

BEAVER SCOUT PROGRAMME

Using existing resources to enhance your winter Section programme



Beaver Scout Programme

Beaver Scouting has been difficult in recent times with COVID restrictions disrupting how we operate.

While it has been possible for older scout section to use on-line meetings and interactions this has not been possible with Beaver Scouts.

During the summer months we know that most Beaver Scout Sections have maintained their Beaver Scout programme by moving outdoors. As the winter months have approached it is a bit more difficult. Some Sections have also been able to run indoor meetings working in small pods and controlling the meeting space. All of these 'work arounds' have helped to keep your Beavers Scouting.

This resources will help to refresh your batteries and direct you to a collection of programme resources and suggestions that can be used to create programme opportunities for your Beaver Section.

Some basic principles to consider:-

- Try and maintain outdoor meetings and activities. Perhaps changing your meeting times to suit the available light and weather (Saturday and Sunday).
- Provide small projects to your Beavers that they can do at home and prepare for the next meeting.
- Build your meeting and activities around adventures rather than a collection of unconnected programme ideas.
- Keep an eye on all the beavers and make sure they are wearing the right clothing so that they are warm. Keep things moving and active.
- Meeting times might be a bit longer when outdoors.



Beaver Scout Meetings

A Beaver Scout Meeting is comprised of a collection of programme items - each lasting from 10 - 20 minutes

The meeting will have a start and finish, a few games and activities. These items can be connected by a storyline - a treasure hunt, for example, or one of the Beaver Adventures - Quest for the Stone of Destiny etc.

Usually, a collection of four meetings will relate to the same story or theme and will finish with an adventure - an outdoor afternoon or day activity.

The meetings are therefore progressive in nature each feeding to the next so that by the time of the adventure the Beaver Scouts have the skills required to overcome the challenge of the adventure.

Example - Quest for the Stone of Destiny

Week one might include an exercise related to tracking signs.

Week two might related to knots - joining ropes together

Week three might related to using a compass or making a compass and finding north.

Week four might relate to making a shelter or den

The day activity would be a hunt based activity - finding tracking signs, making a shelter, joining ropes so that they can be made longer and thrown over a stream or high branch to lift something. Using a compass to find basic directions North, south, east, west and finally finding the 'Stone of Destiny'

Various projects can be given to the Beavers to do at home with the assistance of their family. The projects can be given as handouts or links sent to parents that can be explored on-line.

In the case of our adventure they might include:-

Making tracking signs and creating a trail for your friends to follow around your local area. The handout will include pictures of the tracking signs.

Learn how to tie a knot to join ropes (string) together. Also practicing throwing a rope over a distance.

Making a compass with a magnetised needle and a saucer of water. This can also be done in a pool of water with a piece of grass.

Make a shelter or den in your bedroom or back garden.

There are collections of resources that provide the information required to make handouts on our website and resource centre.

In the following pages we will highlight the location of these resources and provide links to their locations.

In all cases, it will require some consideration with the other Scouters in your team and your Beavers. In most cases the resources provide basic programme ideas but require the 'magic of storylining' to bring them to life and create your adventure.

All of the suggested ideas also provide many opportunities for the Beaver Scouts to build up and improve their adventure skills, teamwork with their Lodges and learn new things. The review process will allow for the discovery of learning at the end of the adventure cycle.

Basic Programme Resources



The basic programme resource includes the 'How to booklet' which explains how the Beaver Scout Section works and how the programme is created.

Beaver Scout Adventures resources presents information sheets and suggestions around the 36 suggested adventures in the beaver handbook.

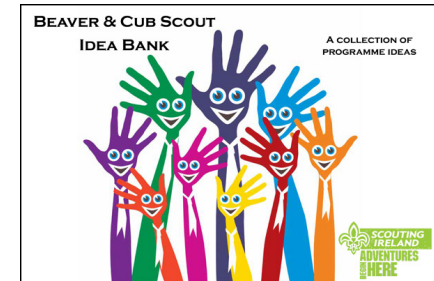
The themes resources provides a collection of pre-planned theme based programme frameworks.

Beaver and Cub Scout idea banks presents a collection of individual ideas that can be used with themes or as highlights within your programme.

Team building presents a collection of team building games that can be modified for use in the Beaver Scout Section.

