Primary level Activity Sheet: Leonardo’s Gears

1. In which of Leonardo’s inventions do you see gears being used? Make a list.

2. Make a sketch of one of these machines and show how the gearing system works.

3. Is this machine, designed by Ld V between 1480 and 1520, similar to any machine that you have seen today?

4. Use notes and arrows to demonstrate movement.

Which machines do you especially like and why?

5. In the Mechanical section of the Exhibition, have a close look and at one of LdV’s gear study models and operate it:
   - Jack
   - Transformation of Linear to Circular Motion
   - Gear Shift
   - Gear with a circular mechanism
   - Helical Mechanism

6. Make a sketch of one of these studies in your sketchbook. Name a machine he invented using this gearing device. How was it used?

7. What type of gearing does it use?
   (eg. rack and pinion, bevel, spur, worm)