1. Push drawing pins into two card discs spaced out as shown in the diagram. Use blutac behind the disc and push the pins through and into it.

2. Cut four pieces of square section wood approximately 6 cm in length and tap these onto the drawing pins as shown.

3. Place the other disc on top and tap the drawing pins into the wooden struts.

4. Cut a small piece of dowel and a large piece of dowel.
5. Make a small hook using a paper clip and use it to thread the elastic band through the roller.

6. Insert the small piece of dowel into the elastic band. Hold firm and thread the band through to the opposite end of the roller.

7. Place a washer and a small pulley in between the roller and the larger piece of dowel.

WIND UP YOUR ELASTIC BANDROLLER AND LET IT GO!

IDEAS TO INVESTIGATE

• Does the length or thickness of the rubber band affect how far it travels or its speed?
• Does the number of winding turns of the elastic band make a difference?
• Does the length of the wooden struts make a difference?
• What happens if you remove the washer?
• What happens if the band roller travels over different surfaces?