

Jump Rope



TO FITNESS

Lauren Lieberman, Ph.D. and Haley Schedlin, M.Ed.



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Jump Rope to Fitness

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Dedication

This book is dedicated to the Alaska, Arizona, and New York Camp Abilities campers and counselors who participated in the field testing of the Jump Rope to Fitness Kit. The motivated campers jumped with a variety of ropes on multiple surfaces. The counselors gathered numerous pages of data. To all of them, we extend our thanks.



Message From The Authors



Photo courtesy of
Carla Rodriguez/
Insight Photo

As children we loved jumping rope with our friends, learning and singing the same jump rope songs that our parents sang years ago, and challenging ourselves on how high and for how long we could jump. We knew we were having fun; hidden behind all that fun we were gaining cardiovascular endurance and body strength. Research has shown that children with visual impairments are behind their peers in cardiovascular endurance and upper body strength. Jumping rope is a great way to improve both. We have written this guidebook to help you jump your way to fitness. We hope you enjoy jumping rope as much as we do.

Lauren Lieberman, Ph.D. and
Haley Schedlin, M.Ed.
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Introduction

The APH Jump Rope to Fitness Kit provides individuals with visual impairment the tools to jump rope independently, learn specific skills, and set goals. Jump rope is a sport in itself, yet can also aide endurance, agility, coordination, and balance; skills that are needed in a variety of sports and recreation activities. Jumping rope can be done at home or in a social setting, with or without peers. Jumping rope is universal in that many schools include it as a unit in their curriculum.

The APH Jump Rope Kit contains three different kinds of jump ropes and a jump rope mat. The mat is for shock absorption and to define a safe space in which to jump. The manual will provide you with the necessary tools and resources to develop a comprehensive and enjoyable jump rope program. The sport of jump rope is a great social activity. You will find that siblings and friends enjoy jumping rope with you.

Field Testing

In order to develop an effective kit for individuals with visual impairments, a study of 71 campers (9-19 years old) with visual impairments was conducted at three Camp Abilities (Alaska, Arizona, and New York). Camp Abilities is a developmental sports program for children with visual impairments or deafblindness. The study examined which types of ropes and anti shock mats worked most effectively when used by jumpers with visual impairment or blindness.



Participants

Sixty-six percent of the participants (38 male and 33 female) responded they currently jump rope. Participants said they usually jump rope by themselves (38%), jump rope with others (21%), or jump rope by themselves and with others (14%). Twenty-six percent did not respond to the question.

When asked how often they jump rope, responses included everyday, twice a week, every other week, once a month, every few months, not very often, when a jump rope is available, and when bored.

Procedure

The participants jumped using two mats. Both mats were made of shock-absorbent rubber. One mat was gray and had a hard edge. The other mat was blue trimmed in yellow. Its edges were sloped to meet the floor/ground. Participants also jumped on asphalt, carpet, cement sidewalk, grass, and a gym floor.

The study included five types of jump ropes:

- Plastic beaded
- Plastic-coated wire
- Flexible plastic cord
- Plastic beaded rope with $\frac{1}{4}$ hula-hoop strung in the center
- Battery-powered talking ropeless





The jump rope counselor conducted a post survey with the jumpers. Each rope and mat was given a Likert scale from 1-5, five being the best and one being the worst. The top three ropes for each question are included in this summary.

Results

How safe do you feel with this rope?

Jumpers rated the ropeless jump rope the safest, followed by the adapted hula-hoop rope, and then the flexible plastic cord.

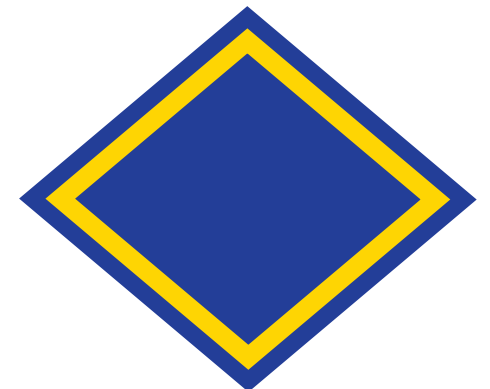
How skilled do you feel with this rope?

Jumpers rated the ropeless jump rope the highest, followed by the adapted hula-hoop rope, and third was the beaded jump rope.

How comfortable is the grip with the rope?

