

## 1. Where in the World are computers?



There are amazing changes in the size, speed and uses of computers in our homes, schools, communities and the world. More and more people are working with computers as part of their job, for recreation, communication and for personal use.



On your own, with your family, tech buddy or your 4-H club, record at least 10 places in your community where you would find a computer and what you think the computer is used for.

Some places where the computer may be used are the swimming pool/recreation center, police station, bank, etc. Try to think of some really different places computers are used that aren't so obvious!

Place I would find a computer	What I think they use the computer for:



## 2. Input - Processing - Storage - Output



To create and “publish” your mini and major projects you will need three important things:

1. Hardware(CPU)
2. Software you know how or will learn how to use
3. A Plan

### 1. The Hardware

CPU (Central Processing Unit)

You need to have a computer that has an Internet connection.

Depending on how fancy you want to make your projects (graphics, animations etc.) is controlled by your:

- (1) modem (14.4 or 28.8 speed connection to the internet is good), and
- (2) processor speed (386 or better is the minimum).

### Peripherals

If you have or can borrow any of the following (or other peripherals), you can make your projects even fancier:

Digital camera

Scanner

Drawing tablet

Webcam

### 2. The basic software programs you will need are:

- Word Processor
- Spreadsheet
- Presentation
- Drawing /Painting
- Database



### 3. The Plan

#### 1. INPUT

Planning the project

A little thought and planning is what makes a good project.

"The Future 4-H Backpack

For a sample project try "The Future 4-H Backpack!"

It's time to use your imagination!!!

Make some guesses about what the 4-H backpack of the future might be.

Think about these questions:

- What will it help a 4-H member do?
- How will it make your life easier?
- What will be in it?
- What will it look like?

Use your computer in any way you can to share your ideas of the future backpack using the Thinking Process or the 5W's on the next page.



### The Thinking Process:

-What I already know

- information I know about my topic

-What I want to learn

- what is my goal for learning about my topic?

-How I will learn it or work with others to reach our goals?

- Internet research, interviews, CD ROM, etc.

-What will I have learned

- what scoring system will you use to see how well you did

-How I shared, or will share what I have learned

- create a slideshow, a brochure, a magazine or newspaper article, do a performance, etc.



Or

### 5 W's Formula

The old formula 5 W's will work just as well for a printed document, screened or embroidered item, presentation, robot or signage as it does for anything else. Let's take a closer look at what this formula is all about:

### The five W's of the Future Backpack

Who - will I present the project to?

What - information do I want to share?

When - is this backpack going to be made? When will it be used?

Where - was the project done? Are there other places where people can find or compare my information?

Why - was this done? Why will my audience care about the topic?

Once you have used the Thinking Process or the 5 W's you need to decide how you will do your project.

## Doing the Project

The first step is to understand what you are trying to share with your audience. If you don't understand what you are trying to share, it will be hard for your audience to understand it. This is why the "words and pictures" you use are so important.

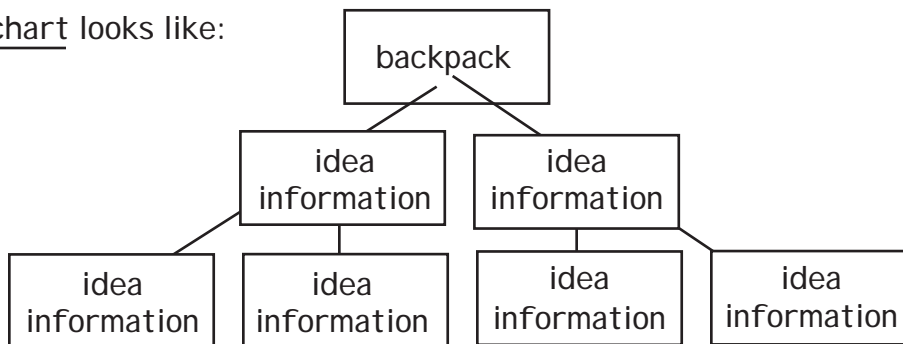
Let's look at what we will call "Picture Plans". The most common kinds of Picture Plans are:

