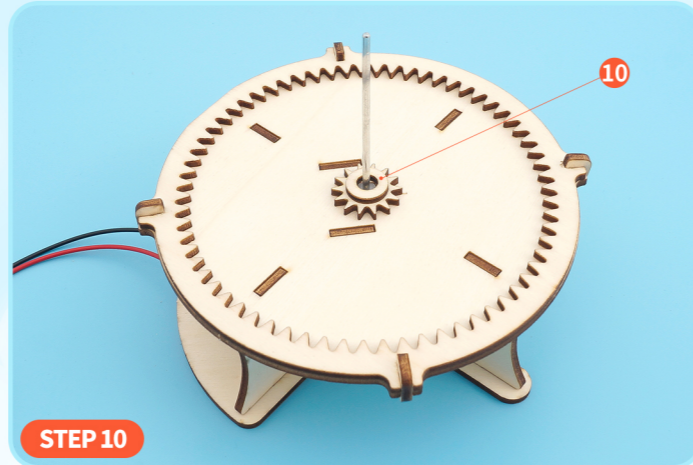


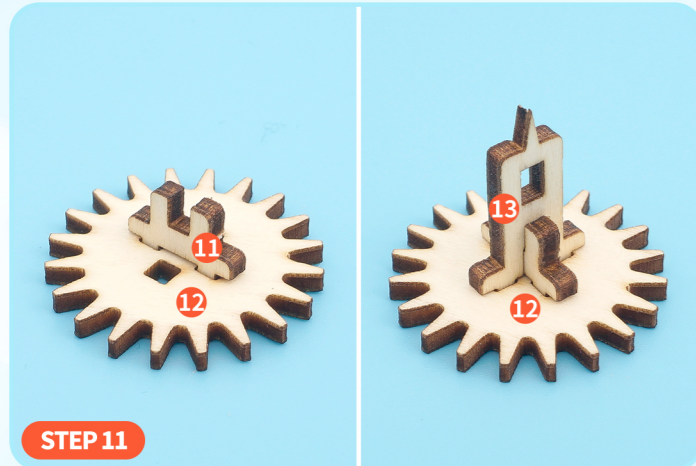
STEP 9

- First put the ⑨ pinion gear on the rotating shaft of the TT motor, and then insert the 5cm iron shaft into the round hole of the rotating shaft of the TT motor.



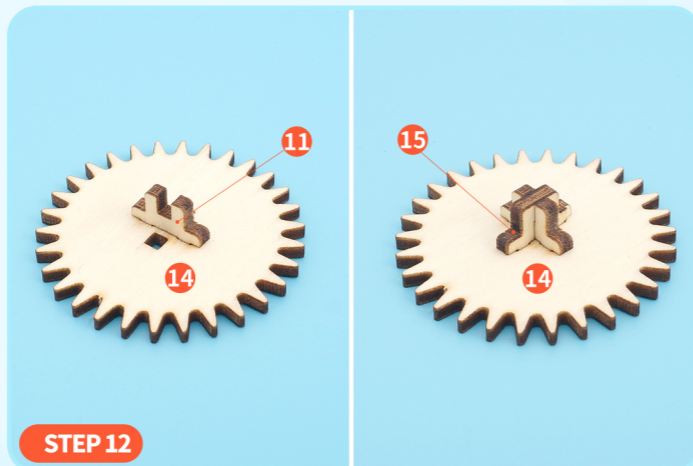
STEP 10

- Put the ⑩ ring piece on the 5cm iron shaft and place it on the ⑨ pinion piece.



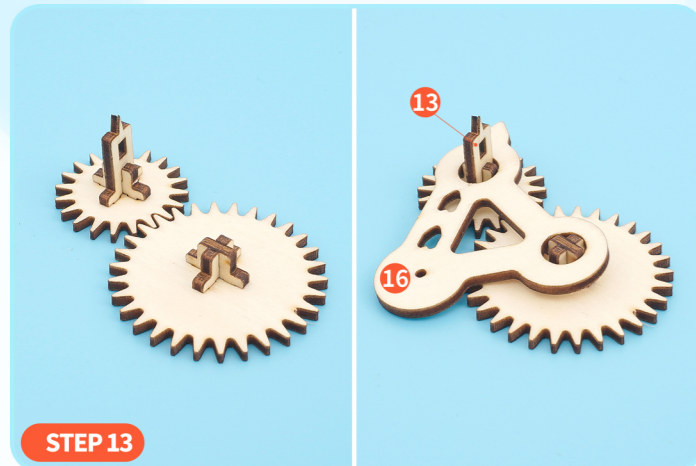
STEP 11

- First install No. ⑪ slot plate on No. ⑫ middle gear plate, then install No. ⑬ plate on No. ⑫ middle gear plate.



STEP 12

- Install No. ⑪ slot plate and No. ⑮ plate on No. ⑭ large gear piece in sequence.



