



## Create your own pinwheel

### HOW TO CREATE YOUR ELEMENTS

#### STORAGE

Depending on the size of your Pinwheel, you could store it in a shoebox or use it as decoration in your classroom. For sustainability reasons, we do not recommend disassembling it.

For the Crane, you will at least need a shoebox.

#### CRAFT THE ELEMENTS

##### A. Create a Pinwheel

To craft a basic Pinwheel, you need:

- Glue
- A long wooden stick
- A cork or eraser
- An iron pin, a long pushpin
- A A4 paper sheet

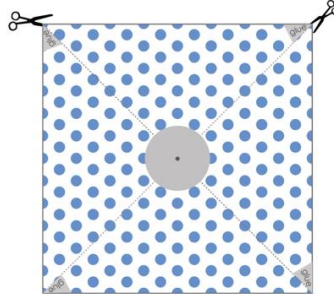
If you want to share the crafting of the Pinwheel(s) with your pupils, you can print the instructions and template in the annexe. For safety reasons, we recommend using round-tipped scissors, and we do not recommend allowing the pupils to manipulate the iron pins themselves; this final touch should be performed by the teacher.



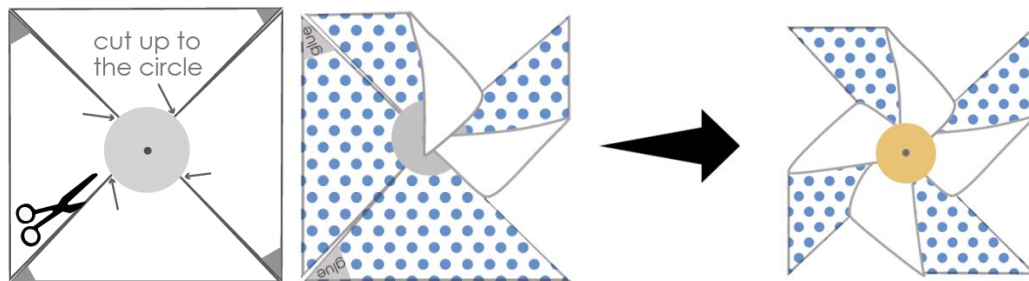
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# TECHNOLOGY

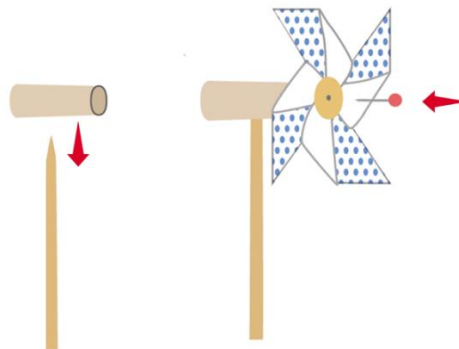
1. Cut out the square and the yellow circle. Cut along the dotted lines towards the middle.



2. Bring one corner of the diagonal lines to the centre of the paper and hold it in place until the glue dries.



3. Glue the yellow circle to the centre of the pinwheel.
4. Stick a wooden stick into the side of the cork.
5. Attach the pinwheel to the cork with a long pushpin.



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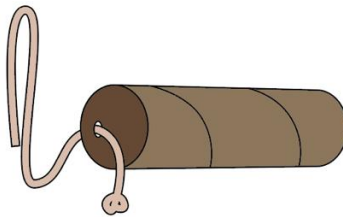
## B. Create a crane

For it, you will need:

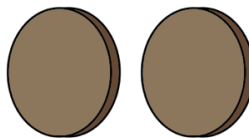
- Glue
- A long wooden stick,
- An empty paper roller (from WC or your kitchen),
- A thread,
- A cardboard sheet.

Creating the crane requires piecing and knotting. Make sure that your pupils are able to craft it, or follow the instructions to create one yourself.

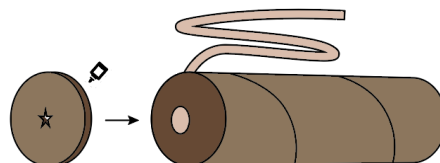
1. Pierce the paper roller and put the string into it.
2. Knot the string on the inner side of the paper roller to fix it. Let it free on the outer side.



3. Draw 2 circles, sized with the paper roller side, and cut them.



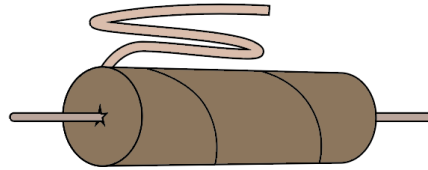
4. Pierce the 2 discs in the middle and glue them on each side of the paper roller.



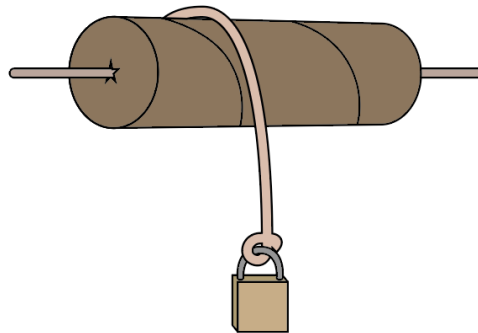
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5. Place the wood stick through the paper roller and through the holes in the middle of the discs.



6. You can support the 2 sides of the sticks on 2 piles of books or between 2 tables to give it some height.
7. You can now knot any object on the thread and perform the activity!



## POTENTIAL DIFFICULTIES

You have several options when it comes to selecting the right paper. Lighter paper will fold more easily, while heavier paper will make a sturdier construction.

Pupils can work in pairs to create the pinwheel; fixing the blades can require four hands.

Since the creation of the crane might be difficult for young pupils, you may create one yourself and let your class experiment with it.



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## ALTERNATIVES

### A. More sustainable crane

If you have access to appropriate tools, you can replace the paper roller with a wooden cylinder. You would have to drill it on the lengthwise to put the wooden stick through it.

To turn the crane easily, pierce the wooden cylinder to add some wooden pin near one of the ends. For the support, you could also create a wooden base, but be aware of the balance! If the wooden cylinder is not up to the gravity point of your structure, your crane could fall if you are lifting a heavier object.



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