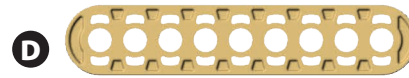
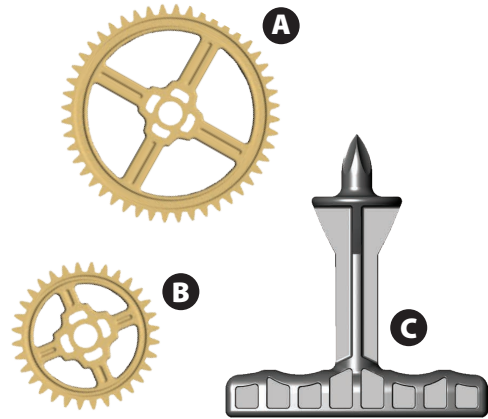


SUPPLY CHECKLIST

From the Winches Set:

- A** Medium Cog
- B** Small Cog
- C** Hole Punch Tool
- D** 1x Medium Connector
- E** 4x Rubber Washers
- F** Medium Rod
- G** Long Rod



...and:

Scissors / Craft Knife

Tape/Glue

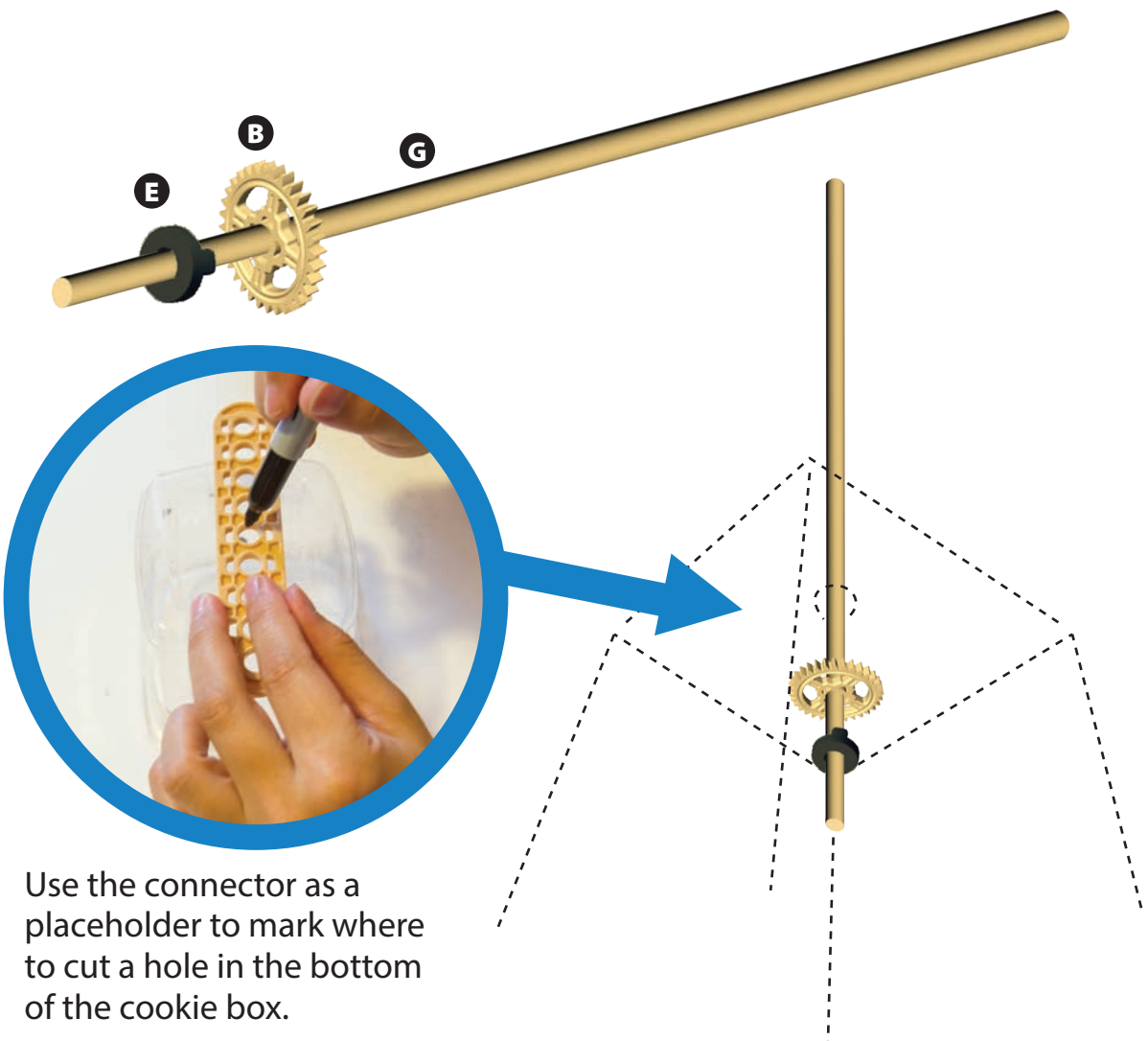
Cookie Box



MAKE THE UPRIGHT POLE

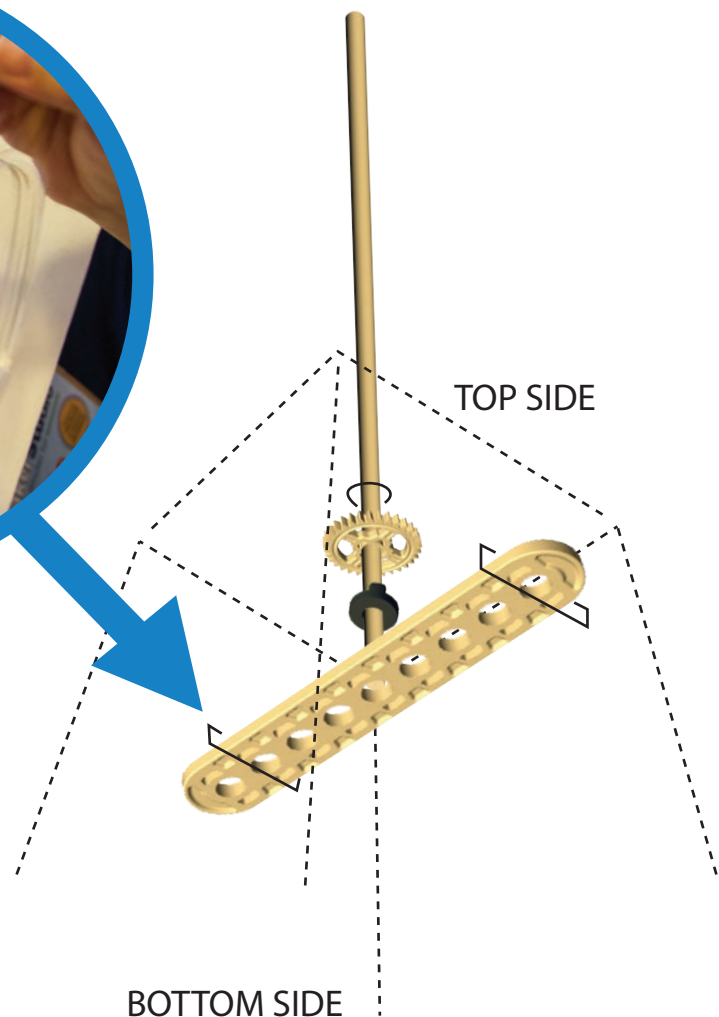
Use the Maker Studio components from the Supply Checklist to build the upright part of the mechanism and attach it to the cookie box. The letter labels refer to the components listed on the Supply Checklist. Use the instructions videos to help you.

Cut a hole in the top of an upside down cookie box. Put the rod through the hole with the cog and washer inside the box.



PLACE THE STABILIZER

Use the Maker Studio Medium Connector (D) to make the stabilizer. To measure where the connector should sit, place the connector on top of the box, with the top hole aligned. Mark the width of the connector on each side. Then mark horizontal lines about 1.5 inches from the top side.

