



# AMERICAN ELM DISTRICT



Volume 5, Issue 1  
Jan. 13, 2005

Welcome to American Elm District Cub Scout  
Roundtable Electronic edition  
Webelos activity badges Scholar and Engineer

Theme:

PRE OPENING ACTIVITIES  
Baden-Powell Word Search  
by Heart of America Council

G L W O H D N A R G  
 C O M P A S S M E A  
 U X I S K I L I D L  
 B E A V E R S K N F  
 S C H I L M K C O P  
 C M B S A G A A C R  
 O A R A R T A P E O  
 U S M O D E E M S M  
 T I O P F G D N E I  
 S G T W I I E A T E  
 W N T A E N N S E E  
 L O O L A B G U L L

Words for Baden-Powell word search

AKELA	BADGES	CHIL
BALOO	CAMPING	KA A
SECONDER	BEAVERS	SIX
FLAG	GAMES	MOTTO
LAW	GRAND-HOWL	MAP
PACK	COMPASS	TENT
LEADERS	BADGES	SIGN
PROMISE	UNIFORM	KIM

## Cub Scout Word Puzzle

T C A M P I N G F S K F W R G  
 H O I U H C U W B W E B E L O  
 G M S Y T I M K K Y E P A L F  
 I P I N E W O O D D E R B Y D  
 L A L U R E T S A M B U C R A  
 F S V F E I H C N E D Z N E R  
 O S E B L U E A N D G O L D R  
 W P R T Y B R E D E C A P S O  
 O O A Z J H S C M T I G E R W  
 R I R S P I R T D L E I F E F  
 R I R A C T I V I T Y P I N S  
 A T O R B O B C A T C B H N M  
 E S W O L F B S W J H I K E S  
 B K L L E W O P N E D A B D E  
 R E D A E L N E D A Y C A M P

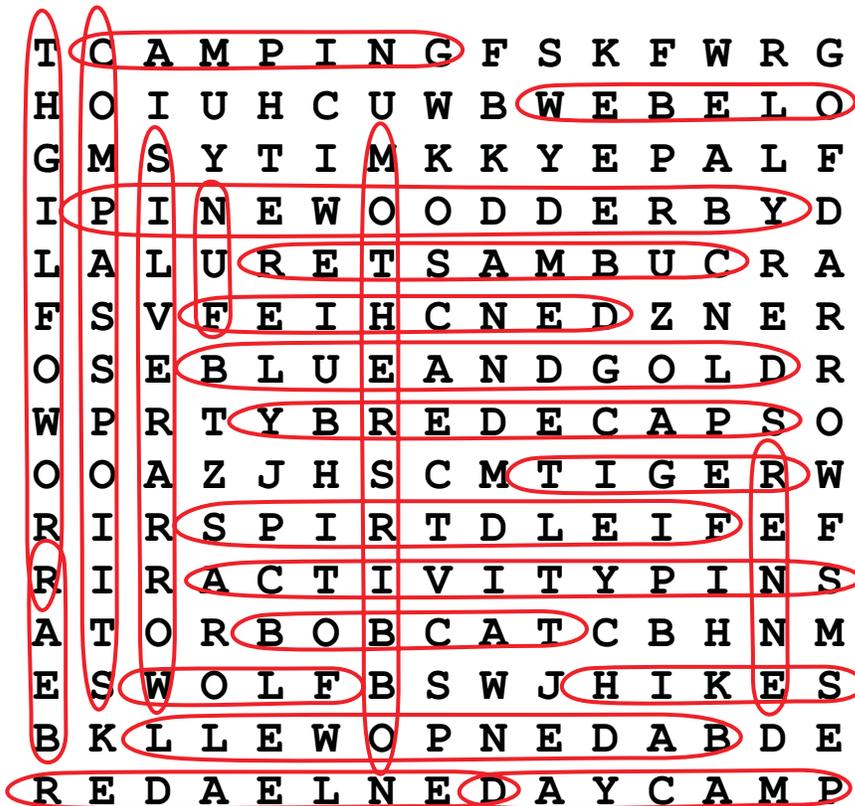
## WORDS FOR CUB SCOUT WORD PUZZLE

ACTIVITY PINS	TIGER	ARROW OF LIGHT
FIELD TRIPS	BEAR	CAMPING
BADEN POWELL	BOBCAT	DAY CAMP
GOLD ARROW		WOLF
BLUE AND GOLD		FUN
MOTHERS RIBBON		WEBLEOS
COMPASS POINTS		HIKES
SILVER ARROW		DENNER
CUB MASTER		SPACE DERBY
DEN LEADER		DEN CHIEF
PINEWOOD DERBY		

Baden-Powell Word Search



ANSWERS TO CUB SCOUT WORD PUZZLE



The road from Tiger to Eagle is long and involves a lot of hard work. Each scout as he travels the path must have a lot a help learning about life and how he fits in this world. Sometimes we leave learning the Scout law till late but as we use the Character Connections we can tie into the Scout Law so that they will become familiar to it and use it as they grow. I ran into a piece from John Wayne from [www.scoutresources.org](http://www.scoutresources.org) One of John Wayne's last public appearance was a dinner to benefit a land purchase for a Scout Reservation to be called John Wayne Outpost Camp. He was riddled with cancer and knew he was close to death.

At this dinner, Wayne recited the Scout Law. Then he did something unusual; he said the 12 points of the Scout Law are "nice words". "Trouble is," he continued, "we learn them so young we sometimes don't get al the understanding that goes with them. I take care of that in my family. As each boy reaches Scout age, I make sure he learns the Scout Law. Then I break it down for him, with a few things I have picked up in more than half a century since I leaned it."

Then Wayne proceeded to explain the importance of the Scout Law, breaking it down for the guests at the dinner, much like he would have for his grandson:

**TRUSTWORTHY**--The badge of honestly, Having it lets you like any man in the eye. Lacking it he won't look back. Keep this one at the top of your list.

**LOYAL** --The very work is life itself, for without loyalty e have no love of person or country.

**HELPFUL** --Part sharing, part caring. By helping each other, we help ourselves, not to mention mankind. Be always full of help– the dying man's last words.

**FRIENDLY** --Brotherhood is par that word. You can take it in a lot of directions - and do-but make sure and start with brotherhood.