The ropeless jump rope and the flexible plastic cord rope tied as most comfortable. The beaded jump rope was third.

Before jumping began at camp, 64% of the participants stated they were not worried about moving or migrating while jumping rope. Responses given after jumping suggest that they reconsidered. Eighty-four percent of respondents stated that a mat would be very helpful to somewhat helpful in maintaining their position.



When asked if they found the mat to be useful while jumping rope, the yellow and blue mat with the sloped edges was rated slightly higher (by 10%) than the gray, hard-edged mat. Less than 1% found either mat interfered with jumping.

Thirty-nine percent of the campers who jumped with the blue and yellow mat stated that it always helped maintain their position while jumping rope, while 25% stated it helped, and 17% responded it somewhat helped. When asked if they feel comfortable using a mat among peers, 78% said they would be very comfortable to somewhat comfortable.





Benefits Of Jumping Rope

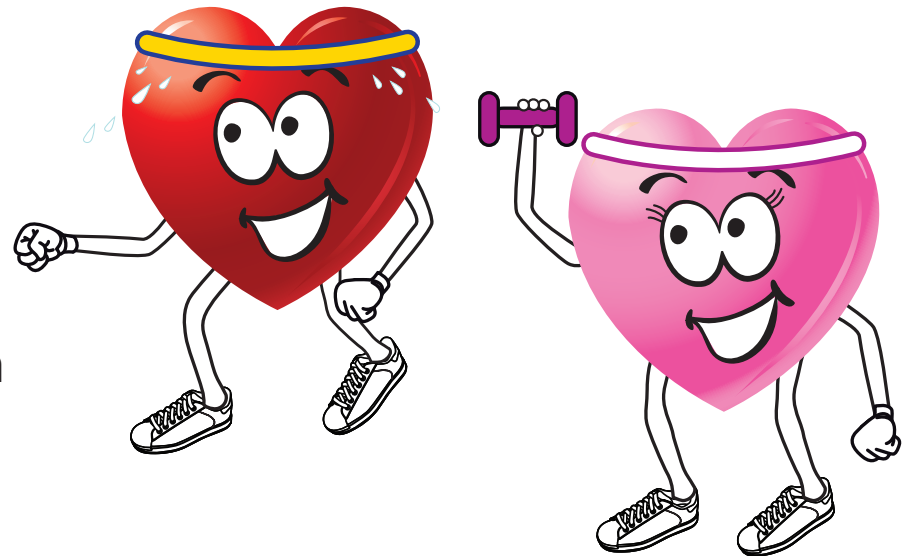
Jumping rope can be done for short or long periods of time. A variety of speeds and skills can be used to increase physical fitness level. In addition, jumping rope can be done in many different settings and performed individually or with a group. Buddy Lee (2003), former U.S. Olympic wrestler and author of *Jump Rope Training*, states,

According to research, a 10-minute program of jumping rope can be as effective as 30 minutes of jogging for improving your cardiovascular health....Combined with a good diet, it ranks as one of the most efficient methods of burning calories in a short time period. (p. 9)

Numerous studies have validated the benefits of jumping rope. These benefits include

- Cardiovascular Endurance
- Anaerobic Capacity
- Coordination
- Balance
- Agility
- Speed
- Upper and Lower Body Strength
- Explosiveness
- Weight Loss

(Holland, 1991; Older, 1998)



Exercise Comparison

According to Kenneth Cooper, M.D., M.P.H. (2002), 10 minutes of jumping rope at 120 turns per minute will produce the same cardiovascular fitness as the following activities.

- Cycling for 2 miles in 6 minutes
- Playing 2 sets of tennis
- Running 1 mile in 12 minutes
- Swimming for 12 minutes
- Jogging for 30 minutes
- Playing Handball for 20 minutes



Jumping rope requires minimal time and is a high calorie burning exercise. In 15-20 minutes, jumpers can burn the calories in a candy bar. Jumping rope is also effective for performing aerobic exercise if done for 10 minutes or more. You spend 10.2 calories per minute jumping rope compared with the 4.2 calories per minute while walking (Chapan, 2006).

Jump ropes are a great choice for fitness training because they are inexpensive, portable, and easy to use. You can jump rope almost anywhere, inside or outside. Little space is needed for basic jumping skills. Children and adults of all ages and skill levels find numerous ways to use jump ropes. Jumping rope conditions the entire body. It increases coordination, rhythm, and timing with each new challenge. These are skills that can be used throughout life.





