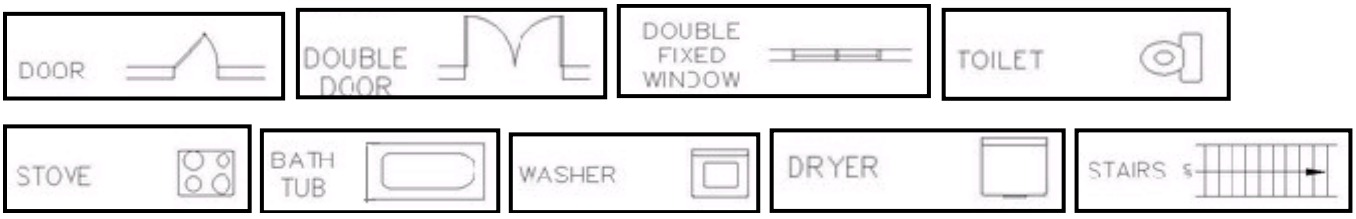
2) What is the classroom volume? _____m3

3) What is the school property area? _____m2

4) How many Hectares is the schoolyard? _____

5) What is the area of the school? _____m2

Sketch the following Architectural Floor Plan symbols below.



6) Door 7) Window 8) Toilet

Go to **www.GoogleMaps** and type the address - 1000 King St. West, Kingston, Ontario.

9) Which park is located nearby? _____

10) What teaching facility is located nearby? _____