**COURTEOUS** -- Allow each person his human dignity which means a lot more than saying “yes ma’am” and “thank you sir”. It reflects an attitude that later in life you wish you had honored more...earlier in life. Save yourself that problem. Do it now.

**KIND** -- This one work would stop wars and erase hatreds. But it's like your bicycle. It's just no good unless you get out and use it.

**OBEDIENT**-- Starts at home. Practice it in your family. Enlarge it in your friends. Share it with humanity.

**CHEERFUL** -- Anyone can put on a happy face when the going is good. The secret is to wear it as a mask for our problems. It might surprise you how many others do the same thing.

**THRIFTY** -- Means a lot more than putting pennies away, and is the opposite of cheap. Common sense covers it just about as well as anything.

**BRAVE** -- You don't have to fight to be brave. Millions of good, fine, decent folks show more bravery than heavy champs just by getting 9out of bed every morning, going out to do a good day's work and living the best life they know how against the law of odds. Keep the word handy every day of your life.

**CLEAN** -- Soap and water help a lot on the outside. But it is the inside that counts, and don't you every forget it.

**REVERENT** -- Believe in anything that you want ot believe in but keep God at the top of it. With Him, life can be beautiful experience. Without Hi, you are biding time. John Wayne then thanked those at the dinner for putting his name on the outpost camp and said, “I would rather see it here than on all the theater marquees the world over.

## OPENING

by Heart of America Council

### Blue and Gold Flag Ceremony

Narrator: I represent the Spirit of Lord Baden-Powell , the founder of Boy Scouting, I am also the Spirit of Scouting Past and Present. Here is our future– Cub Scouts of America.

**1st Boy** In the Cub Scout Promise, we say, “I promise to do my duty to God”, and religious activities are part of our rank advancement program. I like to wear my uniform in church on Scout Sunday. Nearly half of all Cub Scout packs are sponsored by churches.

**2nd Boy** I wear my uniform with pride. People know I am a Cub Scout, growing straight and strong through Cub Scouting. There is only one official uniform. The colors for the uniform have meaning...Blue stands for truth and loyalty; gold, for good cheer and happiness.

**3rd.Boy** (Carrying Indian headdress) Early Cub Scout ceremonies were based on Kipling's jungle tales. When Cub Scouting was established in America in 1930, Indian themes were used. Akela was the big Chief of the Webelos tribe– to which al Cub Scouts belong. Chief Akela's father, Arrow of Light, stated that all men were brothers, and a tribe could be no greater than its boys.

**4th Boy** (Carrying wood project) Cub Scouting means FUN! We have lots of fun, but I like making things– real boy projects- things we can play with that follow our theme. Cub Scout arrow points and Webelos activity badges five us many different projects to work on so we make useful things and learn new skills while we progress.

**5th Boy** (Carrying a collection) I like to go on hikes and collect things for my nature collection. Hikes help us to appreciate the outdoors and help us grow physically.

**6th Boy** (Carrying American Flag) I am proud to be an American so I can salute our flag. I also lie to see our pack flag (Points to it) because then I know I am part of **75** years of scouting, I belong! When you salute the U. S. Flag, you salute a lot of other things, too. You salute your family, your home, your fiends, your den, your fellow Americans and this land of freedom-- because they are America!

Narrator: Yes, I represent the Past and the Present. These boys --Cub Scouts now --are the men of Tomorrow. They will be the preservers of our American heritage. (Pause) Please stand and join us in the Pledge of the Allegiance.

## Akela's Life Story

by Sam Houston Area Council

**EQUIPMENT;** Ceremony board or log with three small candles and one large candle; tom-tom; artificial camp fire.

**SETTING:** Akela enters and walks behind the fire. Akela gives the Cub Scout sign and tom-tom beating stops.

**NARRATOR:** Akela was the big chief of the Webelos tribe. Tall, stalwart, straight as an arrow, swift as an antelope, brave as a lion- he was fierce to an enemy but kind to a brother. Many trophies hung in his teepee. His father was the son of the great yellow sun in the sky. He was called the "Arrow of Light" His mother, from whom he learned those wondrous things that mothers know was called "Kind Eyes". He began to understand the signs and calls of the Webelos tribe. Then he was taken on little trips to the forest among the great trees and streams. Here, from the Wolf he learned the language of the ground; the tracks and the ways to food. (At this point, Akela lights the small Wolf candle using the large candle).

**AKELA:** With this candle, representing the "Spirit of Akela" we light the trail of the Wolf. From the signs along the Wolf trail, I see the following braves are ready for advancement in the Wolf Clan of Akela's tribe. (Akela calls the names of the boys receiving Wolf badges and arrow points. They come forward and stand before the campfire. Akela presents awards.)

**NARRATOR:** Then from the big, kindly bears, he learned the secret names of the trees, the calls of the birds, the language of the air.

**AKELA:** (lighting the Bear candle) With the "Spirit of Akela" we light the Bear trail. From the signs along the Bear trail I see the following braves are ready for advancement into the Bear Clan of Akela's tribe. (He calls forward the boys who are receiving Bear badges and arrow points.)

**NARRATOR:** But before he could become a Scouting "Brave" on his own, he had to prove himself by trying out new skills, performing certain tasks and passing tests of accomplishment.

**AKELA:** (Lighting the Webelos candle) With the "Spirit of Akela" we light the tail of the Webelos.

From the signs along the Webelos trail, I see that the following braves have shown their skills in (He calls the names of the boys receiving activity badges and indicates which badges they earned.)

**NARRATOR:** There Akela was required to pass the highest test of all, He must prove himself qualified to wear his father's names "Arrow of Light".

**AKELA:** From the signs further on down the Webelos trail, I see that the following braves have proven themselves worthy to wear the "Arrow of Light", the highest award in Akela's tribe. (He calls forward the boys who have earned the Arrow of Light Award.) ((Drum stops) From the four winds, Akela hears that you braves are doing well along the trails that will lead you into Boy Scouting and the highest trail of all, that of Eagle. Now will all Cub Scouts stand and repeat with me the Cub Scout Promise.