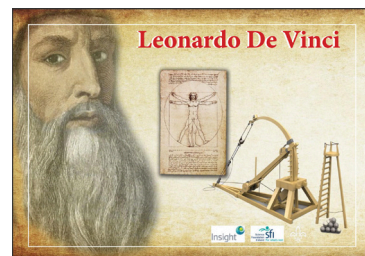
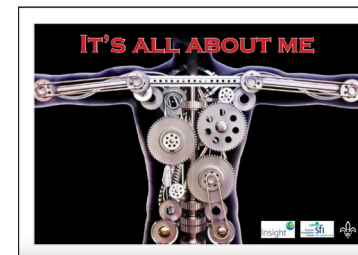
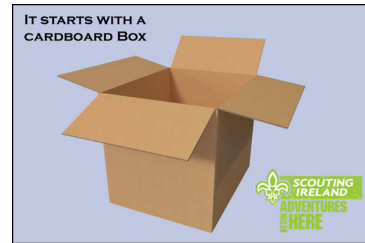
30 Hours resource presents the idea of providing programme during COVID and lockdown restrictions.

All for the programme resources can be found here:-
www.issuu.com/scoutingireland



Collections of different themed resources

Explore each of the resources to discover programme ideas related to a theme or adventure.



NATIVE AMERICAN NATIONS

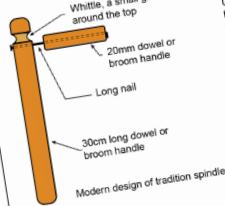
Programme theme exploring the culture, craft and traditions of tribe life



The Native American Nations resources provides programme idea sheets for inclusion in your programme. These ideas can also become home based tasks to do with family members or friends.

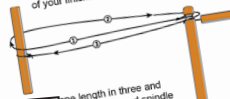
ROPE MAKING

Traditionally braiddings and tight lines were made by twisting root fibres and animal hairs. With the arrival of the 'white man' and the horse native tribes people found that they needed rope to catch them and create bridges. An ingenious tribes man invented the rope spindle to make ropes.



Modern design of tradition spindle

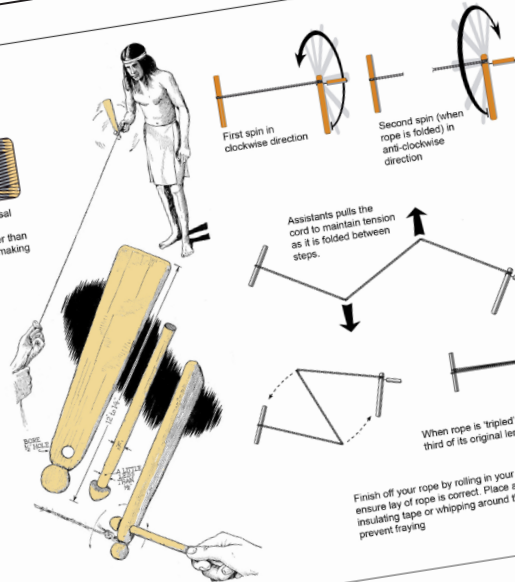
Setup for first spin - tie off one end of sisal to spindle loop as shown and tie off to anchor. Allow 3 times the length of your finished rope



Rope length in three and anchor pole and spindle in



Use sisal rather than fibres to start making your rope.



First spin in clockwise direction

Second spin (when rope is folded) in anti-clockwise direction

Assistants pull the cord to maintain tension as it is folded between steps.

When rope is 'tripled' it is a third of its original length

Finish off your rope by rolling in your hands to ensure lay of rope is correct. Place a piece of insulating tape or whipping around the end to prevent fraying

BEAD CRAFT

Traditional in tribal culture beads have always been important in the creation of jewellery and ceremonial decoration. The early Europeans introduced colour beads of all kinds to the tribal people as trading items. Artists in the tribe were quick to adapt and create unique beadwork and decoration incorporating the symbols of the tribe. Everyday items were also decorated - knife sheaths, shoes and clothing.



Traditional Bead loom created using a bow to keep tension in the weave.

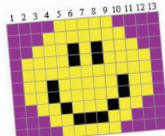


Safety Pin Bead Craft

Creating traditional Native American bead craft is a long and intricate process. Using safety pins and small coloured beads it is easy to create many designs that can be displayed and created.



Use a simple grid layout to create patterns and designs



Working out the pattern helps when threading the individual beads on each pin.



