OPITEC

113.923

LED ball "Asteroid OPI13"

Necessary tools:

Ruler and pencil
Drill 1mm and 5mm diameter
Piercing needle
Soldering iron and solder
Scissors
Acylic black or Edding black
Pliers

PLease Note

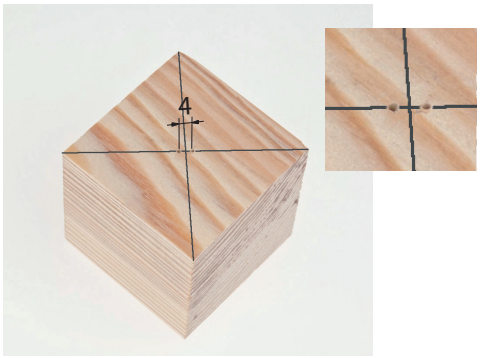
The OPITEC range of projects is not intended as toys for young children
They are primarily designed as an aid for teachers of Design Technology to encourage the practical development of young children. These projects
should be carried out with the aid of a qualified adult. They are NOT suitable
for children und 3 years of age!

Parts List				
	Parts	**Size (mm)**	**Description**	**Part-N°:**
Wooden block	1	50x50x50	Foot	1
Welding rod	2	250x1	LED Holder	2
Rainbow-LED	1	ø5	Light source	3
Button cell 3V	1		Power source	4
Nylon Wire	1	2000	Light wire	5
Table tennis ball	1		Ball	6

Instructions

Step 1:

Mark out the middle point on the wooden cube(1) mark out 2mm from the centre as shown. On each mark drill a 1mm dia hole (See detail)



Step 2:

Colour the table tennis ball (6) black using acylic paint or an Edding marker Repeat this 2-3 times so that later no light can show through! Leave the black to dry well or use a hair dryer

Step 3:

Take the ball and carefully drill a 5 mm hole

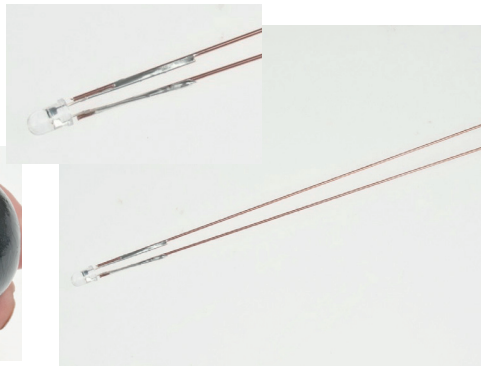
Note: use a holemaker to start with !

Step 4:

Use a hole maker to make theholes all over the table tennis ball (1mm dia) Keep the holes ca 5mm apart

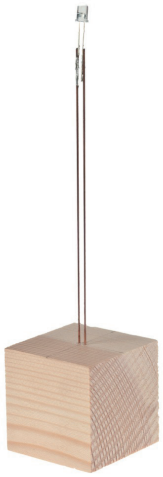
Step 5:

Take the welding rods (2) shorten them or leave them as they are. Solder one welding rod to each leg on the LED (3) See detail



Step 6:

Insert the welding rod and LED in the wooden block (1mm holes)



Step 7:

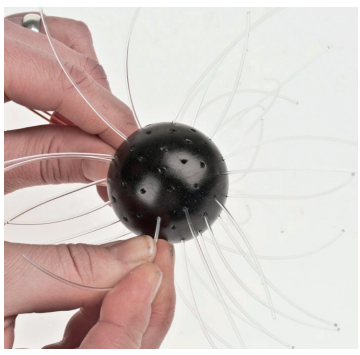
Cut from the nylon a ca 60mm piece. The length of these nylon pieces can vary. The amount depends on the holes in the tennis ball.

Note: the lengths of the nylon depends on the amount of holes in the ball and the total length of nylon

Step 8:

Insert these nylon pieces through the holes in the tennis ball

(Use pliers to help)



Step 9:

Place the ball with the nylon pieces on to the LED (3) . Place the button cell in between the welding rods. Take care the polarity is correct!