## Audience Participation

By Heart of America Council

### Very Special Birthday Party

Divide audience into four groups to respond with the following:

Den Leaders	"Oh, Boy!"
Cub Den 1	"Oh, Boy, Oh, Boy!"
Birthday Cake	"Happy Birthday to you" (SUNG)
Birthday Party	"Yippee"

This is the story of a **Den Leader, Cub Den 1**, and a **Birthday Cake**. One Thursday afternoon, as **Cub Den 1** was meeting at the home of their **Den Leader**, Mrs. Reid, the boys overheard her on the phone say, "It will be a very special **Birthday Party.**" "**Birthday Party?**" They said to each other, "Whose **Birthday Party** is it?" Each asked the other.. "Not mine", said Jimmy. "Nor mine", said Johnny. "Or mine, " said Billy. "Maybe said Mike and Ike, "it's Mrs. Reid's our **Den Leader!**" "Yeah", they chorused. "I know", said Jimmy. "Why don't we give her a **Birthday Party?**" "That's a neat idea", said Johnny. "Let's have **Birthday Cake**", Said Mike and Ike.."Swell", they all said.

So each went home and made special plans for the next Den meeting and the special **Birthday Party** for their **Den Leader**.

Den meeting day dawned bright and sunny. At 3:30 all five boys arrived at their **Den Leader's** house.

Mike and Ike brought a Birthday Cake. Jimmy brought paper hats. Johnny brought balloons and Bill brought ice cream for the **Birthday Party**. As they trooped in the door, they all yelled, "Surprise! We're having a **Birthday Party**." Mrs. Reid, their **Den Leader** looked shocked. "My **Birthday Party**? Why, it's not my birthday." But we heard you talking about a special **Birthday Party** on the phone last week, said Jimmy. "Oh, said their **Den Leader**, and smiled. "It's Cub Scouting's birthday," she said. "Cub Scouting is 75 years old, this month. But I think this is a wonderful idea. We'll just celebrate a little early." And so they did. And that is how **Cub Den 1** and their **Den Leader** had a very special **Birthday Party!** With everyone eating a very special **Birthday cake**.

### Stunts and Tricks

Tongue Twisters

Red leather, Yellow leather

Kick six sticks quick.

Two tree toads tied together tried to trot to town.

A big black bug bit a big lack bear.

### Scouting Quiz

1. Cub Scouting is \_\_\_\_\_ years old this month?
2. Scouting is \_\_\_\_\_ years old this month.
3. \_\_\_\_\_ is the founder of scouting?
4. \_\_\_\_\_ started the Boy Scouts of America.
5. \_\_\_\_\_ is the first rank in Cub Scouting.
6. \_\_\_\_\_ (number) achievements are required to earn the Wolf Badge.
7. \_\_\_\_\_ Electives are required to earn a gold arrow point.
8. There are \_\_\_\_\_ Webelos Activity Badges that can be earned.
9. The \_\_\_\_\_ is the highest award in Cub Scouting.
10. We belong to Pack # \_\_\_\_\_.
11. We belong to Den # \_\_\_\_\_.
12. There are # \_\_\_\_\_ boys in our den.
13. \_\_\_\_\_ is our Cub Master.
14. Our pack is part of \_\_\_\_\_ District in the Black Swamp Area Council.
15. (For parents only) My son is working on his \_\_\_\_\_ rank.
16. (For boys only) I need on # \_\_\_\_\_ requirements to earn my next rank.

17. The Cub Scout motto is "\_\_\_\_\_".

### Scouting Quiz Answers:

1. Cub Scouting is 75 years old this month?
2. Scouting is 95 years old this month.
3. Baden-Powell is the founder of scouting?
4. William D. Boyce started the Boy Scouts of America.
5. Tiger is the first rank in Cub Scouting.
6. 59 (number) achievements are required to earn the Wolf Badge.
7. 10 Electives are required to earn a gold arrow point.
8. There are 20 Webelos Activity Badges that can be earned.
9. The Arrow of Light is the highest award in Cub Scouting.
10. We belong to Pack # \_\_\_\_\_.
11. We belong to Den # \_\_\_\_\_.
12. There are # \_\_\_\_\_ boys in our den.
13. \_\_\_\_\_ is our Cub Master.
14. Our pack is part of American Elm District in the Black Swamp Area Council.
15. (For parents only) My son is working on his \_\_\_\_\_ rank.
16. (For boys only) I need on # \_\_\_\_\_ requirements to earn my next rank.
17. The Cub Scout motto is "Do Your Best".



## Skit

By Heart of America Council

### Happy Birthday Skit

**Characters:** 5 Cub Scouts plus one small Cub Scout

**Props:** A birthday cake large enough for a small boy to hide inside.

**Cub 1:** Well, here we are. But where is Ed?

**Cub 2:** I don't know. It's just like Ed to invite us over for the surprise party and then not be here.

**Cub 3:** Does anyone know who's birthday we're celebrating?

**Cub 4:** It isn't mine. Mine's in April.

**Cub 5:** Who cares?

**Cub 4:** I do! Besides, now that you know when it is, you can save your money and buy me a super present!

**Cub 1:** Boy! Will you look at that cake?

**Cub 2:** Man, that's big enough to feed an army!

**Cub 3:** Not with Jack around. You know how he is with our den snacks, He eats everything in sight!

**Cub 4:** I can't help it. I'm just a growing boy...just like the Law of the pack says we should.

**Cub 5:** Yeah, but we're to grow up...not out!

**Cub 1:** Look, here's a note.

**Cub 2:** Read it. Maybe it will explain what this is all about.

**Cub 1:** Okay, okay! (Reads from note) We're a gang that's really true. Here to celebrate our 75th, our organization rates an "A" plus, so let's all sing....

**Small Cub:** (Jumps out of cake and yells Happy Birthday to us!).

### Mowgli Joins the Jungle Pack

By Last Frontier Council

#### Cast and Props:

Narrator: see the JUNGLE BOOK for costumes

Akela: Father Wolf

Shere Khan: The Tiger

Mother Wolf

Baloo: The bear

Bagheera: The black panther

Mowgli: Barefoot boy with swim trunks on, sitting facing Akela.

Pack Council: As many Cubs as you want in the circle.

**Narrator:** England's Robert Baden-Powell, who started Scouting, used Rudyard Kipling's The Jungle Book as a basis for the Cub Scouting

Program. Our skit is taken from this book. As our scene opens, Mowgli, the man cub, has been brought before the Pack Council. Shere Khan, the vicious tiger, wants to kill the cub, but Mother Wolf wants to keep the cub as her own. Akela, the great Wolf who leads the pack, arises...