SIGN LANGUAGE AND SYMBOLS

Diagram illustrating various hand signs and symbols used by Native Americans:

- Teepee**: Hand sign for a teepee.
- Indian**: Hand sign for an Indian.
- Saddle**: Hand sign for a saddle.
- Sign Language**: Hand sign for sign language.
- Fire**: Hand sign for fire.
- Water**: Hand sign for water.
- Work**: Hand sign for work.
- Together**: Hand sign for together.
- How Many?**: Hand sign for how many.
- Horse**: Hand sign for a horse.
- Short**: Hand sign for short.
- See**: Hand sign for see.
- Done**: Hand sign for done.
- Die**: Hand sign for die.
- Challenge**: Hand sign for challenge.
- Leave**: Hand sign for leave.

SMOKE SIGNALS

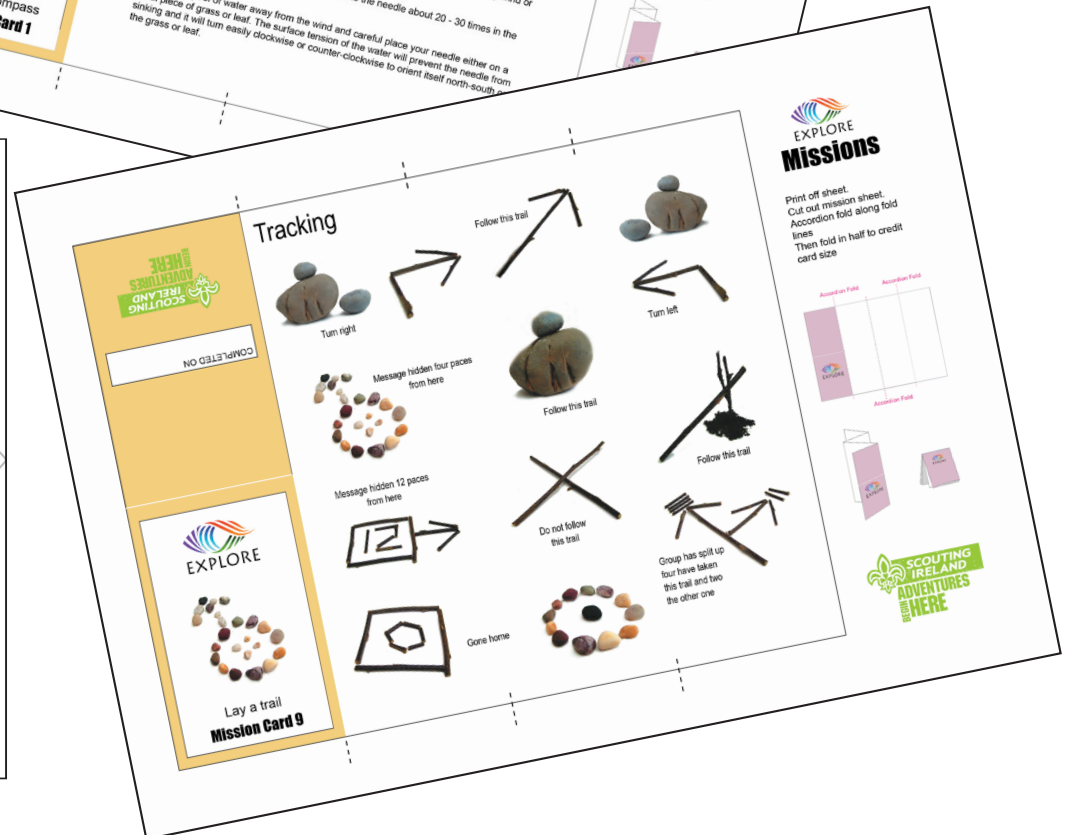
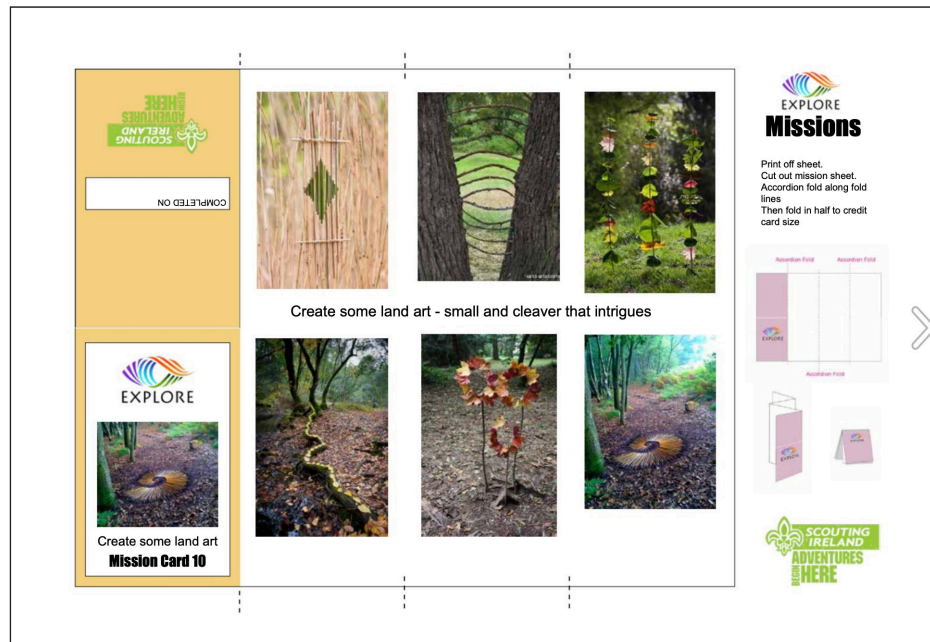
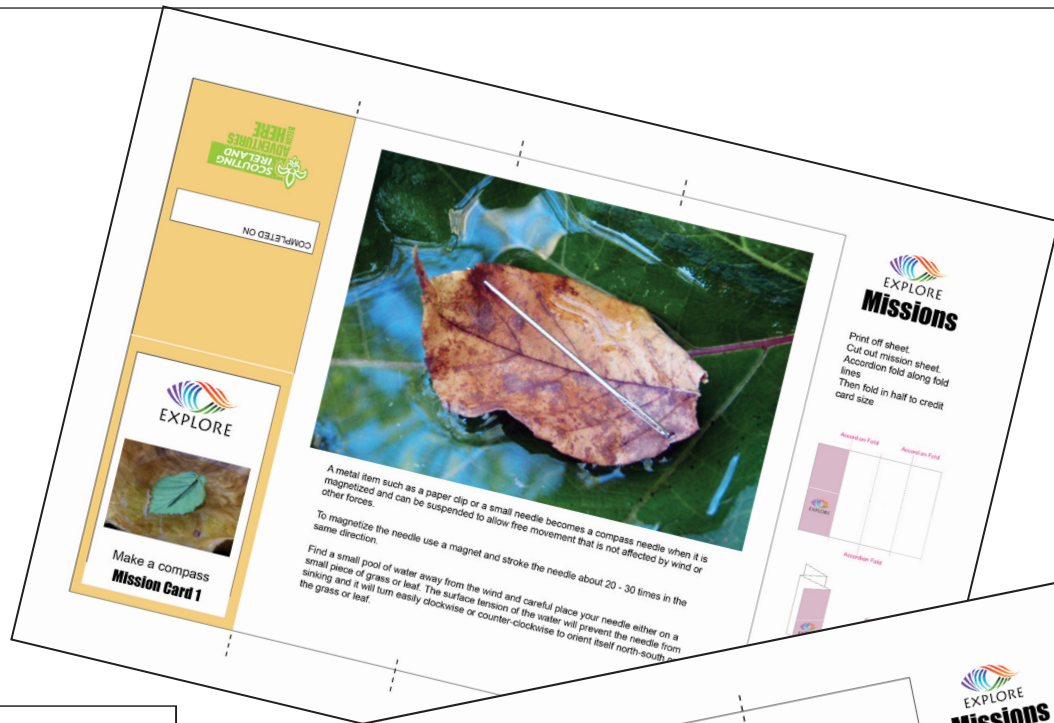
- Camp is here**: One smoke signal.
- Help I'm lost**: Two smoke signals.
- Come meet here**: Three smoke signals.