Many athletes have incorporated jumping rope into their training regimens. Mark McGuire used a jump rope to improve his speed and skills in baseball. Emmitt Smith applied jumping rope skills to practice blocking and defending in football. Bruce Lee jumped rope as a martial arts warm-up and as a training strategy to develop speed. Sugar Ray Leonard and Muhammad Ali are famous boxers who used jumping rope to improve their power, agility, and grace.

Everyone should begin with the basics. Whether jumping for fitness or sports cross training, with practice, patience, and perseverance you will learn and enjoy the many benefits of jumping rope. Let's get started.

How To Get Started

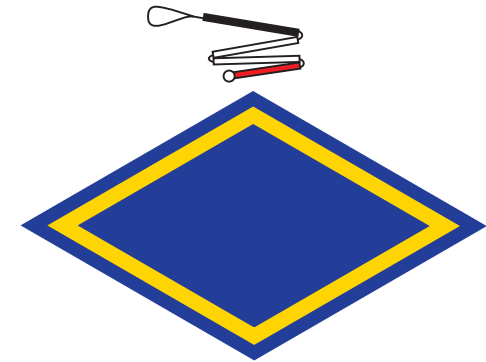
What to Wear

You should always be comfortable when jumping rope.

- Wear properly fitted athletic shoes, preferably cross-training shoes. (Many people wear inappropriate footwear and can injure themselves or lessen their ability levels.)
- Wear loose fitting clothing, preferably shorts or warm-up pants that allow for full range of motion.
- If it is cold, layer your clothing and avoid cotton. Wear a raincoat if it is drizzling.
- Remove all jewelry and hats because they can hit the jump rope and interfere with your performance and safety.

Place your cane in a safe location so that you will not jump on it and you will be able to find it when you are done. Accidentally jumping on a cane could result in a broken or sprained ankle.

Hint-Placing the cane in a specific corner off of the mat will help you to retrieve your cane when you are finished jumping rope.



The Right Rope

Ropes are made from various materials.

Different types of ropes include the leather rope, the plastic rope, the beaded rope, the hula-hoop rope, and the ropeless jump rope; however, jump ropes can be made from many other materials including items found at home.

The Jump Rope to Fitness Kit features three different types of jump ropes, but has a total of five jump ropes.

- The beaded rope has 1.5-inch plastic tubes threaded through a cotton/nylon rope. It has a little extra weight to help the beginning jumper. It is not adjustable, so refer to the Jump Rope Chart to select your correct length. The Kit includes three beaded ropes: short, average, and tall.
- The talking, ropeless jump rope is just two handles with a short rope and bead attached to each handle. You can practice jumping without the rope getting in the way. The ropeless jump rope can be used by beginners and advanced jumpers. Advanced jumpers may enjoy dance and aerobic





routines when using this rope. It is battery-powered, so you can track your number of jumps, calories burned, and timed minutes.

- A generic, plastic-cord jump rope is included because it is a lightweight option, it travels easily, and the length is adjustable by pulling the rope through the handles and tying knots.

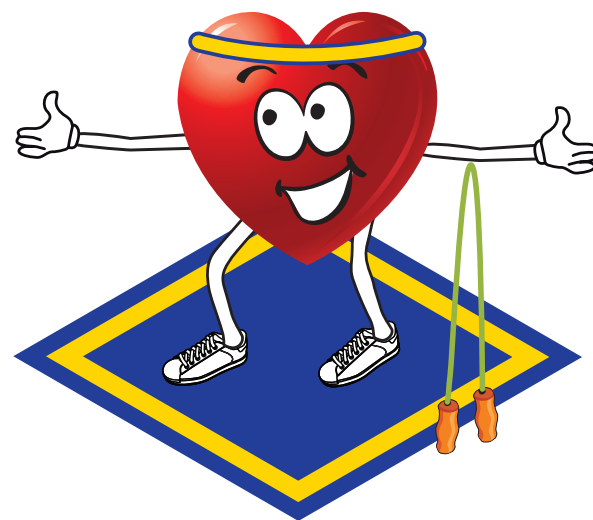


Ropes should be folded in half to measure the length against the height of the jumper and should not go over the armpit. Ropes should go above the jumper's head at least 2 feet when it is in the air. Examine the rope each time before jumping to make sure that there are no cuts or holes in the rope. Damaged ropes should be disposed of promptly. Before jumping make sure that the rope is free of knots. If jumping in a group, make sure that all ropes are rotating in the same direction.