**Akela:** (Arises from a kneeling position) You know the law --you know the law. Look well, oh wolves.

**Mother Wolf:** Look, look well, oh wolves. (She kneels on Akela's right)

**Shere Khan:** (Enters) He is mine. Give him to me!

**Narrator:** Now the Law of the Jungle says that if there is any dispute as to the right of a cub to be accepted by the pack, he must be spoken for by at least two members of the pack, neither of who is his father or mother.

**Akela:** Who speaks for this cub?

**Narrator:** The only outside creature who is allowed at the wolf pack's council is Baloo, the brown bear, who teaches the Wolf cubs the Law of the Jungle.

**Baloo:** (Enters from left) I speak for the man cub. There is no harm in him. Let him run with the pack. I myself, will teach him.

**Akela:** Baloo has spoken and he is our teacher for the young bus. Who speaks besides Baloo?

**Narrator:** A shadow drops onto the circle. It is Bagheera, the king of the jungle, and no one cares to cross his path.

**Bagheera:** (enters for left) To kill any small cub is a shame. To Baloo's words, I shall add my strength and help this small cub! (Share Khan gives Mowgli a last hungry look, roars and slinks away.)

**Narrator:** An that is how Mowgli joined the Wolf Pack! (The pack howls it's approval.)

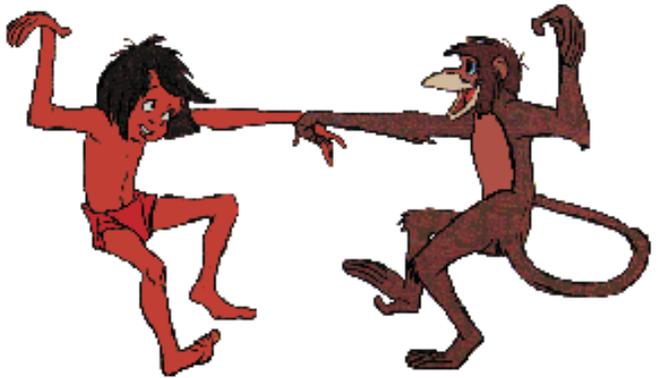
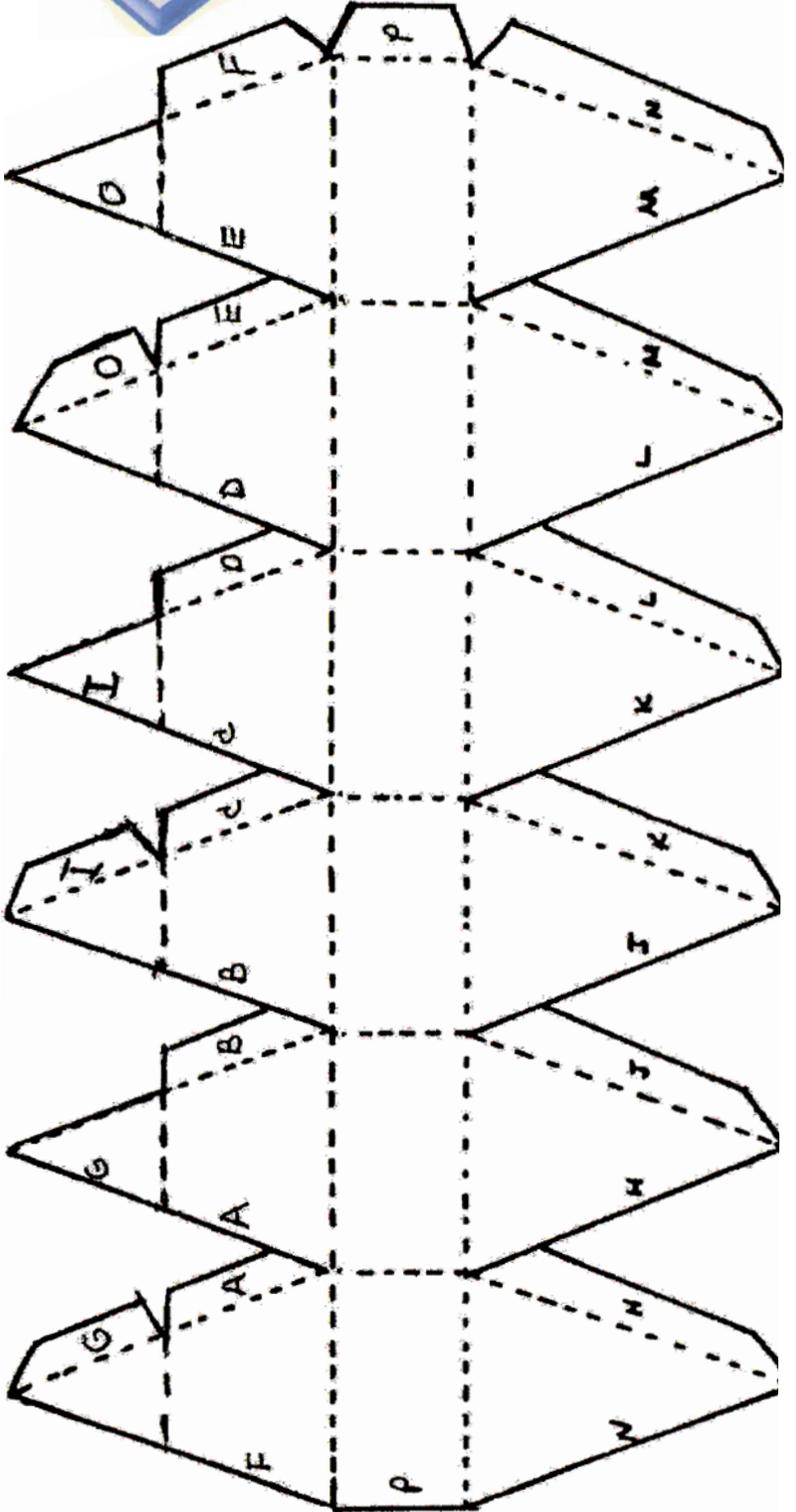


### THEME MIDWAY

By Great Salt Lake Council

This is a pattern for a diamond crystal. When put together you can make a neckerchief slide for the 75th anniversary of Cub Scouting. Make a copy of this page onto cardstock. Cut out pattern and the 75 years diamond logo. Now, be sure to cut down to the dotted line on the tabs. Folding over on each dotted line, crease up. This way all the lines will be inside your diamond at the end. Next, with a glue stick glue the tabs H to H, J to J, K to K, L to L, M to M, N to N, and P to P. You now have the bottom done. Next, glue A to A, B to B, C to C, D to D, E to E, F to F, G to G, I to I, and O to O. With last three points, glue each on top over the other to form a flat top. Now glue the 75th logo on one of the rectangles and on the opposite rectangle on the back. Hot glue a slide, which can be made out of pipe cleaners or PVC pipe. You can also enlarge this and make large diamonds to decorate your tables. Put a dowel the height of your diamond through the tip to support. You can then glue the last three tabs to the dowel.