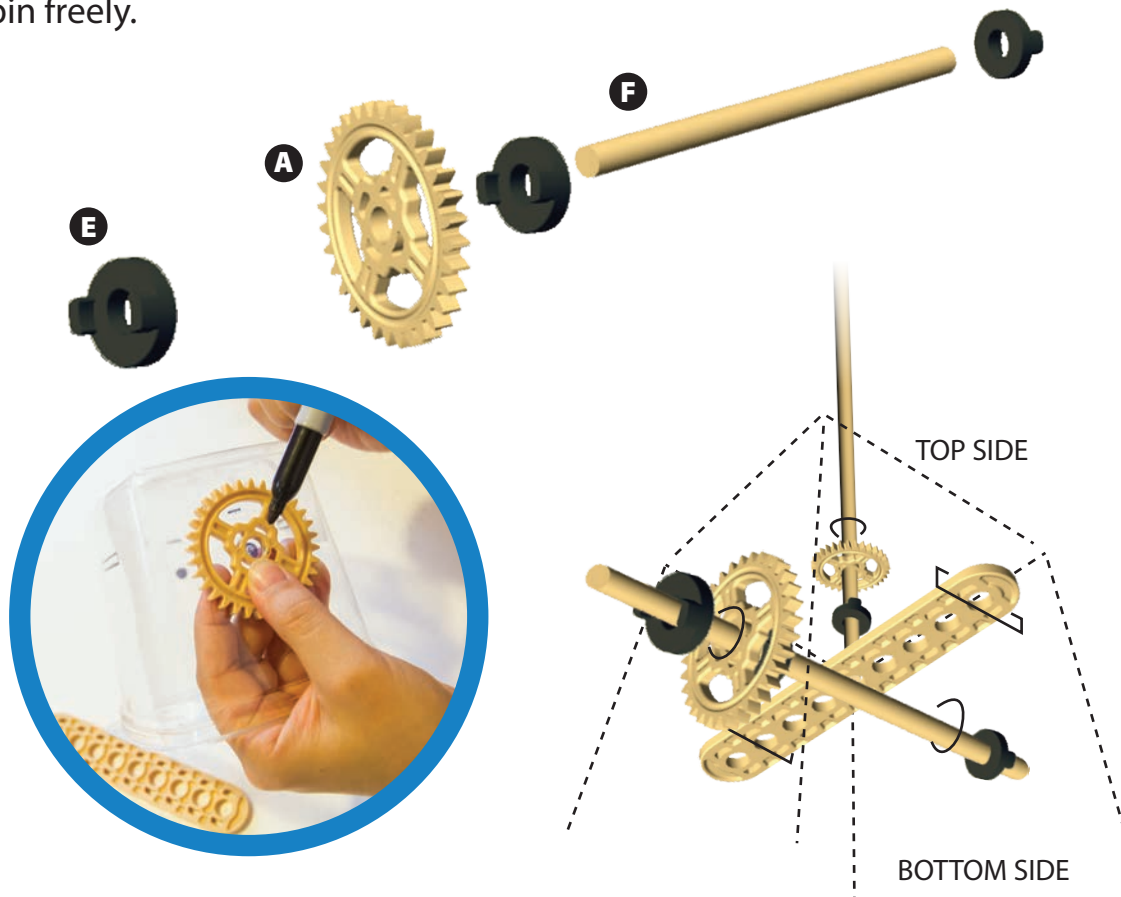


MAKE THE MECHANISM

Use the Medium Cog (A) to mark where to place holes for the Medium Rod (F). Remember the box must fit both the Small Cog and washer sideways, as well as the Medium Cog upright. Be careful to leave yourself enough space for both to fit when you position the Rod holes.

Position the Rod (F) underneath the Connector, with the Cog (A) inside the box. Position the middle washer in the below exploded diagram with teeth holding onto the cog so that the cog turns with the rod.

The washers on the far left and right will hold everything in place on the outside of the box, with teeth facing away from the box, to allow the rod to spin freely.





MakerStudio™

Dancer Project

Engineering Instructions



POSITION THE COG TEETH

The key to making this mechanism work, is positioning the two cogs so that their teeth interlock.

To do this, move the horizontal rod with the larger cog until its teeth fall into position with the smaller cog. You can move the larger cog along the rod to get the spacing right.

You can also move the small cog up and down to adjust everything, but it has less room to move, and is difficult to reach, so fine tune from the larger cog.

...and that's all you have to do! Now you can decorate. Use the video and pdf support materials to help you beautify the box and create the dancer.

