



## Robotic Hand



### THE ADVENTURE

Cub Scouts build a robotic hand to explore how a human hand works. Make adaptations to improve the speed, strength

### PLAN

- Review the step-by-step image guide and determine the level of support required for your Pack.
- Create a working prototype of a robotic hand to become familiar with the structure and how it works.
- To ensure the Pack can finish the activity in one session, you can make the holes in the straws in advance and bring them to your meeting ready for assembly.
- Make enough copies of the photographic instructions so that three or four Cubs can share one copy.

### DO

- Simple tools, such as a piece of florist wire, can help Cubs feed the string through the straw fingers.
- Some Cubs will need more support than others. Consider giving some Cubs more ready-made pieces than others

### REVIEW

- Make the overall design more robust by layering multiple cups, using wood for the arm and securing the hand to the arm using a wood screw and washer.

### SUGGESTED TIMING:

- Plan: 5-10 minutes
- Making the fingers: 20 minutes
- Making the palm and the arm: 20-25 minutes
- Practicing hand controls: 15-20 minutes
- Games: 20 minutes
- Review: 10 minutes