1. Flow Charts
2. Mind Maps
3. Storyboards

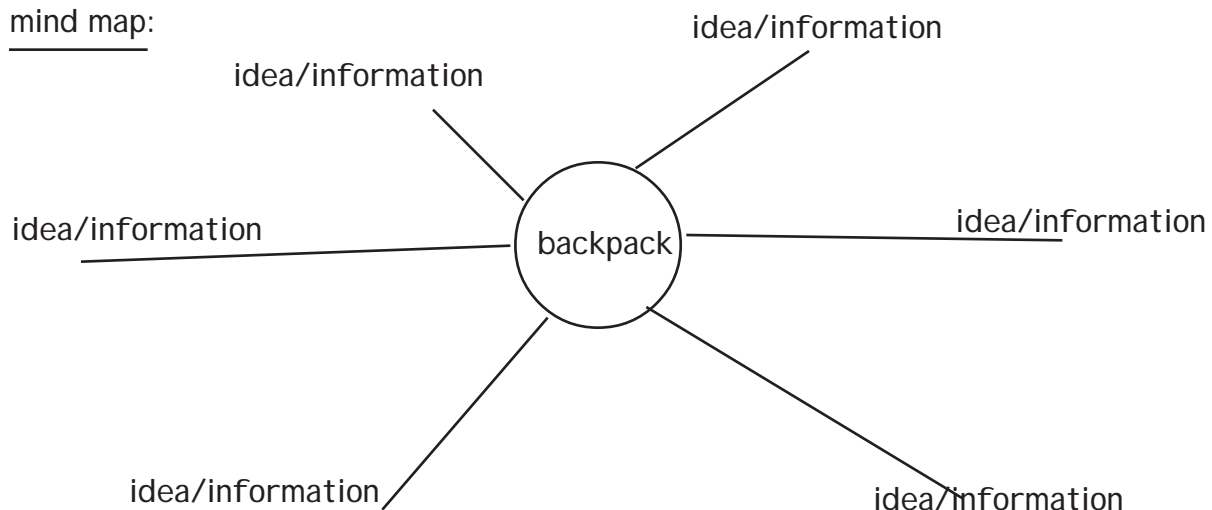
These are three of the simplest, yet most powerful plans you can use to organize your projects.

If you have a flow chart, mind map or storyboard computer program you can use it to draw out the plan for your project. Do your plan on, or attach your final plan to page 18.

A flow chart looks like:



A mind map:



## Storyboard

topic\_\_backpack\_\_\_\_\_

information idea	picture	words



Each of these Picture Planning tools is quite easy to use.

- Step 1 Write as many ideas down as you can.
- Step 2 Decide which ideas are the best
- Step 3 Find or draw pictures that fit with your ideas
- Step 4 Decide what words best fit your ideas and pictures
- Step 5 Do your project!!

You need to plan for your mini and major projects. Try to choose a topic or theme that you can use for both projects! This will save you some time and will let you gather lots of really good information to present.

## My Project Plan (The Future 4-H Backpack)



## Planning the Scoring

When starting to plan your major projects, it is also important to talk with your 4-H leader about how the project will be scored. Your leader has examples of what a good project is, but it is very important for both of you to agree on the scoring before you start your work.

There are three different Scoring Systems you may want to look at using:

- rubric
- checklist
- score card

### Rubric

A rubric is a scoring list or chart of "what counts. " The reason rubrics are so good is that you and your leader decide before you even start your project what categories you will be scored on and what you need to do to get the highest, middle and lower scores. Each category says exactly why you got the score you did. There are no surprises!

### Checklist

A checklist is kind of like a rubric. You list several things you will be scored on and get a certain number of points for each thing that you did correctly. There is usually a comment section at the bottom where the person scoring can tell you what you did well and what can be improved.

### Score card

A Score card is also a bit like a rubric or a checklist. Usually a score card has fewer things you will be scored on but they are worth more. A Scorecard also has a different comments sheet where the judges or your leader can say why they gave you each score.

Talk to your Computer Project leader about these different kinds of scoring. They will have examples for you to look at and then you can plan the scoring together.