SYMBOLS

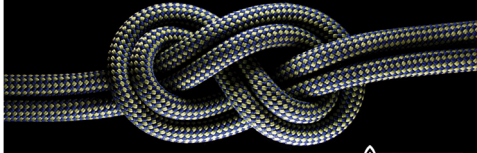
A central map titled 'SYMBOLS' showing various symbols used by different tribes, such as a bear, a horse, a mountain, a river, and a sun.



The Missions resource provides a collection of 'do at home' or do with your lodge missions. The mission sheets can be folded to create small pocket sized missions.



ESSENTIAL KNOTS



JOINING KNOTS



Reef knot



Perhaps the most common knot known to people. It is easy to tie and used in rope work and first aid. It does have a tendency to work loose when not under tension so not the best knot for joining ropes together.



Sheet bend



The sheet bend is similar in construction to the reef knot. It is easy to tie and was used in shipping and harbours to bring ashore heavy lines. It can be improved by doing extra turns to provide more friction in the knot structure.



Double Fisherman knot



The double fisherman knot is a very secure way of joining two ropes together. It is comprised of two knots working together to create its strength. The same knot with up to ten turns is used to join fishing line.

BACKYARD COOKING



SCOUTING IRELAND
ADVENTURES
HERE

Within the backyard cooking resource are programme idea suggestions and sheets that can be copied and extracted to create homebased or lodge based worksheets.

Food containers

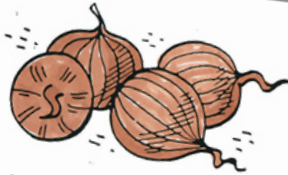
Onions, potatoes and oranges can be used as containers for cooking eggs. The egg is placed in an orange skin and the skin acts as a container in which the egg can cook. A potato can be hollowed out and an egg meal of egg and potatoes. Similarly, an onion can be sliced in half and layers scooped out to make a container and a lid.



Twist

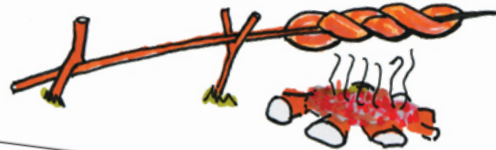
Simple camp bread can be made by making a bread dough then wrapping the dough around a thick stick. The bread is cooked slowly over the embers of a fire.

Twists: Mix flour, water and a pinch of salt together to form a thick dough, adding raisins and sultanas if the budget will stretch that far. Take a piece of this dough and roll it into a snake-like length, wrapping it around a green-stick (with the bark removed). Support over glowing embers, turning occasionally until the outside turns golden brown. Serve with butter and/or jam.



Bear in mind the following when preparing any backwoods feast:

- Always use two thicknesses of foil.
- Keep everything in the cooking area clean.
- Keep the embers hot at all times by adding small amounts of fuel at regular intervals.
- Have tongs and oven gloves handy to lift hot parcels of food.
- Fold foil so that the contents can be checked so that no juices are able to escape.
- Make sure that you have a somewhere to place the food on when its ready for handling.



Frame Code

AB	CD	EF	ST
GH	IJ	KL	UV
MN	OP	QR	WX

The frame code uses a grid system to determine the position of letters. The message is then written graphically as shown. The dot indicates the second letter in the frame.

A B
 C D DOT

Code Wheel

A Code wheel is used to create secret messages by replacing one letter for another.

The first letter in the message is the letter that matches with A on the outer circle so it can be encoded

MEET AT THE CLOCK

PHFFJ PJ JAF NTVNC

The Romans invented the stick code. This was created by winding a leather strip around a stick of a special thickness. The message was then written on the leather and when unravelled would appear to be random letters.

It could only be decoded if you has a similar sized stick.

Secret Codes

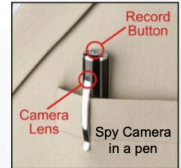
SPY CRAFT

THEME PROGRAMME RESOURCES



SCOUTING IRELAND
ADVENTURES
HERE

Within the spy craft resource are programme idea suggestions and sheets that can be copied and extracted to create home based or lodge based worksheets.

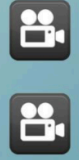


Record Button
Camera Lens
Spy Camera in a pen

The challenge is to create a pinhole camera and produce an photograph



Pin hole camera.



Science Bit

To make a photograph two sciences are applied physics and chemistry. A camera is a black box with a small hole in it. Light rays pass through the pinhole of the camera and an image appears on the back of the camera body. The light rays hit a light sensitive film that will produce an image. In order to see the image the film is placed in chemicals that detect light sensitive silver halide crystals elements that exist on the film and the picture appears. Modern cameras use light sensors rather than film.



A pinhole camera is simply a light-sealed black box with a pinhole to allow light to pass into the box and land on photo sensitive paper or film. Any sized box can be used - we demonstrate here how to make a paint tin or can camera.



Firstly you need a clean tin that has a lid - (paint tin). The inside of the tin and lid needs to be painted black - A tin of black spray paint is a simple way to do this.



Place a your camera on steady surface to prevent movement or blurry images. The exposure time can be a few seconds long.