<http://clipart.disneysites.com/>



## WEB SITES

These sites are current as of 1-8-05

By Great Salt Lake Council

[www.cubroundtable.com](http://www.cubroundtable.com)  
<http://www.allcrafts.net/scrapbook.htm>  
<http://www.familytreemagazine.com/articles/oct01/ideas.html>  
[Http://www.familytreemagazine.com/articles/oct01/ideas.html](http://www.familytreemagazine.com/articles/oct01/ideas.html)  
<http://www.scrapbookingwithlove.com/ideaPages.asp>  
[http://h30039.www3.hp.com/scrapbooking/projects\\_07\\_2003/just\\_for\\_kids\\_kit.asp](http://h30039.www3.hp.com/scrapbooking/projects_07_2003/just_for_kids_kit.asp)  
[Http://www.adobe.com/education/digkids/lessons/activities/holiday\\_scrapbook.html](http://www.adobe.com/education/digkids/lessons/activities/holiday_scrapbook.html)  
[Http://www.newhomemaker.com/hands/crafts/journal.html](http://www.newhomemaker.com/hands/crafts/journal.html)  
[Http://www.kidsdomain.com/holiday/birthday/party.html](http://www.kidsdomain.com/holiday/birthday/party.html)  
[Http://www.wtsmith.com/rt/bluegold.html](http://www.wtsmith.com/rt/bluegold.html)  
[Http://www.scoutbase.org.uk/library/history/cubs/](http://www.scoutbase.org.uk/library/history/cubs/)  
[Http://www.sageventure.com/history/cub/](http://www.sageventure.com/history/cub/)  
[Http://www.troop97.net/bsahist2.htm](http://www.troop97.net/bsahist2.htm)  
[Http://histclo.hispeed.com/youth/youth/org/sco/country/us/scoutuscubh.htm](http://histclo.hispeed.com/youth/youth/org/sco/country/us/scoutuscubh.htm)  
[Http://members.aol.com/randywoo/bsahis/index.htm](http://members.aol.com/randywoo/bsahis/index.htm)

## Closing Thoughts

### Stick to it

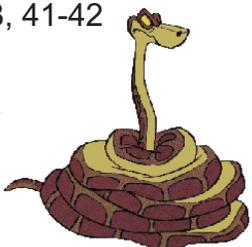
(hold up envelope with stamp)

Cub Scouts, the postage stamp you see on this envelope had the important job of making sure that this piece of mail was delivered to me. The stamp is pretty small but, in spite of its size, it did the job. Each of you has a job to do in your den. Like the postage stamp, it isn't your size that determines how will you do the job, but rather, how will you stick to it. We aren't all good at all things. Remember the stamp. It did the job in spite of its size to the job. Make up your mind that you can do the same thing. Do your best and stick to it until the job is done.

## WEBELOS Scholar

by Grand Canyon Council

- Mental Skills Group
- Webelos Scout Book p. 108-116
- Webelos Leader Guide p. 118-123
- Cub Scout Academics and Sports Program Guide p. 37-38, 41-42



School gives boys many opportunities and experiences, but often boys don't even realize what is going on in this important part of their lives, or what it can do for their futures. Learning how a school system is structured may seem dry, but if a boy gets a chance to see the district offices, visit a superintendent's office or go to a school board meeting the scope of education gets bigger. Going to other schools can help a boy figure out that things can be different, but still be good, and that he can make a difference in his class by understanding the roles of those involved in helping him get his education. Going to a junior high, high school, community college or a university, if there is one close to your area, can be a real mind expanding experience. If a boy knows the history of education, he can become grateful to live in a time where there are so many resources that make learning interesting. That realization makes service to the school very natural. Some good ideas are in the Webelos Leader Guide p. 119. A boy might not realize that helping someone who is having trouble with school work is also a service. Many a boy has helped someone understand computer use! Don't miss a chance to praise any boy who shows success in something he does at school. Let each boy know that what he does at school is not only important to him, but important to you. It is also a great time to realize that learning happens when someone is finished with formal schooling. He can learn that grown ups who have jobs often have to have training for the things they need to do, and that is also education. The Cub Scout Academics and Sports Program Guide has two areas that fit Scholar. One is Geography on p. 37-38 and the other is Mathematics on p. 41-42. Teachers can help with each of these categories, which fit into school curriculum easily. Related Activity Badges: If a boy takes part in a school activity that includes participation on a sports team, it could pass off part of Sportsman, Webelos Scout Book p. 79, requirements 3 and 4. If a service project at school includes helping to raise and lower the lag, then it can pass off part of Citizen, Webelos Scout Book p. 157, requirement 2. If a service project involves the school, but not necessarily doing flag service, then it can be used to pass off Citizen, requirement 4. Ideas for neckerchief slides, den doodles, lanyard necklaces or recognition plaques etc., can be:

- Miniature books.
- A picture.
- A miniature apple.
- A fake chalkboard.
- A tiny pencil.
- An eraser.
- A 1 inch segment of a ruler.
- A school photo.
- A key that can represent education being a key to the future.
- A photocopy/hand drawn copy of the Scholar activity badge that is laminated or mounted.

