4.88 WHAT WILL CITIES LOOK LIKE 25 YEARS FROM NOW?

Application of Architectural Concepts

Age Level:

Third grade and up

Note:

The activities, "How it Feels to be a Structure" and "What Makes Structures Stand Up?" and possibly "What is Green Building and Sustainability?" should precede this activity.

The span of 25 years was chosen for students to think about because the children currently in the 3rd-5th grades will be 33-36 years of age at that time. This will allow the students to think about what kind of future city they might live in during their own lifetime. This can also lead to students having conversations with their parents at home and/or creating a time chest for the school so they could return and see how their predictions compare to what really happens!

Subjects:

Visual Arts
Math
Social Studies
Science
Language Arts

Time:

One to two hours

Materials:

- Copy of the Think About Sheet for each student plus one for each of the groups
- 9" x 12" and 12" x 18" construction paper in a variety of colors
- 1" x 12" colored paper strips
- 6" squares
- Scissors, tape and glue
- A piece of about 18" x 24" corrugated cardboard for each table or group (could be cut from corrugated cardboard boxes)

Learning Objectives:

- To gain an understanding of the design and planning process
- To participate in a creative thinking group process
- To communicate and exchange ideas to and from a group

Design Professional:

This project will give you the opportunity to demonstrate how architects, landscape architects and city planners work in a design group. It will demonstrate the roles of the architect, the landscape architect, the city planner, the contractor and the people in the development of a city.

If the class has done the mask activity, refer to that. If not, you may still want to show an over-head of the sheet from that activity titled, "Who Are All These People?" as a reference.

It will also allow students to truly think about the importance of sustainable design when planning and building using limited resources for more people.

Teacher:

The students will be very excited about this activity, and the design professional will need considerable help in keeping the students aware of the criteria for the project.

This can be a very good individual project, but you may feel that it will take up too much room and materials. Making it a group project simulates the group process that is the essence of city planning with community participation. This will add a great deal of meaning to the activity.

Presenting the Activity:

Suggested Dialogue...

> *"Let's hop in a time machine and let its computer program us for a trip to a city 25 years from now. What do you think it will be like? Some present-day architects and city planners are already thinking about ideas such as cities that are:*
>
> *• Floating above the ocean on water filled stilts*

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- *Contained in a giant plastic bubble held up by climate-controlled domes, where you could wear shorts all year*
- *What resources will the city be using?*
- *Will you be driving cars?*

"Some such cities are already being tried out experimentally to find ways to meet future population needs without using up all the earth's land.

"Paolo Soleri is an architect and urban planner who became famous for his theories about the preservation of the environment. He believes that cities should be built on as little land as possible and surrounded by open land to be used for agriculture, recreation and natural preserves. This means that people couldn't each have their own house on their own lot. He calls his theory Arcology—a word formed from architecture and ecology.

"In 1970, he began an experimental city in Arizona called Arcosanti. It is still being built with the help of people who go there to work with him and learn more about his theories.

"Another idea a lot of planners have worked on is the building of cities on the sea. Since more than two-thirds of the surface of our planet is water, this makes a lot of sense. Plans have been made for sea cities that float offshore on water filled tubes or concrete boxes. They are built in sections, so they will be flexible enough to resist storms and winds. We actually have a form of this type of city right now. We have off-shore plat-forms that house crews and equipment for oil drilling. Sometimes 300 or more people live on these platforms for many months.

"Travel between these "sea cities" would be by hydro-foil, hovercraft or helibuses.

"Another idea for cities using the sea was built for Expo '75, in Okinawa, Japan. The city was submerged under the sea like a giant aquarium. Okinawa is a tropical island, so the view is quite spectacular.

"An Israeli architect named Moshe Safdie designed a city called Habitat, that was built for the Expo in Montreal, Canada. It looks like something you might have built out of building blocks.

"Although everyone lives very close together, and the living spaces are quite small, everyone has a view and a garden that is on the roof of the apartment below.

"Another important place for experimenting is outer space. If, through the space program, it can become possible to live on other planets, then we could solve our population problems, as well as giving the adventurous new frontiers to explore. Perhaps we can have satellite cities that can be launched in space."

Hand out copies of the Think About Sheet to each student. Explain that this is a checklist to be used in planning their city. Initiate a discussion about the things mentioned on the sheet to stimulate ideas and options about the form their city will take.

The design professional and the teacher will circulate around the room offering suggestions and answering questions as the students fill out their sheets.

Presenting the next part of the activity:

Suggested dialogue...