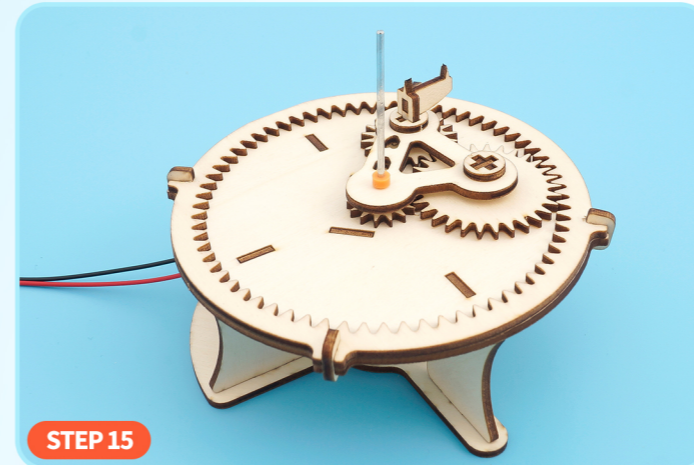
STEP 13

- First match the middle gear plate and the big gear plate together, and then install the triangle plate ⑯. Note: The round holes with arrows are placed on the ⑬ number plate.



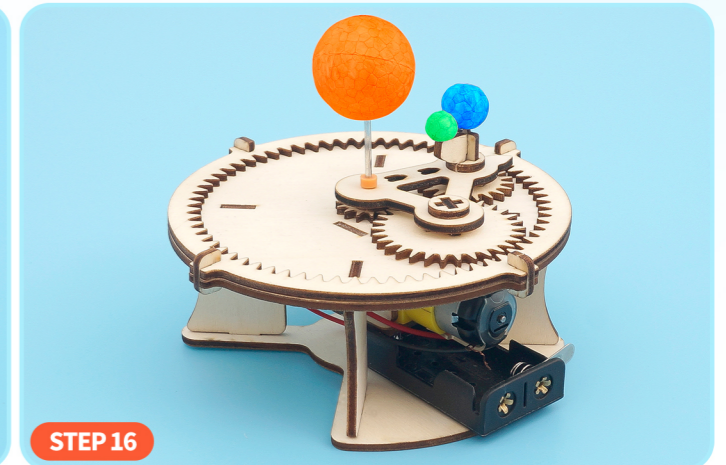
STEP 14

- First, clamp No. ⑰ cross pallet to No. ⑯ triangular plate, pay attention not to be too tight, leave a gap of 1mm, and then install No. ⑱ hook plate on No. ⑬ plate.



STEP 15

- Insert the triangular plate No. ⑯ along the 5cm iron shaft and fix it with an orange fixing ring. Because the fixed ring has a triangular plate with a 1mm gap, leaving no gap will increase movement resistance.



STEP 16

- Apply the corresponding color to the foam ball, insert it in the position shown in the figure above, install the battery on the battery box, and place the battery box under the position of the TT motor. The three-ball instrument is completed. When the knife switch is closed, the three-ball instrument starts to move.



Problems in Production? Check if they are the following problems!

After installing the battery, the terrestrial instrument will not turn after closing the knife gate.

1. Check if the wiring is detached. It is recommended to reconnect the wires.
2. Check whether the gears match.
3. Check if the battery has run out of power, it is recommended to replace with a new battery.
4. Check if the cross card is too tight, it is recommended to leave a 1mm gap.

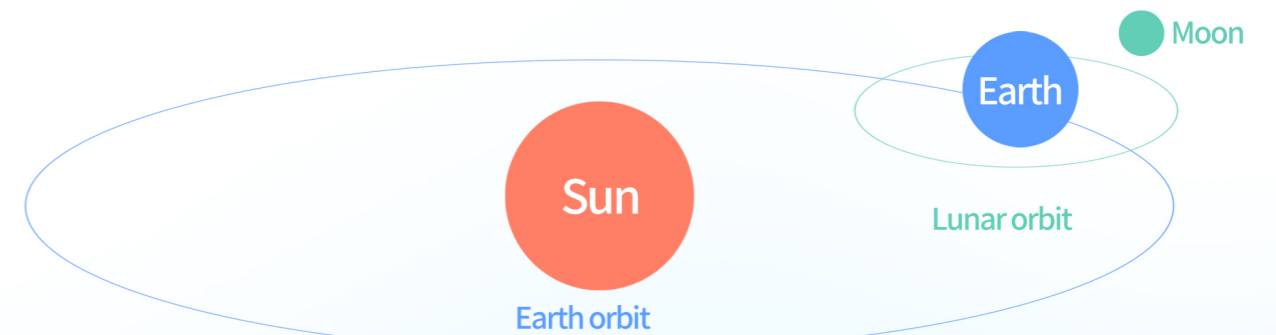


Science tips

When the moon moves between the sun and the earth, if the three are in a straight line, the moon will block the sun's light towards the earth, and the black shadow behind the moon just falls on the earth. At this time, an eclipse occurs. This is the Tengu Food Day in folklore. Solar eclipse and lunar eclipse are typical examples of light propagating in a straight line in the same homogeneous and medium.

Earth movement is divided into rotation and revolution

1. The earth's rotation period is 24 hours, forming a day and night alternation. (The side facing the sun is daytime, and the back is nighttime)
 2. Earth revolution means that the earth revolves around the sun in a certain orbit. The revolution period is one year, forming spring, summer, autumn and winter. When the earth moves to near the perihelion is summer, and near the perihelion is winter.
- The rotation and revolution of the moon are synchronized, so we can only see that the moon always faces the earth with the same one.
- The moon revolves around the earth with a period of one month. The moon reflects sunlight. As the moon revolves, we see that the moon is sometimes a crescent, sometimes a disc. When the sun, the earth, and the moon are exactly (or almost) in the same straight line, the light from the sun to the moon will be Covered by the earth, this forms a lunar eclipse.



Sun diameter: 1392,000 kilometers

Earth diameter: 12756 km

Moon diameter: 3476.28 km