#### Activities

Source: "BALOO'S BUGLE"; Volume 4, Issue 6; January 1998

- Play a Newspaper search game looking for articles about education.
- Ask a librarian to explain the Dewy Decimal System, visit the public library, have the boys complete applications for a library card if they do not already have one.
- Invite a member of the school board or a professional educator to talk to the boys on the value of an education and what school has to offer a boy.
- Have the boys try to find out some of the these things:
  - ‡ What jobs are there at school for the boys to do?
  - ‡ What extra-curricular activities are available?
  - ‡ What community activities is the school used for?
  - ‡ Who are the people on the office staff, cafeteria staff, and custodial staff? What are their responsibilities?
  - ‡ What are some of the problems of the school, and how can you help?
- Invite a teacher or principal to one of your den meetings.
- Let the boys talk about what is going on in school. Guide the discussion in such a way that they will see the value of an education.
- Discuss possible den service projects for the school.

#### .Trivia

Source: "BALOO'S BUGLE"; Volume 4, Issue 6; January 1998

- With which hand does the Statue of Liberty hold her torch? (right)
- Which is larger, a dime or a penny? (penny)

- How many legs does a spider have? (8)
- Whose picture is printed on a one dollar bill? (George Washington)
- If you have only one match and enter a room in which there is a kerosene lamp, an oil heater and a wood burning stove, which do you light first?  
(The match

#### )Problem

Source: "BALOO'S BUGLE"; Volume 4, Issue 6; January 1998

1. Two cars start from Denver to drive to Colorado Springs, a distance of 80 miles.
2. They are both the same make of car, and both are being driven at the same speed.
3. One of the cars makes the trip in 80 minutes while it takes the other car an hour and 20 minutes.
4. Can you explain the reason?  
(Answer 80 minutes and one hour and 20 minutes are the same.

#### Engineer

#### Engineer

- Technology Group
  - Webelos Scout Book p. 266-281
  - Webelos Leader Guide p. 64-71
  - Cub Scout Academics and Sports Program Guide p. 45-46
- Learning about things people have created to make life easier and tasks quicker can be fascinating to boys. Boys can realize that everything that doesn't occur naturally on the earth was designed and built by individuals and that boys themselves have creativity to design things, too. Engineering is usually thought to be big items such a building construction, bridges or similar things, but there is engineering in things inside homes, vehicles, etc. Three types of engineers in the book, Civil, Mechanical and Electrical, define and bring awareness to boys who may be interested in one area or Another. If you don't know of someone who has engineering knowledge how could be a guest speaker, check the local utility service for your community and inquire about a tour or person who may know that skill less utility service may also have pamphlets available that

rejoins together to allow traffic to cross A pontoon bridge is made of objects that float, such as a pontoon boat, or wooden barrels. One example is the barrel bridge at Disneyland's Tom Sawyer Island. Using 35 mm photo canisters, tongue depressors and string, boys can make a model pontoon bridge. Use the Webelos Leader Guide p. 64-71 for good ideas for block and tackle and different catapults. The purpose of block and tackle, which is a simple machine, is to use pulleys to lift items easily. "A single block and tackle has an ideal mechanical advantage of two, which means that if there were no friction, one pound pulling force can pull two pounds. A double block with one pound pulling could lift four pounds As additional blocks are added, the mechanical advantage is increased, but each additional pulley also decreases the distance the load is moved. Friction is a factor affecting the lifting power." Probably the most common block and tackle uses are elevators and the ropes that pull up the curtain on a stage.

### Engineer - Bridges

The design of a bridge and the type of construction depend upon the kind and width of the construction, the load it is expected to carry, the kind of ground or rock found at the site and the cost. To learn about bridges and their construction, here are four different types you can make from cardboard. They can be used to display matchbox or "HO" size cars.

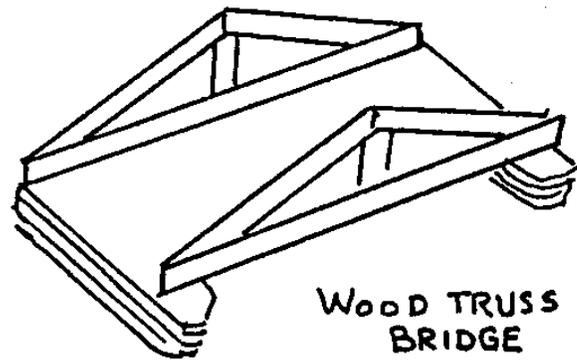
#### Wood Truss Bridge

This bridge is two-inches wide, four-inches long with one inch high sides. Lay out the sides and bridge floor as one piece, then cut halfway through the cardboard where the parts join and fold up the sides. Each side on a full size bridge would be built up with four timbers and iron rods, so draw the joints of the timbers with a pencil. Glue up six layers of cardboard three-inches by two and three quarter-inches for abutments at each end of the bridge.

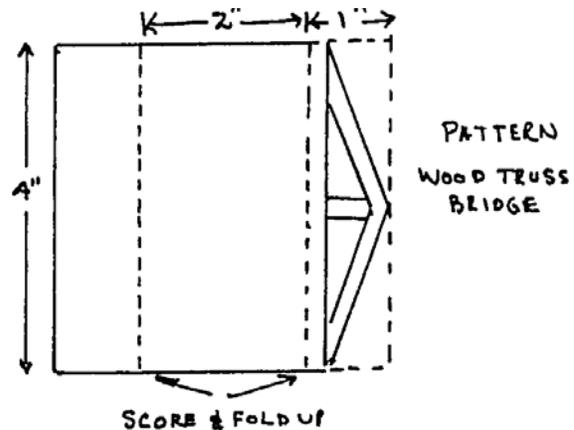
This type of bridge was used in colonial days for single lane roads. Some still exist today.