Jump Rope Chart (from the Jump Rope Store)

Your Height	Length of Rope
--------------------	-----------------------

Under 5'	7'
5' – 5'6"	8'
5'6" – 6'	9'
Over 6'	10' (not included in Kit)
Double Dutch	16' (not included in Kit)



Correct Jump Rope Technique

1. Hold handles with a firm grip, elbows close to sides.

2. Make small circles with wrists while turning the rope.
3. Keep torso relaxed, the chest open with the shoulders back, head erect, and look straight ahead to keep balanced.
4. Jump only high enough to clear the rope, with light ankle-knee motion.
5. While jumping, the rope should touch the surface lightly.
6. Never sacrifice good jumping form for speed!

Remember: The key to effective jumping is to be light on the balls of your feet.

Jumping Safely

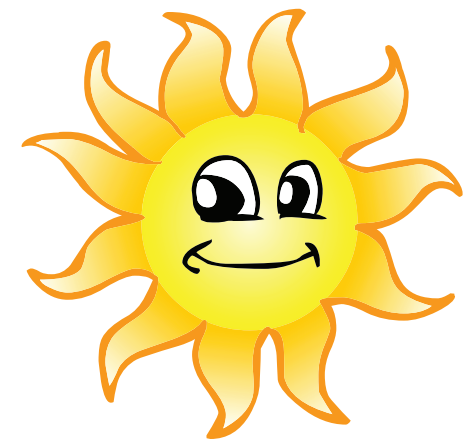
Get parental/guardian permission before jumping inside or outside. Advocate for a safe area to jump. If you live in a small area and there is no outdoor space, you can use the ropeless jump rope that requires very little space.

1. Environment

There are many places that you can jump rope safely. Here are some guidelines to determine a safe environment.

Outdoor Area:

- The area should be clear of trees, fences, shrubs, gravel, or any surrounding building.
- Use a jump rope mat to determine your location.
- Place the mat away from streets.
- If the sun bothers you, face away from it.





- Jumping rope can be done in most weather conditions as long as you dress appropriately.
- Seek shelter at the first sound of thunder.

Indoor Area:

- The rope should clear any objects hanging from the ceiling.
- The rope should clear the ceiling and not touch walls.
- Use the mat to prevent migration and coming into contact with walls, furniture, appliances, and decor items.

