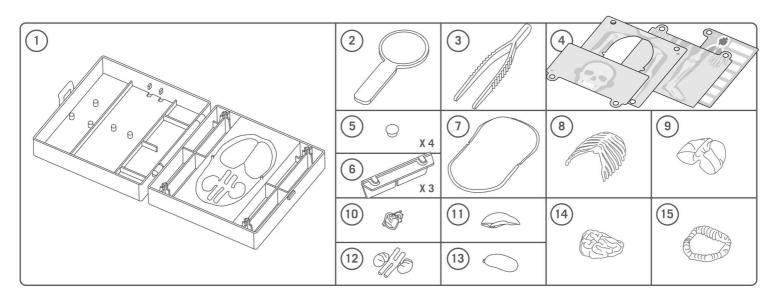
## **Human Torso Anatomy**

## **A. SAFETY MESSAGES**

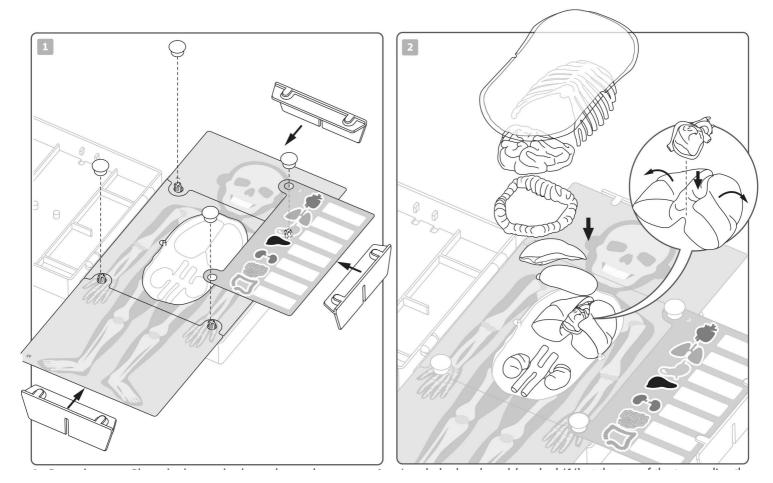
- 1. Please read through these instructions before you start.
- 2. Adult assistance and supervision are recommended.
- 3. Intended for children of ages over 8.
- 4. This kit and its finished product contain small parts which may cause choking if misused. Keep away from children under 3 years old.

## **B. CONTENTS**



Part 1: Surgeon's case, Part 2: Magnifying glass, Part 3: Forceps, Part 4: Body card x 4, Part 5: Plastic pin x 4, Part 6: Plastic stand x 3, Part 7: Transparent cover, Part 8: Rib cage, Part 9: Lungs, Part 10: Heart, Part 11: Liver, Part 12: Kidneys, Part 13: Stomach, Part 14: Small intestine, Part 15: Large intestine.

## C. CONSTRUCT THE TORSO MODEL



- 1. Open the case. Place the largest body card over the torso cavity. Attach the head card (marked '1') at the top of the torso, directly above the neck and shoulders. Place the legs card (marked '2') directly underneath the bottom of the torso. Attach the diagram card (marked '3') onto the right hand side. Add the stands to the edge of cards so they stay upright. Secure the cards with four pins.
- 2. Pull the lungs downwards and place the heart in the middle. Put the lungs and heart into the torso cavity. Put the kidneys into the cavity. Put the stomach below the right lung (as you look at the torso). Insert the liver so the wider part sits in the space to the left of the stomach. Put the large intestine below the liver and stomach. Now put the small intestine into the large intestine so it sits snugly. Place the rib cage over the lungs. Now put the transparent cover over the whole torso.

## D. PERFORM HUMAN TORSO ANATOMY



- 1. Now it's time to perform the human torso anatomy. Remove the transparent cover. Using the forceps, carefully take out the organs one after the other. Isn't it clever how all the organs fit together perfectly in your body?
- 2. Use the magnifying glass to anatomise the human organs. You'll discover how unique each organ is, both in appearance and function. Now read the fun facts below to find out more about what makes your body tick.
- 3. Detach the diagram card. Write down the name of the organs on it. Attach the card back in place. Your torso model is now complete!

## **LUNGS**

- · Lungs are the only organs in the human body that can float on water this is because the air in the air sacs gives lung tissue a low density.
- · Lungs are the fourth biggest organ, containing over 300,000 million capillaries (tiny blood vessels); the right lung is bigger than the left lung.