The pinhole needs to be very small and you need to use a sewing needle to create the hole. First thing you need to do is file away a bit of the surface of the tin to make it thinner then punch the hole in the tin - otherwise it will be hard to do and will break your needle

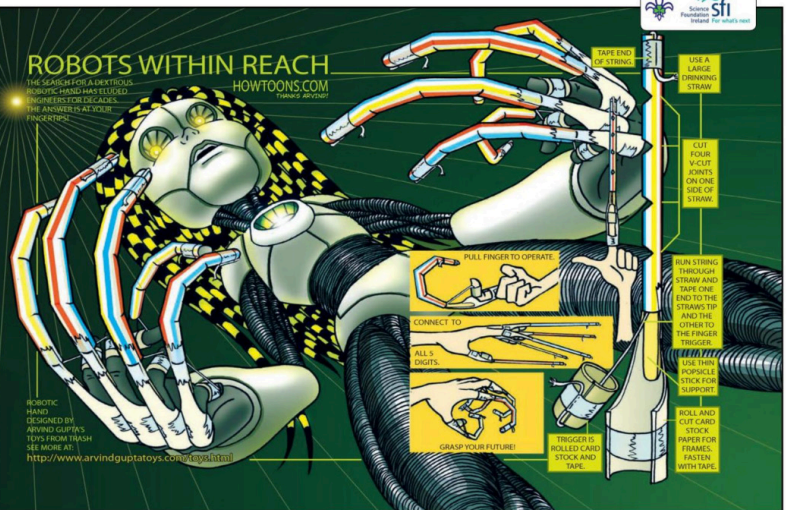
You will need to create a small shutter using black insulation tape. The will be in place before you take the picture then you lift it carefully for the exposure and then seal the hole again from the light.

Make a pin hole camera.

ROBOTS WITHIN REACH

THE SEARCH FOR A DEXTEROUS ROBOTIC HAND HAS FLOODED WIRELESS TV CHANNELS - THE ANSWERS AT YOUR FINGERTIPS.

HOWTOONS.COM



ROBOTIC HAND DESIGNED BY ARVIND GUPTA'S TOYS FROM FINNACH SEE MORE AT: <http://www.arvindguptatoys.com>

Howtoon collection Visit howtoons.com for a full library of interesting activities you can try and explore.

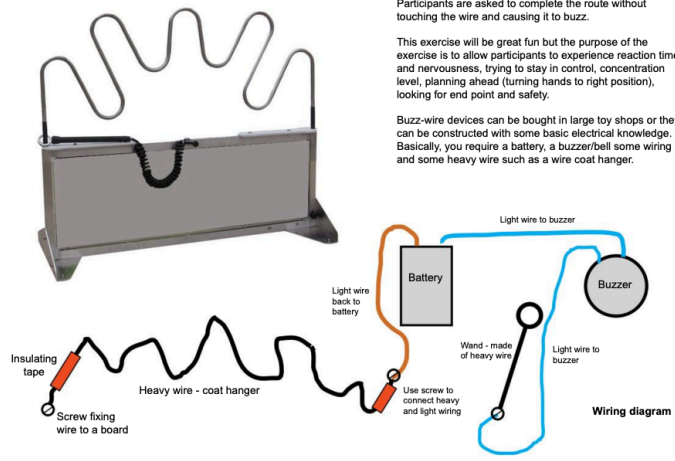
Buzz - wire


The buzz - wire exercise is related to eye and hand coordination

Participants are asked to complete the route without touching the wire and causing it to buzz.

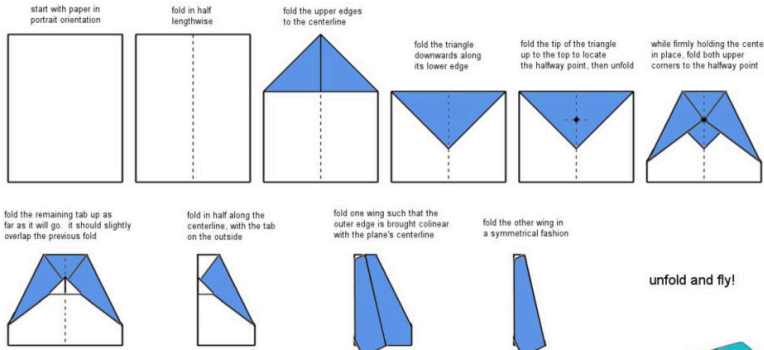
This exercise will be great fun but the purpose of the exercise is to allow participants to experience reaction time and nervousness, trying to stay in control, concentration level, planning ahead (turning hands to right position), looking for end point and safety.