2. Surface

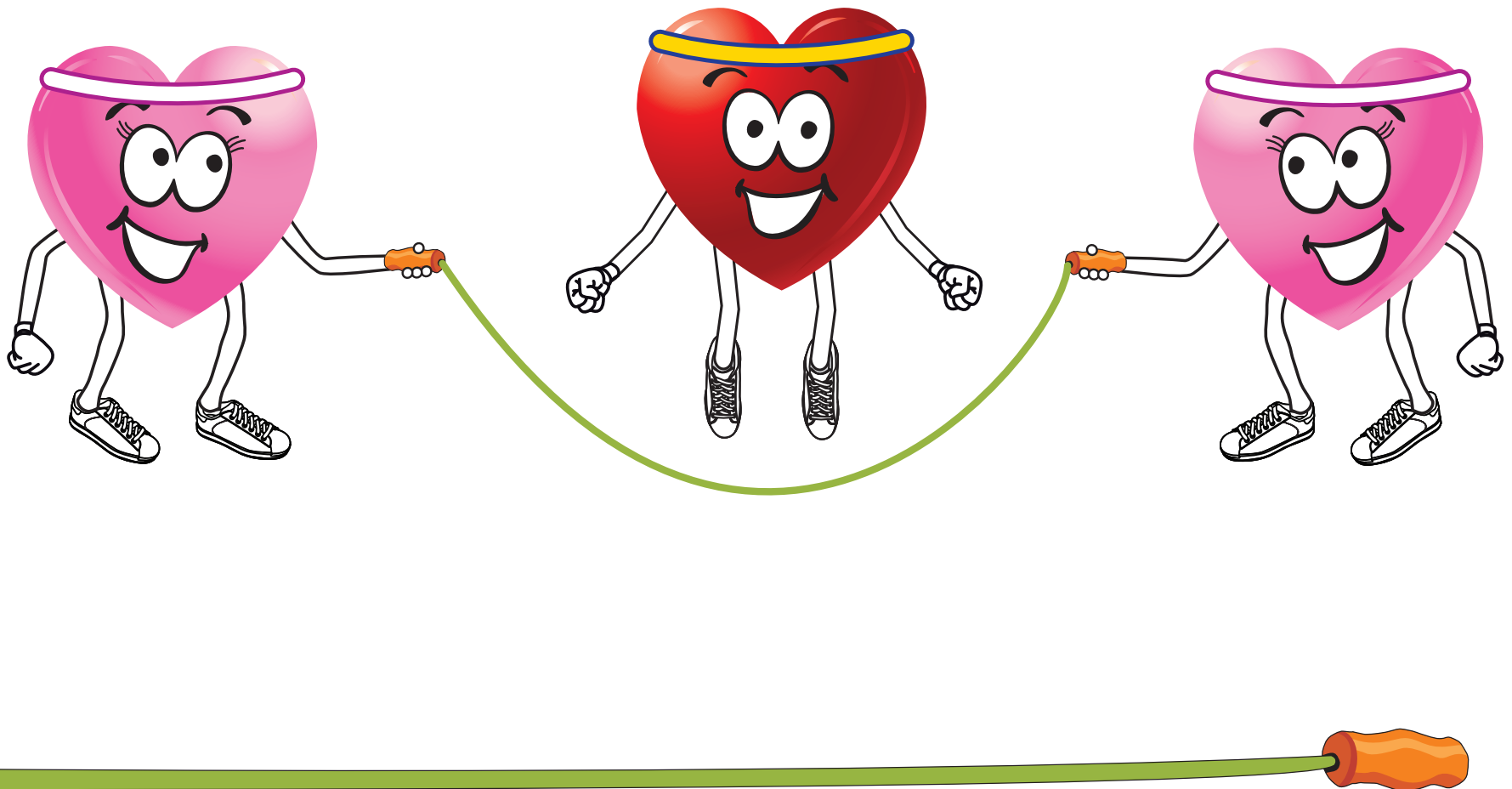
The surface should be flat, stable, and free of loose gravel.

Social Awareness

Jumping rope can be a very social activity. There are variety of ways to encourage your friends and siblings to get involved.

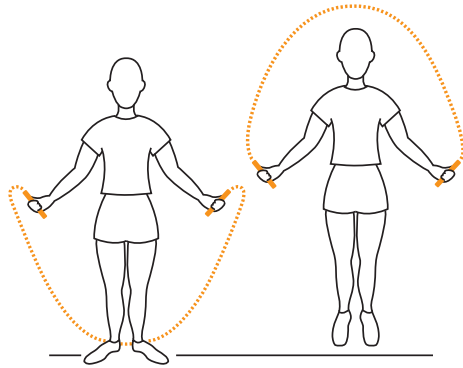
- Lend one of the extra jump ropes in the kit to your friend(s) or sibling(s) so you can jump together.
- As a team, set goals and work together to attain them.
- See if you can collectively jump 1,000 jumps.
- Improve skills in order to join a Jump Rope for Heart Program.
- Jump to music and see if you can keep the rhythm, and or sing to the music.
- Utilize a long rope and have two friends hold the ends of the rope so you can jump in the middle. Take turns. There are many fun jump rope rhymes and songs you can play. (See Appendix A.)

- If you have only one friend available you can tie one end of the rope to a fence or doorknob and still play the same games.





Progressions



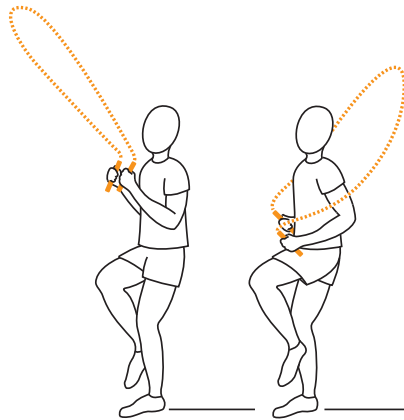
Basic Bounce Step

Basic Bounce Step

Jump only high enough to clear the rope (1 inch) and land lightly on the balls of your feet.

Backwards Jumping

Begin with the rope in front of your feet. Turn rope backwards. When the rope hits the ground behind your feet, jump up and over the rope.



