

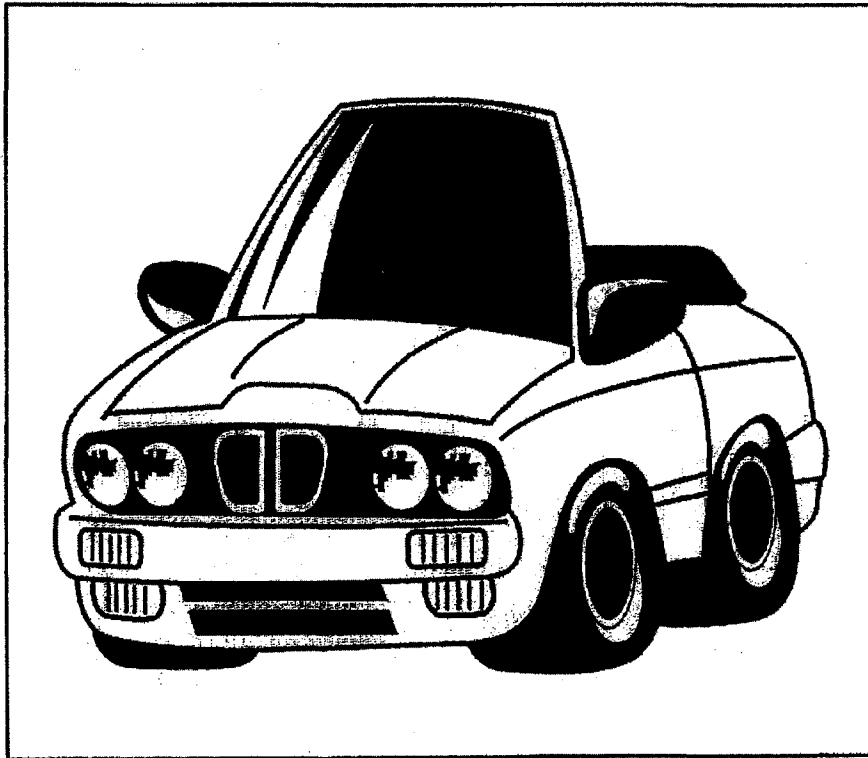


# *Mini 4-H*



# *Models*

All Divisions



Draft

Developed by

Purdue University Cooperative Extension Service

Area 7 Youth Educators

(Blackford, Delaware, Fayette, Franklin, Henry, Jay, Madison,  
Randolph, Rush, Union, & Wayne Counties)

PURDUE UNIVERSITY, INDIANA COUNTIES AND U.S. DEPARTMENT OF AGRICULTURE COOPERATING  
AN AFFIRMATIVE ACTION/EQUAL OPPORTUNITY INSTITUTION

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#### Resources and References

*Please Note: As a professional courtesy, the Area VII Extension Educators request that these materials NOT be copied or duplicated in any means. Copies of the materials may be requested for purchase.*

*Mini 4-H Model Building Manual, Madison County, Indiana*  
*Mini 4-H Model Building Manual, Delaware County, Indiana*  
*Mini 4-H Models Manual, Blackford County, Indiana*  
*Wild Adventures, Rush County, Indiana*

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# Mini 4-H Parent's Page



Welcome to the Mini 4-H Program! Mini 4-H is designed for youth to explore a variety of project areas.

Your child received this project manual when enrolling in Mini 4-H. This manual will provide fun, age-appropriate learning activities throughout their year(s) in Mini 4-H and their interest in this project.

As a Mini 4-H parent, your job will be to guide and encourage your child through the activity. It is highly suggested that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. The 4-H motto is "learn by doing" ... and is a great educational tool which we can provide for youth.

Additionally, the Mini 4-H program is set up to allow your child to exhibit a project at the 4-H Fair. This project is based upon information within this manual.

The 4-H Fair is an exciting time for 4-H members and families. It is a week that allows community youth to showcase their talents, interests and enthusiasm for learning.

Mini 4-H is fun! Your child cannot help but enjoy it! You can have fun too, by guiding and helping as your child participates in the program. Encourage and praise your child as he/she has fun learning and sharing with you.



# Mini 4-Her's Page



Welcome to Mini 4-H! You are now a member of the 4-H family. You are a special person.

Mini 4-Her's have lots of fun! There are lots of activities for you to explore. You can try new things. You can share it with your friends and family.

Mom, Dad or another adult can help you with your project. Bring your project to the 4-H Fair and lots of people will be able to see what you have done. You also get a ribbon made just for Mini 4-Her's.