### **HEART**

- The heart is the fifth largest organ in the body. It beats 100,000 times a day and pumps 2,000 gallons of blood around 60,000 miles of blood vessels every day. Wow, isn't that incredible?
- $\cdot$  The aorta is the largest artery in the body, extending from the left chamber (ventricle) of the heart, right down to the abdomen. It's also the thickness of a garden hose.

# **KIDNEYS**

- · Unbelievably, kidneys have a higher blood flow than the brain, liver and heart. They also receive 20-25% of all the blood pumped by the heart.
- Kidneys help keep the amount of fluid constant in your body and remove unwanted waste products, filtering around 50 gallons of blood through 150 miles of tubes every day.
  STOMACH
- · As a part of the digestive process, your stomach secretes biologically produced hydrochloric acid (HA). This is corrosive enough to destroy metal, plastic and bone. Luckily, this doesn't happen in the human body!
- Did you know that when you blush and your face turns red, the lining of your stomach also turns red? Isn't the human body amazing?

## **LIVER**

- True fact! The liver is the only organ in the body that can grow back. This is why some people often donate part of their liver to others who may need a new one.
- The liver detoxifies all the harmful substances that go into our bodies via food, drink and the environment. It protects the body and helps it function properly.

### LARGE INTENSTINE

- The large intestine is the last part of the gastrointestinal tract. It absorbs water and vitamins from undigested food and passes waste out of the body in the form of faeces (otherwise known as poo!).
- · When gas builds up in your large intestine you're likely to experience flatulence (or farting!). Gas is produced by friendly bacteria that live in the intestine.

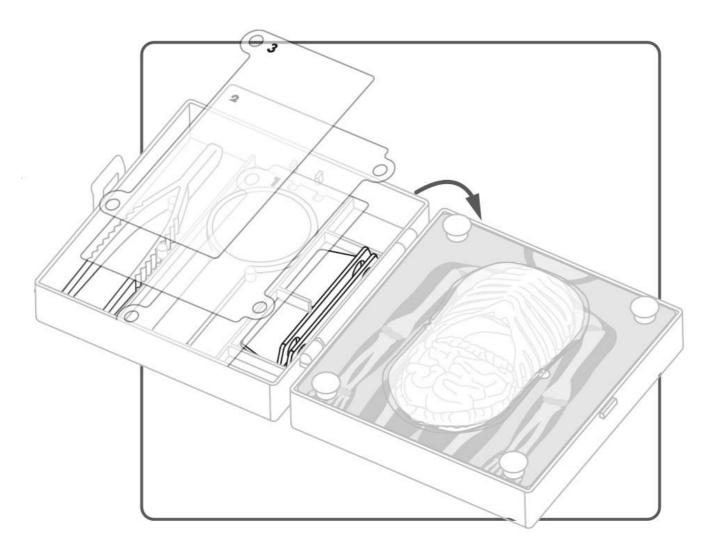
#### **SMALL INTESTINE**

- The small intestine is divided into three parts: the ileum, duodenum and jejunum. Its main purpose is to absorb all the nutrients from the food we eat.
- · Measuring around 3 metres (10 feet), the small intestine is twice the length of the large intestine about double your height!

### **RIB CAGE**

- The rib cage is made up of bone and cartilage, which is what makes it so flexible. If it wasn't flexible, your lungs wouldn't be able to expand and you wouldn't be able to breathe.
- · Your rib cage has 24 ribs (12 pairs) that are all attached at the back to the 12 vertebrae that make up the spinal column.

## E. PACK UP THE SURGEON'S CASE



Remove the stands and put them into the case cover. Clip the magnifying glass and forceps into the compartments. Remove all the pins. Place cards 1-3 into the case cover. Secure the pins back in place. Close the case and take it with you on your travels. Why not share your body knowledge with friends and family and see how many organs they can identify?

## **QUESTIONS & COMMENTS**

We treasure you as a customer and your satisfaction with this product is important to us. In case you have any comments or questions, or you find any parts of this kit missing or defective, please do not hesitate to contact our distributor in your country, whose address is printed on the package. You are also welcome to contact our marketing support team at Email: infodesk@4M-IND.com, Fax (852) 25911566, Tel (852) 28936241, Web site: WWW.4M-IND.COM

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**WARNING:** 

CHOKING HAZARD - Small parts.ΚΙΝΔΥΝΟΣ ΠΝΙΓΜΟΥ - Μικρά κομμάτια.

Not for Children under 3 year.

**LUNGS**