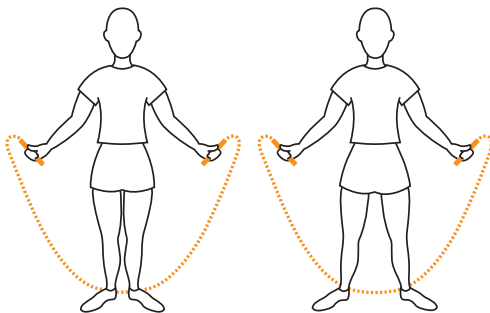
Alternate Foot Step

Alternate Foot Step (jogging step)

Jump with alternate foot, lifting knees up, like jogging in place. Do not kick feet back.

High Step

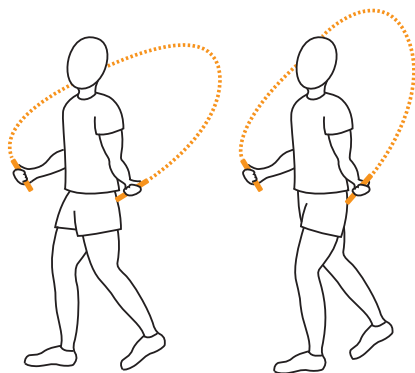
Same as Alternate Foot Step. Bring knees up to waist level. Keep back straight.



Side Straddle

Side Straddle (jumping jack feet)

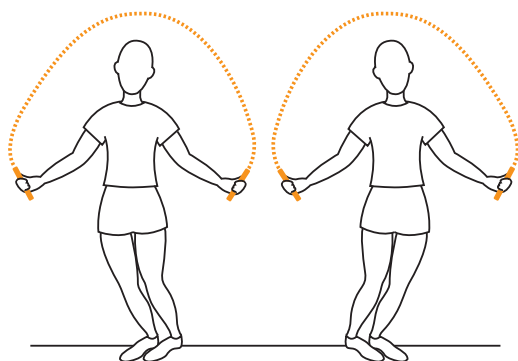
Begin with Basic Bounce Step (feet together) on first swing. Jump with feet shoulder width apart on second swing.



Forward Straddle

Forward Straddle

Jump with one foot forward in a straddle position on first swing. On second swing, switch feet. Move feet only a few inches apart.

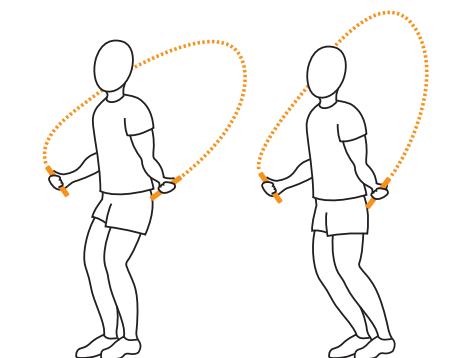


Skier's Jump

Skier's Jump

Jump a few inches to the right on first jump and a few inches to the left on the second jump.

Alternate. Keep feet together and torso straight ahead. Result should look like a skier's slalom.



Bell Jump

Bell Jump

Jump a few inches forward. Jump a few inches back. Result should look like a ringing bell.





Goal Setting

When jumping rope, you can examine the product or the process of your skill level.

- Product is the quantity of jumping rope; it can be determined by number or time. For example, if you can jump 50 times in a row, set a goal of jumping 60 times in a row and then increase it to 75. Look at the time and start off with 10 minutes and increase minutes every time you jump. Make sure your progressions are done in realistic increments for your skill and fitness level.
- Process is how you jump; it can be analyzed by increasing the difficulty of your jumping skills. For example, you can jump forward with two feet consistently. To improve your process, learn to jump backwards with two feet. Once that is accomplished, try to jump on one foot forward and backwards.

A rubric is a common way of analyzing skill levels for a variety of different sports and activities. A rubric is a way for you to chart your process. The following is a rubric that looks at the process and the product of jumping rope. The colors mimic a rainbow; the red is the easiest level, and violet is the most difficult level. You can progress according to your process and or product, or both.