Here are some things to know about 4-H.

The 4-H Symbol:

A four-leaf clover with an "H" in each leaf



4-H Colors:

Green and White

The 4-H Motto:

To make the best, better.

The 4-H Pledge:

I pledge my *Head* to clearer thinking,  
my *Heart* to greater loyalty,  
my *Hands* to larger service, and  
my *Health* to better living,  
for my club, my community,  
my country, and my world.

# \* What Are Models? \*

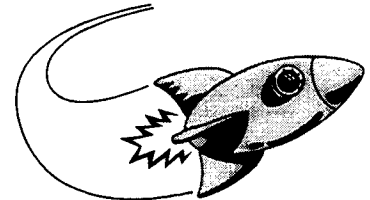
Do you like to make things? Do you see things and ask, how was that made? Many of us like to make things.

A *model* is a small version of a real life thing. Many of us like to make models of cars, boats, planes, tanks, and buildings. Making a model can take a lot of time.

## ▼ Activity 1 -- Observing Things Around Us

You will need to find the following things around the house:

- pencil
- tape measure
- this activity sheet



Here is what you do:

1. Look around the place you live in. Look at it from the outside and from the inside. Look at it up close and far away.
2. Write down what you see. What color is it? How big is it? (use your tape measure) Does it look new or old? Does it have moving parts? Does it look neat? Is it rough or smooth? Use the chart to keep notes about what you see.
3. Look at a the car or truck. Look at it from the outside and from the inside. Look at it up close and far away.

4. Write down what you see. What color is it? How big is it? (use your tape measure) Does it look new or old? Does it have moving parts? Does it look neat? Is it rough or smooth? Use the chart to keep notes about what you see.

*Keep notes about the things that you see..*

What did you see?	Where you live	Car or Truck	Thing 1 example	Thing 2	Thing 3
What is it?			Table		
Color(s)			brown		
Rough or Smooth?			Rough		
How Tall?			18 inches		
How Wide?			36 inches		
How Deep?			24 inches		
Does it look New or Old?			Old		
Moving Parts?			No		
Is It Neat?			Very Neat		

Here are some questions:

Why is it important to look at things that you are going to model?

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Did you see things that you didn't see before? What? \_\_\_\_\_

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Which thing would you most like to make? Why? \_\_\_\_\_

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# \* Why Make a Model? \*

When you make a model you will have fun. When you make a model you will learn new skills. You will learn to watch things. You will learn to follow instructions. Best of all, you will find a hobby that can last the rest of your life. You may even build models when you grow up and go to work. Many jobs include model building. Engineers and architects often build real working models of what they make before it is made.

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## ▼ Activity 2 -- Make a Plastic Model Kit

You will need these things before you start.

- A Snap-Together Model Kit
- A place where you live to lay out the pieces where they won't be lost.

Here is what you do:

1. Lay all the pieces out so that you can see them.
2. Look at your instructions. Make sure you have all the parts in your instructions. If you don't, put the model back in the box, and return it to the place you bought it from. If you have everything, go to step 3.
3. Now, read the directions to the end.
4. Now, once more....read the directions to the end.
5. Follow the directions and snap together your model.

Here are some questions:

Why did you check the parts? \_\_\_\_\_

\_\_\_\_\_

Why did you read the directions? \_\_\_\_\_

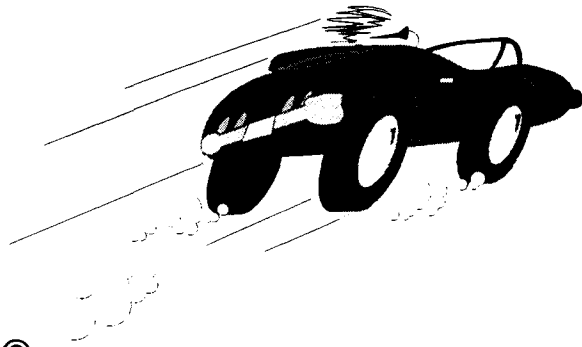
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## ▼ Activity 3 -- The Wonderful World of Legos©

Items needed:

-Legos of all sizes and kinds



Here is what you do:

1. Spread out a bunch of Legos©.
2. Make two or three models of a larger item. Here are some ideas....
  - Car
  - Helicopter
  - Barn
  - Chair
  - House
  - Small Town with 5 Buildings
  - Fire Department Building
  - School Bus

Here are some questions:

What models did you make? \_\_\_\_\_

Which one was the hardest to make? \_\_\_\_\_

What other kind of Lego© models could you make? \_\_\_\_\_

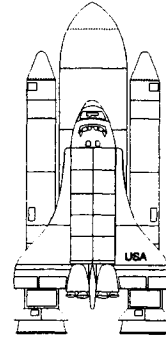
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## ▼ Activity 4 -- A Toothpick Model

Items needed:

- Lots of toothpicks
- Glue (white school glue)



Here is what you do:

1. Decide what kind of model you can make with toothpicks.  
Here is a hint ... toothpicks are straight. The model would need to have straight sides.
2. Make a model of a larger item. Here are some ideas....
  - House
  - Barn
3. Using a little bit of glue, put your model together.

Here are some questions:

Was this easy or hard to do? Why? \_\_\_\_\_

\_\_\_\_\_

Why did you use very little glue? \_\_\_\_\_

\_\_\_\_\_

What happens if you use too much glue? \_\_\_\_\_

\_\_\_\_\_



# \* Different Kinds of Models \*

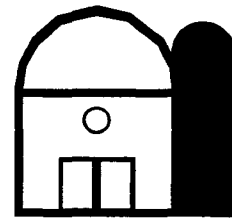
There are different kinds of models. Plastic models are fun and easy to do. Once you snap or glue them together, they look like the real thing. But there are other kinds of models.

Take a look around your house, your school or the library. Do you see other kinds of models? Remember ... models are a small version of a real life thing. What are these models made of?

## ▼ Activity 5 -- Other Models

Items needed:

- pencil
- a shoebox
- construction material (scrap paper, cloth, etc.)
- glue
- scissors



Here is what you do:

1. Pick a building or room. I could be your house, your school or the local library. Your choice!
2. Look around this building or room. What does it contain?
3. Make a model of the building or room.
4. Use construction paper, toothpicks ... anything that will work, to build your furniture, carpet, chairs, etc. Don't worry about making the tiny items in the room (such as cups).

Here are some questions:

What are some things that you can find around the house to make a model? \_\_\_\_\_

What are some other things that you can use to make models? \_\_\_\_\_

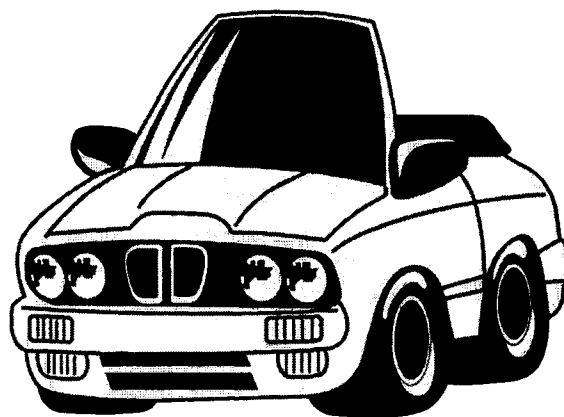
What do you like to make models out of? \_\_\_\_\_

## \* Begin Your First Model \*

The fun thing about making models is that you can make anything that you want. There is not a right or wrong model.

Try making your first model out of something at home. This might be toothpicks, sticks, sugar cubes, playing cards or anything else that you can glue or stick together. A popular thing that many models are made of is clay or "Playdough".

Once you have some model making experience, try a plastic model. But don't forget ... you need to ask an adult for permission!



Before you know it, you'll have a room full of models!



# What Do I Exhibit?



Here is a list of projects that can be shown at the 4-H Fair. Pick *one* project you would like to try. You do not have to make them in any order. If you have any questions, please call the Extension Office. There are people there who can help you.

- ◆ Make one snap together plastic model.
  - Do not glue or paint your model
  
- ◆ Make a model made out of clay or popsicle sticks.
  
- ◆ Make a model using two to four different items of your choice.
  - Examples: clay, toothpicks, sticks, ceramics, sugar cubes, etc.
  
- ◆ Visit a museum and look around at different models. Write a short report on your visit. Here are some things that you might want to put in your report:
  - ✎ What kind of models did you see?
  - ✎ Ask someone who works at the museum how they build their models? Or do buy the models already done?
  - ✎ What was your favorite model? Why did you like this model? How big was the model? How big would the real life item be?
  
- ◆ Make a model using as many different items of your choice. Make a model background to display your model.
  - Example: paint a shoebox so that a plastic model car looks like it is driving down the road, across the field, through the water or the air.

*Have Fun!*