Buzz-wire devices can be bought in large toy shops or they can be constructed with some basic electrical knowledge. Basically, you require a battery, a buzzer/bell some wiring and some heavy wire such as a wire coat hanger.








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unfold and fly!


tips for flying:

 neutral roll stability	 high roll stability	 unstable in roll
throw the plane, holding it by the tab, throw it directly forward, but give the wings a small upward angle of attack. 5 degrees should be plenty.	if the plane climbs, stalls, and crashes, curl the rear wingtips downward slightly.	if the plane nosedives rapidly, curl the rear wingtips upward slightly.


Paper Planes



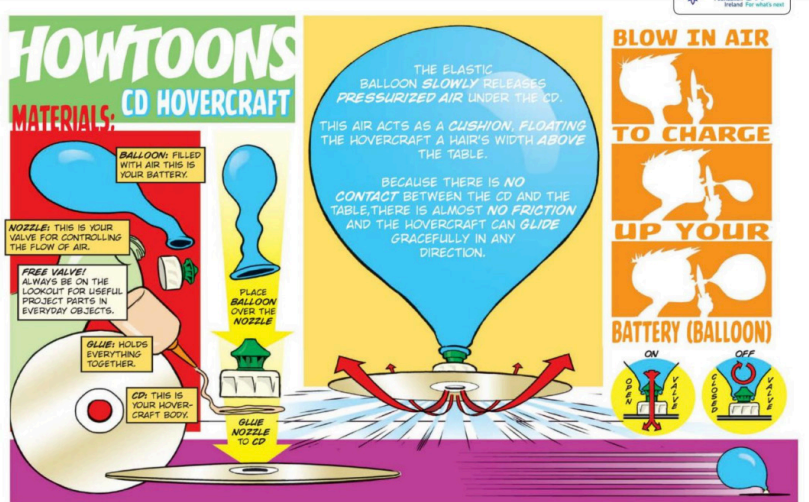
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Flying



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HOWTOONS
CD HOVERCRAFT

MATERIALS:

- BALLOON: FILLED WITH AIR THIS IS YOUR BATTERY.
- NOZZLE: THIS IS YOUR VALVE FOR CONTROLLING THE FLOW OF AIR.
- FREE VALVE! ALWAYS BE ON THE LOOK-OUT FOR USEFUL PROJECT PARTS IN EVERYDAY OBJECTS.
- GLUE: HOLDS EVERYTHING TOGETHER.
- CD: THIS IS YOUR HOVERCRAFT BODY.
- GLUE NOZZLE TO CD.

THE ELASTIC BALLOON SLOWLY RELEASES PRESSURIZED AIR UNDER THE CD. THIS AIR ACTS AS A CUSHION, FLOATING THE HOVERCRAFT A HAIR'S WIDTH ABOVE THE TABLE.


BECAUSE THERE IS NO CONTACT BETWEEN THE CD AND THE TABLE, THERE IS ALMOST NO FRICTION AND THE HOVERCRAFT CAN GLIDE GRACEFULLY IN ANY DIRECTION.

BLOW IN AIR TO CHARGE UP YOUR BATTERY (BALLOON)

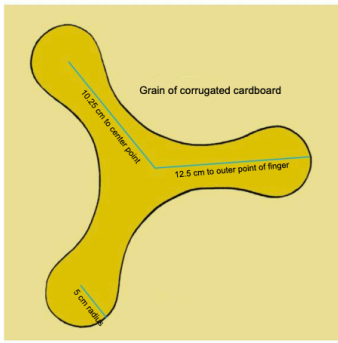
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Grain of corrugated cardboard

12.5 cm to outer point

12.5 cm to outer point of finger

5 cm wide

To use the same design as an outside boomerang it needs to be thicker and have two 'indoor' type boomerangs and a few small coins, and some tape. Again, some tuning will be required before it will fly to perfection.



For indoor version (also can be used in light wind or calm conditions) the cardboard version is just one sheet thick.

Once the shape is cut out fold in the top of each finger. Throw it a couple of times and modify - by folding in and out and twisting the edges of each finger.