Jump Rope

Task description	Student can perform the act of rolling, walking, hopping, or jumping over a rope at any height.
Scale components	(a) number of jumps, (b) direction of jumps

Rubric level & color	Rubric descriptors
1-red	Student will crawl, roll, walk, and jump over a rope placed up to 1 foot off the ground.
2-orange	Student will step or jump forward over a rope placed 1 foot off the ground, either stationary or swinging.
3-yellow	Student will bring rope over head with arms and step or roll over rope once.
4-green	Student will bring rope over head with arms and step or roll over rope 2-20 times.
5-blue	Student will jump rope, swinging rope overhead backward, 1- 20 times.
6-indigo	Student will jump rope to music forward, backward, crisscross, for 1-5 minutes.
7-violet	Student will jump rope to music, either alone or with a partner, for 6-20 minutes.

Specific adaptations from Lieberman & Houston-Wilson, 2002

Jumping rope can be practiced everyday. If you travel often or are away from home for long periods of time, a jump rope is a great way to exercise and ensure that you continue to work towards your goals.





Appendices

Appendix A

Children Jump Rope Rhymes for Group and Double Dutch Jumping

*Strawberry shortcake, cream on top,
Tell me the name of your sweetheart:
A, B, C, D, E, F, G, H, I, J, etc.*

Do until the jumper misses. The letter shouted when the jumper misses is the first letter of her sweetheart's name.

*Call the Army, call the Navy,
So-so's gonna have a baby.
Wrap it up in tissue paper,
send it down the elevator,
(Rope turned double time)
Boy, girl, twins, triplets, boy, girl, twins, triplets, etc.*

Whichever answer the jumper misses on is the number of babies she's going to have.

Red hot pepper in the pot,

Who's got more than the leader's got?

(jump double time) 10, 20, 30, 40, etc.

Go as high as you can go without missing. Jumper with highest score wins.

*Teddy Bear, Teddy Bear, turn around,
Teddy Bear, Teddy Bear, touch the ground,
Teddy Bear, Teddy Bear, show your shoe,
Teddy Bear, Teddy Bear, please skiddooo!*

The jumper actually does these moves while jumping: turning around, touching the ground, showing her shoe, and jumping out on the word "skidoo." Another version is "that will do" instead of "please skidoo." Then it continues:

*Teddy Bear, Teddy Bear, climb the stairs,
Teddy Bear, Teddy Bear, say your prayers,
Teddy Bear, Teddy Bear, turn out the light,
Teddy Bear, Teddy Bear, say good night!*

*I'm a little Dutch girl dressed in blue,
Here are the things I like to do.
Salute the captain,
Curtsy to the queen,*





Turn my back on a big submarine!

You can jump out at this point, but really good jumpers continue with:

I can do a tap dance

I can do a split

I can do the polka just like this!

So-so and so-so sitting in a tree, K-I-S-S-I-N-G

First comes love, then comes marriage,

Then comes so-so with a baby carriage.

All in together girls,

how do you like the weather girls,

Tell us your birthday, please jump in:

January, February, March, April, May, etc.

Jumpers come in on their birthday month. Then:

All out together girls,

how do you like the weather girls,

When is your birthday, please jump out, etc.

Fire, Fire, false alarm,

so-so fell into so-so's arms,

Is he gonna be the one?

(double time): Yes, no, maybe so, yes, no, maybe so, etc.

*I like coffee, I like tea,
I like so-so to jump with me!*

Person jumps in, then it repeats and they invite a third person, etc.

This is a warm-up rhyme:

Blue bells, cockle shells, easy, ivy, over

As it was recited, the rope is swung back and forth gently under your jumping feet, but not turned overhead. On the last word, "over," the rope begins to turn fully, accompanied by the jump rope rhyme of choice.



Appendix B

Websites for Jump Rope Opportunities

USA Jump Rope Federation

<http://www.usajrf.org/>



Jump Rope for Heart

http://www.aahperd.org/jump/template4.cfm?template=hows_event.html

<http://www.jumpingbuddy.com/>



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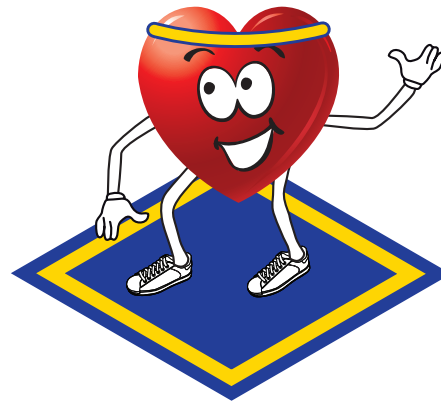
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