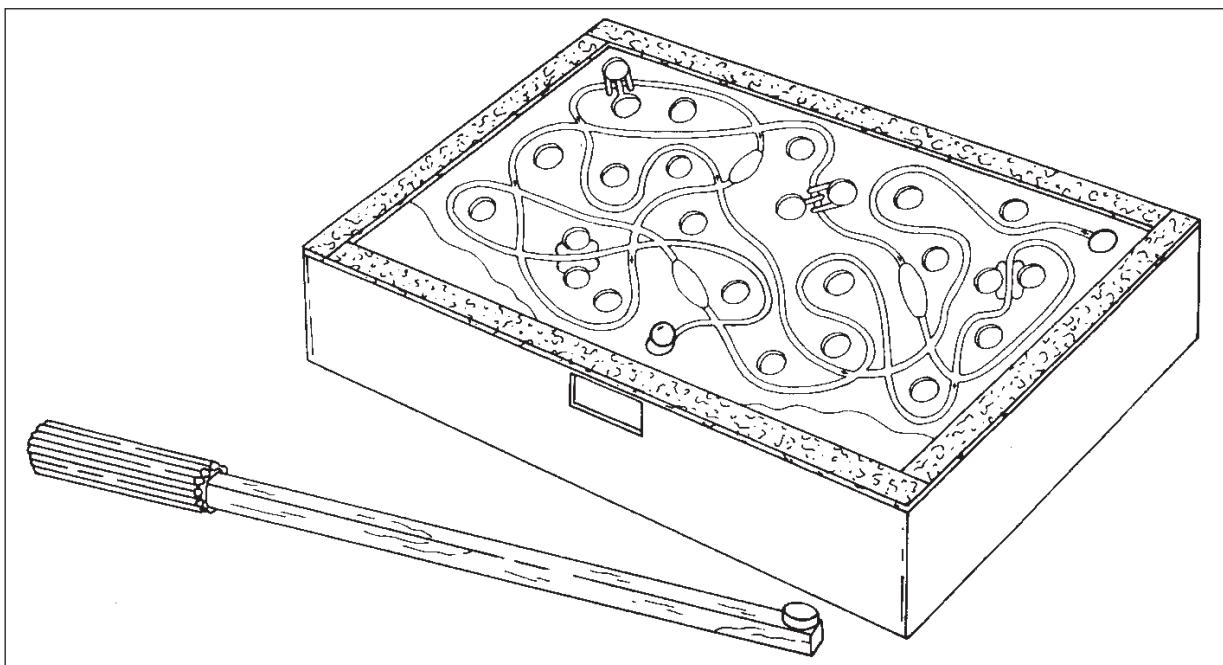


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*M a g n e t - L a b y r i n t h*



## Contents

- 1 Card sheet (pre-stamped)
- 1 Printed card (pre-stamped)
- 1 Cork strip (pre-stamped)
- 1 Corrugated card strip
- 1 Magnet
- 1 Metal ball
- 1 Wood strip
- 1 Glasspaper
- 1 Glue (universal)

## Necessary tools

- Scissors
- Brush/paints
- Felt tips

### Please Note

The OPITEC range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of Craft, Design and Technology. These projects should only be undertaken and tested with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation!

# Safety notes for working with magnets



Permanent magnets and magnetic article are technical products that require safety knowledge. All persons experimenting or working with magnets should read these note and keep them in mind!



## Articles that can be influenced by magnets

- Computers or electronic data
- Electronic machines
- Heart pacemakers
- Injuries caused by crushing or pinching
- Danger caused by magnetic splitters
- Danger of fire and explosion
- Health dangers caused by contact with drinking water, food or skin



## Working with magnets

- People with heart pacemakers should avoid contact with all types of magnetic fields
- Computers and other data storage units should be kept away from magnetic fields
- Magnets must be carefully handled in the presence of other magnets and objects made from iron. There is a danger of injury caused by pinching or squashing-wear safety protection
- Magnets must not be used in an atmosphere where there is a danger of explosion
- Items made from iron should not be left near magnets
- Strong magnets can splitter when under attraction , to avoid injury when working with magnets wear safety glasses
- When working with magnetic properties in mechanical projects there is a danger of fire
- Glowing or burning magnets should not be extinguished with water, Co2 or halogen – use sand or powder extinguisher
- The presence of hydrogen can cause magnets to deteriorate and lead to them breaking up- avoid all contact between magnets and hydrogen
- Some magnets have a nickel coating which can cause skin allergy- handle – if this happens avoid all contact



## Be careful with magnetism

- Be careful of magnetic fields, magnets can spring apart and cause accidents
- Fix magnets in a holder and never hold them freely in your hands
- Magnets can shatter
- Keep your working area free from magnetic pieces
- Read any special makers instructions that come with the magnets