#### Stone Arch Bridge

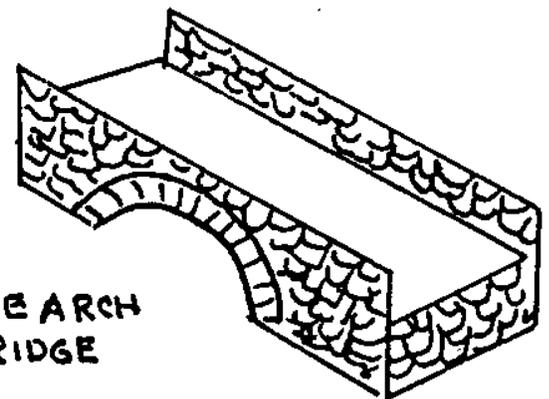
This bridge is made from three pieces of cardboard. Sides are one-inch high and four-inches long. The arch is one-half-inch by one and three-quarter-inches. The floor and ends are made as one piece, then scored and bent. The floor is three and seven eighths-inches long. Each end is one-half-inch long and



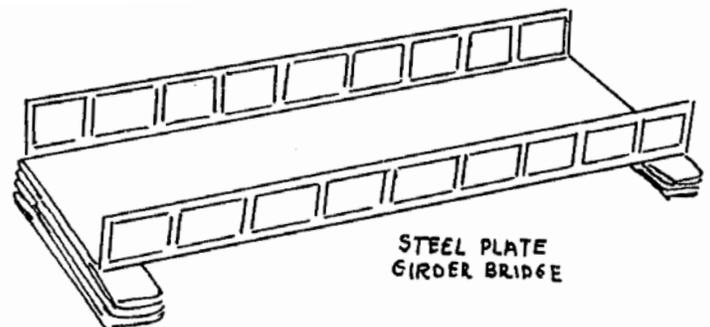
WOOD TRUSS  
BRIDGE



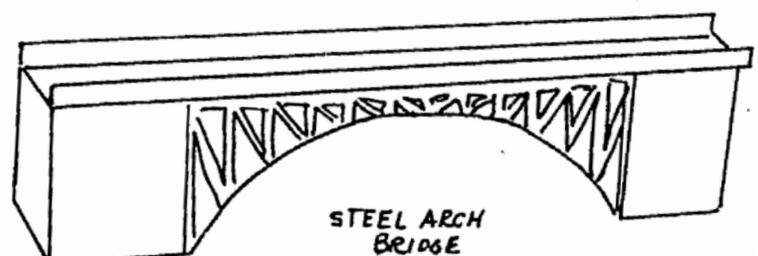
PATTERN  
WOOD TRUSS  
BRIDGE



STONE ARCH  
BRIDGE



STEEL PLATE  
GIRDER BRIDGE



STEEL ARCH  
BRIDGE

on and one-half-inch wide. Draw the outline of stones with a pencil.

### Through Plate-Girder Bridge

This is typical of the reinforced steel-plate bridges we see used for roads and railroads today. It is three-inches wide and nine-inches long. The bridge floor and sides are laid out as one piece - the floor is three-inches wide and nine-inches long - the sides are one-inch high. Vertical lines are spaced on one-inch centers. The steel angles used to reinforce the steel plates are simulated by pencil lines. Abutments are made from six layers of cardboard five-eighths-inches by four-inches glued together. Use pencil dots for rivets and pencil shading along the sides to give the bridge a three-dimensional effect.

### Modern Steel Arch Bridge

Made from three pieces of cardboard. The deck is three-inches wide and twenty-inches long. Sides (or railings) are one-half-inch high. Make the sides and deck as one piece, then score and bend. Lay out one side and one end for the bottom unit as one piece on a twenty-inch by four-inch piece of cardboard. Sides are four inches by eighteen-inches, ends are two-inches by four-inches. Arch opening is eleven inches long by nine-inches high. Lay out vertical steel beams on one-inch centers and mark them with a black felt tip pen. Steel arch bridges are used by railways and highways to span deep canyons. If the canyon is rock, no concrete abutments are needed.

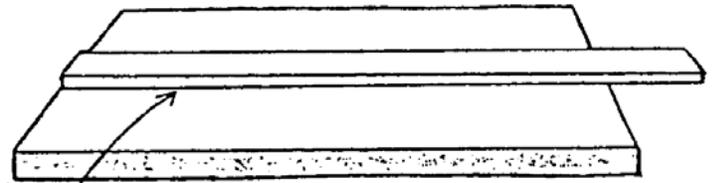
### Engineer - Catapult

#### Materials

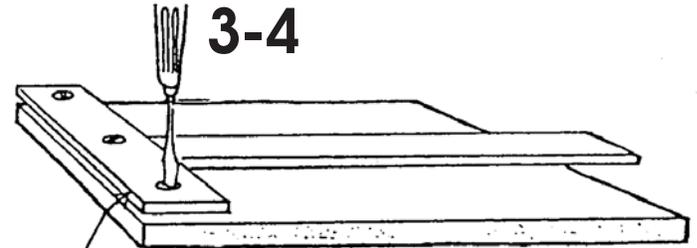
- Platform: heavy board one foot square; five-eighths-inch flake board is good.
- Arm: one-inch to two-inches wide and fourteen-inches long.
- Deadman: twelve-inches long; a one-inch by two-inch furring strip is good.
- Springer: a six-inch length of one-inch by two-inch is best.
- Three Wood Screws
- Paper Cup
- Rubber Band
- Button

#### Construction

1. Lay the arm across the center of the platform, one end even with the platform edge.
2. Lay the deadman along the same edge and across the end of the arm.