Simple Boomerang

EXPERIENCE NATURE

- Walk in the mud and cross streams
- Camouflage and blend into your surroundings
- Look up and around - lie in the tall grass or see different things in a mirror or reflection
- Taste the rain and feel the wind

DISCOVERY

- Connecting with nature's lines, texture and shapes
- Exploring the sky and wind with special viewers
- Discovering sounds around you with sound mapping
- Finding nature's colour palette
- Exploring underwater with water scopes

NATURE IN YOUR BACKGARDEN

- Birds
- Squirrels
- Bats
- Foxes
- Fungi
- Wild flowers
- Bees
- Butterflies
- Hedgehogs
- Worms and insects
- Snails

UNDERWATER SCOPE

May I just... what are you doing?

Nothing really. Just some simple *poewmooing*.

The only things you need to make an underwater scope are a plastic bottle and a pair of scissors.

An water into its start your cut in the bottle at 2/3 around it in the middle and make a small cut.

...and a 2-liter sports bottle.

Cut the shape out below for your viewing pleasure.

Now just submerge the scope halfway into the water and start exploring.

I wonder if this is how goggles were invented?

The End!



Science Bit


A laser beam is a beam of light that travels in a straight line. A sensor is an electronic device that detects light - put the two of them together with an alarm circuit and you have a laser beam security system.



The laser light is directed to the sensor using a series of small mirrors. This can create an unseen criss-cross of beams. When the light is shining on the sensor the switching mechanism stays open if the beam is broken then the switch turns on and causes the alarm bell to ring.

Challenge - Get your team through the laser security system



Lasers and Mirrors



Spiders web challenge

The spiders web is constructed as shown.

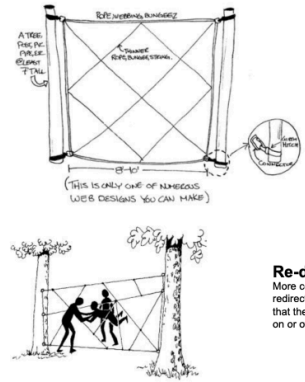
Teams have to get every member of their team through the web without touching it and setting off the alarm.

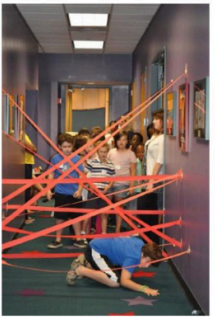
The strings of the web represent security laser beams. Small 'single' bells can also be attached to the web that ring if any disturbance to the string is detected.

Each member of the team should pass through a different hole in the web or through a group of selected holes.

Re-redirect laser beams

More complex games can be devised - teams are challenged to redirect a laser beam around a series of obstacles using mirrors so that the light connects to a sensor device and switches something on or off. Laser light pointers can be used for this purpose.







EGG DROP CONTEST



Your mission—if you choose to accept it—is to construct a parachute that will deliver an egg safely to the ground when dropped. No fancy materials allowed! You can only use familiar household items like plastic bags and string.

Do you think you have what it takes to construct this gravity-defying wonder? Be careful: a sloppy parachute will result in a yucky mess!

Materials

- Plastic heavy-duty trash bag
- Plastic sandwich bags
- String
- Scissors
- Hole punch
- Eggs

Contest Rules

Only one egg will be given for testing purposes, and one egg for final test. Eggs may not be taped.

In the construction of the craft / devise you may not use padding of any type to protect the egg.

Marking the contest

Suggested marking system

Design	25
Teamwork	25
Result	40 (Does it work)
Effort	10

The Mess

It is an excellent idea to cover the floor of your test area with a sheet of plastic taped to the floor. Each team is responsible for cleaning up their mess (the best part of it at least). When the

challenge is over, the plastic can be rolled up and placed in the bin.

The largest parachute falls the slowest and should cause the least amount of damage to the egg.


Why?

When you drop the egg, the strings that are attached to the sandwich bag pull down and this opens the bag to full size, which creates a large surface area and more wind resistance. More wind resistance slows down the descent of the egg.

You can explain the results of this experiment with the concept of resistance. Wind resistance, also called drag, is simply a force that acts on a solid object. The largest parachute creates more resistance and slows the descent of the egg the most.

The experiment shows that the size of the parachute makes a difference in the speed of descent, but what if you tried different materials for the parachute? Repeat the experiment with a parachute made from construction paper, plastic grocery bags or other items.








Science Bit

Light travels in a straight line and mirrors and shiny surfaces can refract light and change its direction. The two mirrors in a periscope placed at 45 degree angles enable light to travel around corners.

The container keeps the mirrors in line and at the correct angle.

Make a periscope for looking around corners undetected






Place the paper template on some cardboard and cut out the box shape. Glue all the seams together to create the periscope box.

Finally place and glue in the mirrors.







Periscope