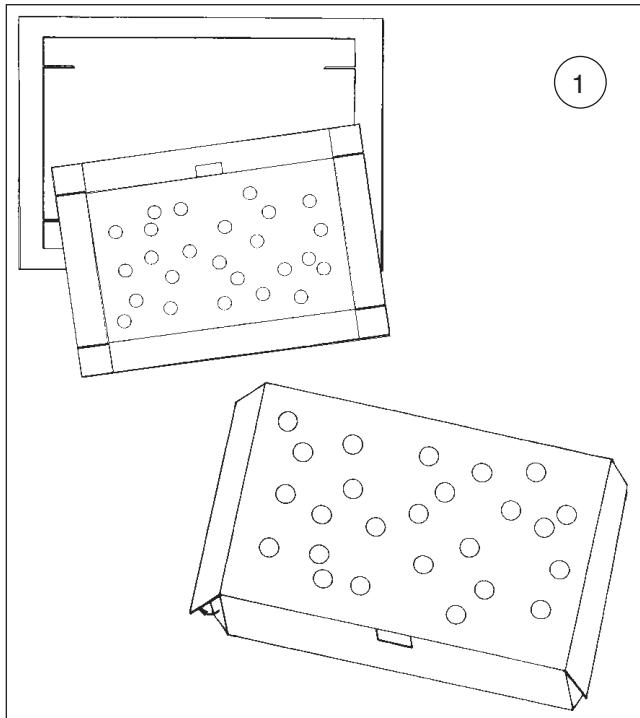


## Transport

- When transporting magnets by air there are special regulations that must be followed
- This also applies to appliances with built in magnets- contact airline
- There are also regulations for sending magnetic goods by post – see Post Office

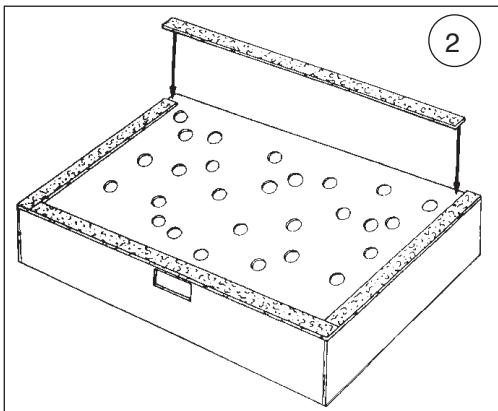


## Instructions:



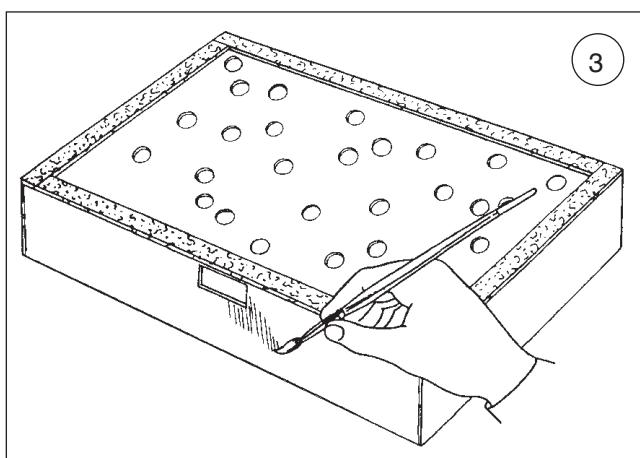
1

- 1) Press out the shape from the card sheet and fold the edges as shown, glue the tabs in position.



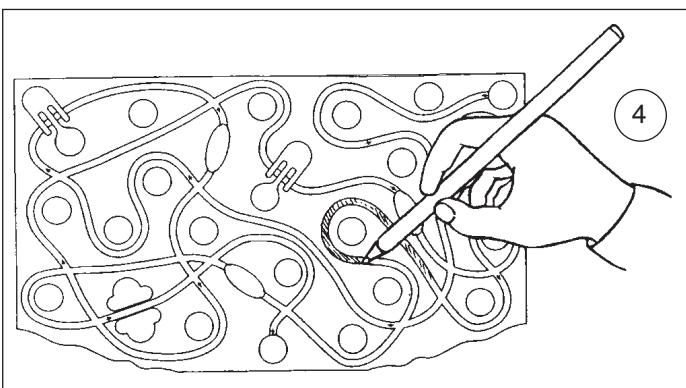
2

- 2) Press out the strips from the cork sheet and cut them to length. Arrange them as a frame around the edges of the playing area and glue them in position.



