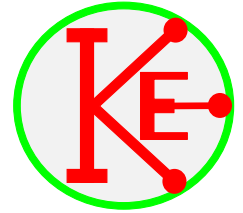


Colour Spinner



Make a spinner to investigate the mixing of colours.

YOU WILL NEED:

2x 9cm dia. thin cardboard discs,
two 7cm diameter paper discs,
approximately 1m of string,
scissors

1x 6cm dia. thick cardboard disc,
PVA glue or 'Pritstik' glue
colouring supplies
ruler

Access to:- centring tool, mounted bodkin, un-mounted bodkin and scrap cardboard.

SAFETY:

Scissors are sharp - ensure that you do not cut or pierce yourself when using these.

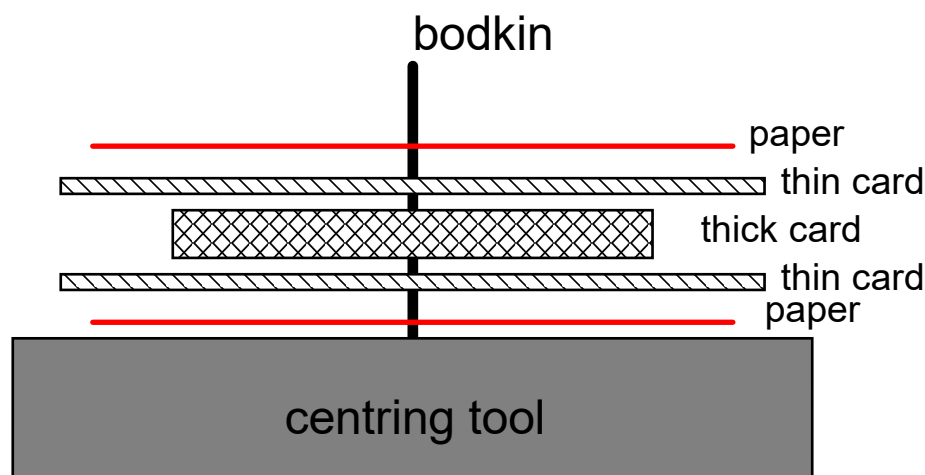
Paper and cardboard can also cause painful cuts.

The bodkins (thick needles) are sharp and can easily pierce your skin.

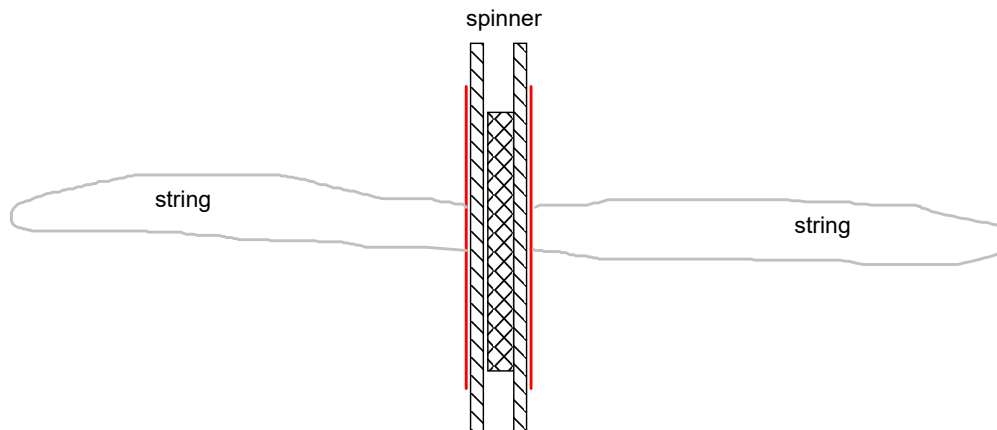
Report any injury to the leaders.

INSTRUCTIONS

- 1). Cut out two 7cm diameter paper discs and colour as desired.
- 2). Cut out two 9cm diameter thin cardboard discs.
- 3). Cut out a 6cm diameter thick cardboard disc.
- 4). Use the centring tool and PVA/Pritstik to stick the paper and cardboard discs together as in the diagram below.



- 5). Remove your spinner from the centring tool.
- 6). Use a ruler to put a mark 5mm either side of the centre hole.
- 7). Place your spinner onto the scrap cardboard and use the mounted bodkin to make holes at the 5mm marks.
- 8). Use an unmounted bodkin to thread the string through the two holes at 5mm to make a loop of string - tie the ends together.



- 9). Put your thumbs in each end of the loop.
- 10). Spin the disc around a few times and then you should be able to make it spin fast by pulling the string with your thumbs when the disc stops and then releasing your pull as the disc unwinds the string and winds it up in the opposite direction.

This can take a bit of practice to start with.

- 11). Look at the colours on the side of the disc while it is spinning.
What do you notice?
Why does this happen?
- 12). When you stop pulling the string, why does the disc continue to spin and wind up the string in the opposite direction?

If you have time, make new, different coloured paper discs to attach to your spinner, or make a new spinner with the new paper discs.