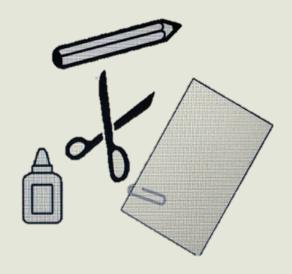
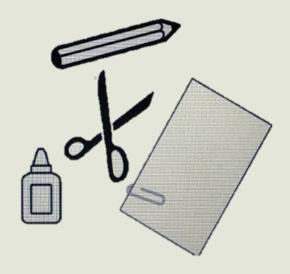


Materials Required

- A3 card Sheet or card board (for giving the base)
- Any 3 different textured cloth materials of different colors (red-velvet, orange-soft net, green-furnishing material cloth)
- Coir (natural rope)
- Synthetic rope
- Drinking Straw with flexible neck (3)
- Synthetic net

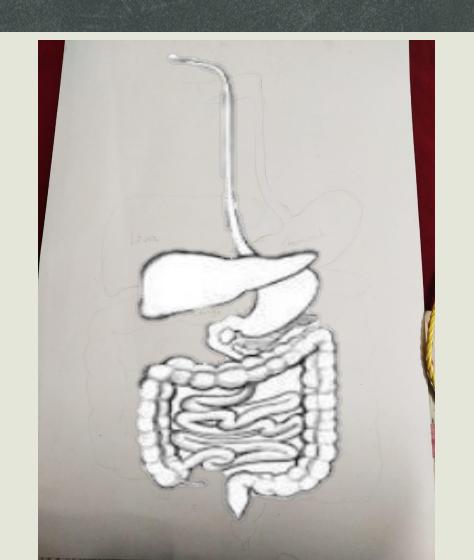


- Flexible, thin metal wire(or floral steel wire)
- Aluminum foil
- Foam paper
- Embroidery thread
- Cotton
- Double side tape and glue

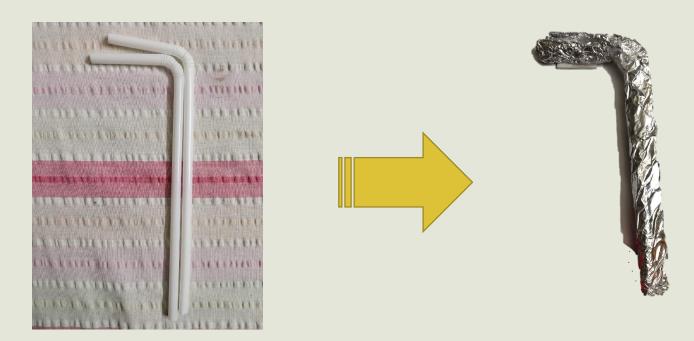


Steps involved:

Step 1. Take an A3 card sheet and draw a rough diagram of the human digestive system



Step 2. Take two drinking straws and cover with aluminium foil paper. Attach it to the A3 card base using double sided tape.



Step 3. Take one of the cloth material and fold it into half with the textured part inside. Draw a rough outline of liver with a pencil. Stitch through the outline leaving a small opening in one side. Cut out the same in liver shape. Pull the stitched material inside out through the opening to get the textured part out. Fill the liver cut-out with cotton to give the 3-D Shape. Finally stitch and close the opening.



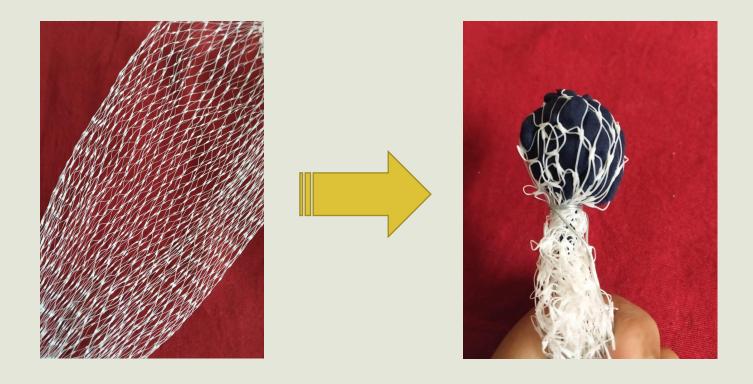
Step 4. Similarly do step 3 for the shape of stomach and pancreas on the two other cloth materials.

Step 5. Fix the stomach, pancreas and liver shapes to the A3 card sheet using flexible metal wires. (How to fix with flexible wires-put two smalls hole at where the shape is to be attached. Insert the flexible wire through the first hole, then passing it in through the shape and pull out through the second hole. Tie the two ends of the wire at the backside of the sheet.)

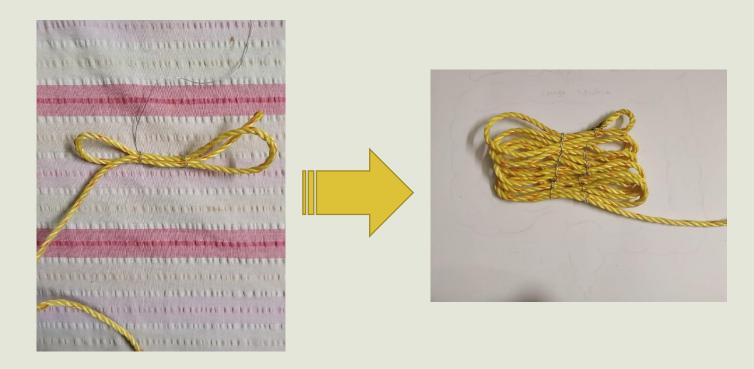




Step 6. For the gall bladder, take some piece of cloth, make it into a sphere shape and cover with synthetic net. Fix to the card sheet using flexible wire.



Step 7. Take the long synthetic plastic rope for the small intestine. Fold the rope in zig- zag pattern for around 8 times. Tie the folds at some places with the flexible wire to maintain the shape. Keep it aside.



Step 8. For the large intestine, cut the Coir rope into 3 pieces of same length. Braid the 3 pieces of coir. (You can also use a coir rope of width larger than the synthetic rope used for the small intestine instead of the smaller width coir and avoid braiding). Connect one end to the end of small intestine and leave one for pasting the anus cut out. (Note: All connections are made using flexible metal wire)



Step 9. Take the foam paper. Make a rough drawing of the anus. Cut it out in the same shape. Paste the cut out at the end of the large intestine rope using a double sided tape.

Step 10. Fix the two intestines and anus structures to the A3 card base using flexible wires in the same way as we did for the other organs.



Step 11. To show connections like that from stomach to intestine, either use a bright colour straw or cover a straw with bright coloured embroidery thread. Cut into small pieces and stick it on the card sheet wherever necessary.



Tactile diagram of Human Digestive System is ready!