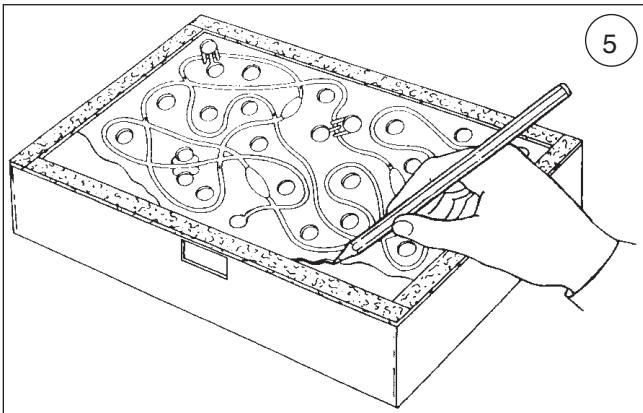
3

- 3) Paint and decorate the sides of the game to your own design.

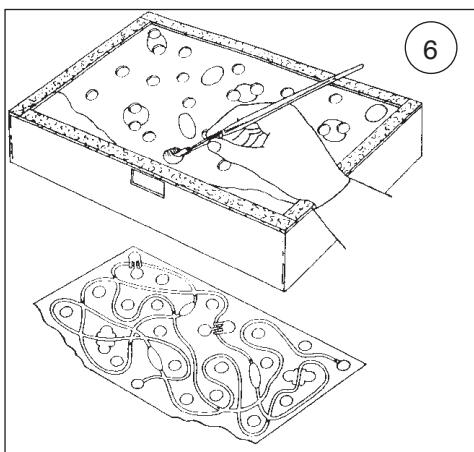


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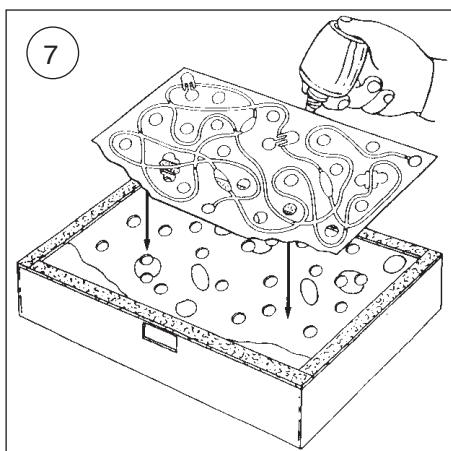
- 4) Remove the labyrinth design from the card. Push out the holes and colour in the pathways.



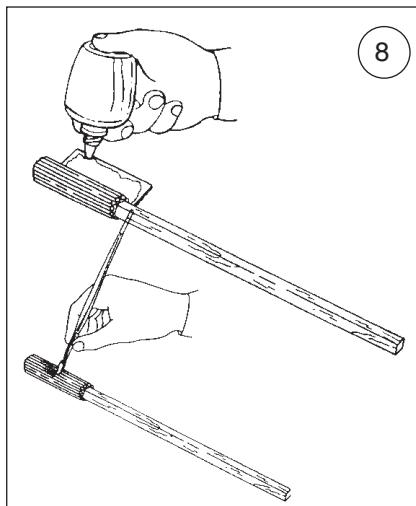
5) Lay the design over the top of the box (do **not** glue it down) Draw around the edges of the design with a pencil, as shown.



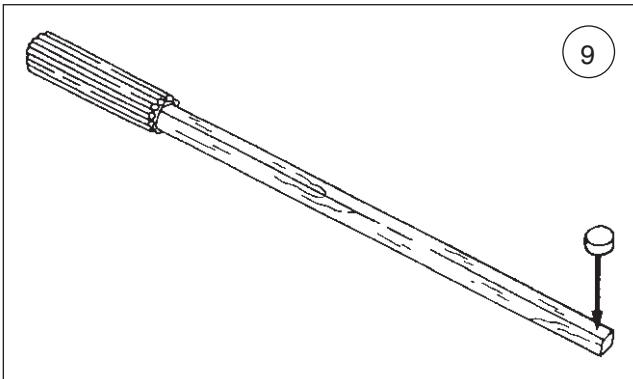
6) Remove the design and paint in the two zones using different colours. Ensure that the paint goes over the lines.



7) Apply glue to the back of the design and stick it down on to the box. Make sure that it adheres well.



8) Apply glue to the smooth side of the corrugated card and wrap it around the end of the wood strip. This will form the hand grip.



9) Glue the magnet to the other end of the wood strip.

### ***Rules of the game***

Insert the wood strip with the magnet through the opening in the box. Place the steel ball in the start position and hold it in position with the magnet. Guide the ball along the paths in the direction of the arrow. The ball must overcome every obstacle and not fall down a hole. The three oval shapes serve as rest areas where the player can change hands if necessary.

The aim is to complete the course in a short a time as possible with the minimum number of lost balls.