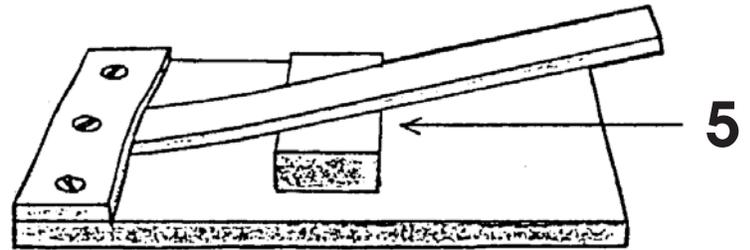


1

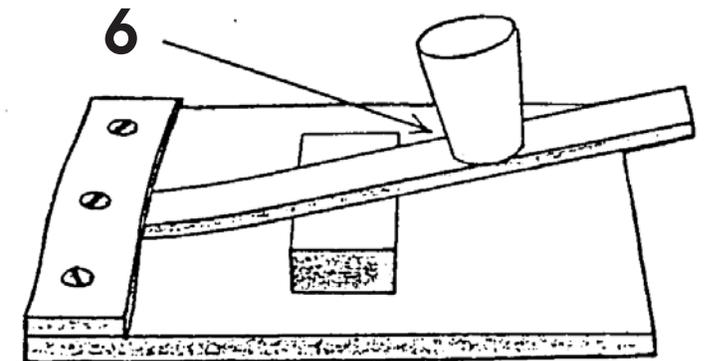


3-4

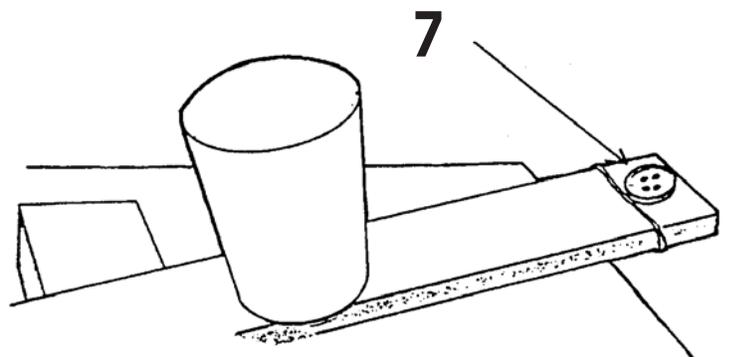
2



5



6



7

3. Drive a screw through the center of the deadman, through the arm, and into the platform.
4. Drive a screw near each end of the deadman into the platform.
5. Slide the springer under the center of the arm.
6. Tape a paper cup to the arm about four-inches from the free end.
7. Roll the rubber band one-inch down from the free end of the arm

**Instructions**

1. To use the catapult, place the button on the end of the arm.
2. With your thumb, press down the free end of the arm, and then let it go.
3. With practice, you will find just how much to press the arm down to pop the button into the cup.

**Game - Catapult Catch**

1. Webelos Engineers can assemble this catapult and try hurling a button for distance and accuracy.
2. They can also make a contest of trying to pop the button into the cup in another boy's catapult.

**Hanging by a Thread**

Source: Denver Area Council Pow Wow 1999 Book, "Don't Stop Thinking About Tomorrow" The Maya have long been famous for their buildings, calendars, pottery, art, and language. And bridge building. Recently archaeologists and engineers have discovered the remains of the world's earliest suspension bridge. Using computers, videotapes and pictures taken from a plane, the researchers found the bridge in Mexico. This ancient bridge was made from trees, twined plant materials, and masonry. It's hard to believe that the Maya could have built a bridge 590 feet long over 1,200 years ago. Let's see how they did it. The instruction seems long and complicated, but it isn't. Use illustrations as guide.

**Materials:**

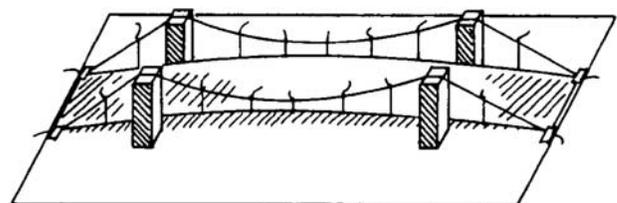
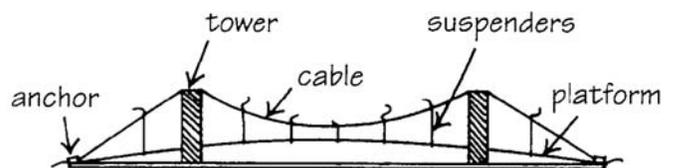
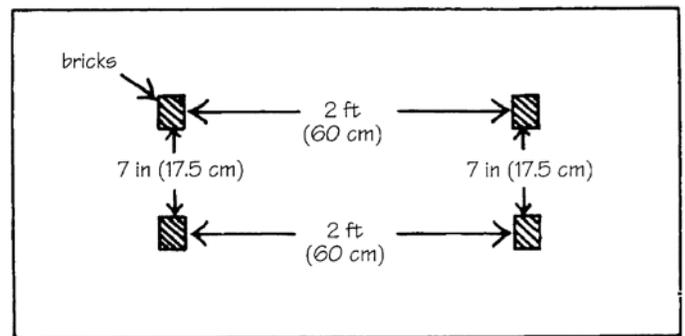
- a piece of heavy cardboard, 2 feet by 4 feet.
- a piece of lightweight cardboard, 6 inches by 5 feet.
- four bricks or wooden blocks.
- duct tape or other heavy tape.
- large ball of strong string.
- a yardstick.
- scissors.

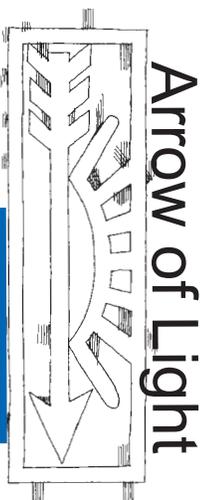
**Instructions:**

1. Place the heavy piece of cardboard on a firm surface. (This is the base for the bridge.)
2. Place the four bricks on end on the cardboard base so that they form the corners of a rectangle

seven inches wide and two feet long. (These are the towers.)

3. Tape one end of the string to one short edge of the cardboard (the two foot side) in line with one of the bricks. (This is the anchor.)
4. Drape the string over the top of the brick, straight across the space between the bricks, and over the opposite brick.
5. Leave enough string so that it hangs down between the bricks about three inches.
6. Tape the loose end of the string to the opposite side of the cardboard. (This will form the other anchor.)
7. Cut the string. (The length of string hanging between the bricks is called the cable.)
8. Do the same thing on the other side of the bridge, using the other two bricks.
9. Make sure this string hangs down the same distance as the first cable. (You now have two cables.)





**Repeat the Cub Scout Promise**

**Demonstrate the Cub Scout Salute**

**When do you wear the Cub Scout Uniform?**

**WEBELOS**

**Demonstrate the Cub Scout Sign**

**What are the Cub Scout colors?**

**Fell in Creek!  
Back 2 spaces**



**Demonstrate the Cub Scout Salute**

**Told someone they did a good job. Ahead 1**

**Helped someone in need ahead 2**

**Demonstrate the Cub Scout Handshake**

**Name 2 important Americans**

**Helped someone in need ahead 2**

**Demonstrate the Cub Scout Handshake**

**Worn your uniform to Den meeting! Ahead 2**

**What does Webelos mean?**

**Tell 1 way to respect our flag**



**Who is Akela?**

**What makes America special to you?**

**Repeat the Cub Scout Promise**

**Repeat the Cub Scout Motto**

**Demonstrate the Cub Scout Sign**

**Demonstrate the Cub Scout Sign**

**Bobcat Den**