"When architects and city planners work, they usually work in groups because they have more ideas to work with and can discuss their ideas, then let the group decide which ones will be the best ones for the project.

"When everyone in the group takes responsibility to contribute ideas and also listens carefully to the ideas of the others, there is usually a very good result.

"You have some good ideas on your Think About Sheets. As a group of designers, you will want to share your ideas and help the group develop a creative proposal for your city. You will use your own Think About Sheets to help the group make a plan for the group solution to the design for its city. After sharing each of your own ideas and discussing what the group ideas might be, fill in the group Think About Sheet.

"You will also want to consider the materials you will have available as you make your plan. They will include all the structural models you make when you did the activity, "What Makes Structures Stand Up?" There will be more of those materials to use. You can combine the models, make additions, or add new forms.

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> *"Each group will have an 18 by 24-inch piece of corrugated cardboard to use as a base.*
>
> *"Now take about 10 minutes to fill out the group Think About Sheet. Have someone in the group be a recorder to fill in the sheet when the group has made a decision."*

The teacher will assign the groups and have each group assemble at a workplace. Give each group a copy of the Think About Sheet.

The teacher and design professional will circulate, helping the students with the group work. Try to keep to the time schedule and call time when it is appropriate.

> *"Now you have developed what architects and city planners call "design criteria." Remember, this design criteria is what you have determined is the basis for your city plan, and you must keep it in mind as you work on your model."*

Tell the students how much time they will have for the city project, and have them collect their materials. The time should be about one hour. Give a couple of warnings before time is up. As they work, remind them of their design criteria.

When the city projects are essentially finished, ask for attention...

> *"It looks like there are some pretty creative structures here. What does your city need now? Right! A name. Your group should decide on a name and write it on the top of your group Think About Sheet. Make a sign with the name, and put it on your model.*
>
> *"The next step will be to present your city solution to the rest of the class. Your group will need to tell them how you decided to design it, what are its important elements, why you did the things you did, and how you met your design criteria. All members of your group should participate in the presentation."*

Clear a large table or space on the floor. Have room enough for the students to be able to stand around it. Give each group a number.

Explain...

> *"You are now going to put your city together with the others. You know, cities often have been developed by different groups and at different times. This presents a new design problem. As each group puts its model in the city space, they will tell about their design solution and explain why they are choosing to put it in that location. As each model is added, the group will need to say how it relates to its neighbors. Each model must touch at least one of the other models."*

The architect should offer a critique after all the models are in place, and give the project closure.

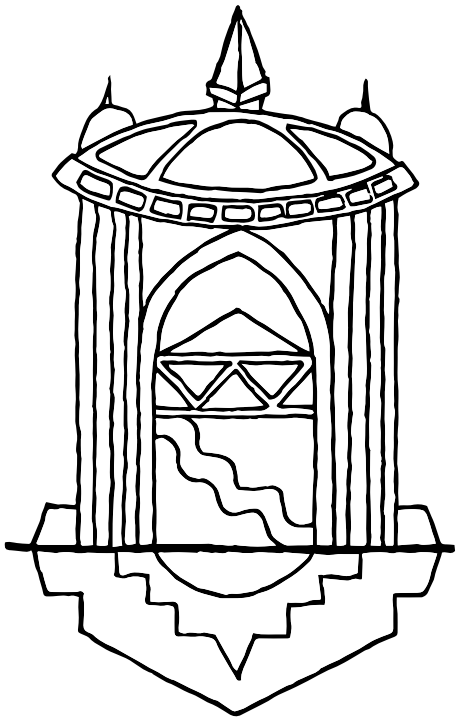
The teacher should add to the architect's comments and discuss what the next step might be.

Extensions might be...

Have the students write an essay about their city 25 years from now.

Make a presentation to another class or to an administration/ parent group.

Exhibit the city in a public location.



THINK ABOUT SHEET

4.91

What Will Cities Look Like 25 Years From Now?

NAME	DATE

It is 25 years from now, and there are five times as many people in the world as there are now. What kind of a city would you design to meet the needs of these people? Consider the new technology that will probably be available by then.

1. What does your city look like? (big, small, dirty, clean, trees, no trees) _____

2. How many people live in the city? _____

3. How do people get in and out of the city? _____

4. How do people move around in the city? _____

5. Where are the:

   businesses? _____

   factories and industries? _____

   schools, churches, museums, etc.? _____

   places to live? (houses, condos, row houses, boat houses) _____

6. What will people do for recreation, for fun on days off, or on vacations? _____

   Where will people go? _____

7. How will the city look as you come toward it from a distance? _____

8. Why will people want to continue living in the city? _____