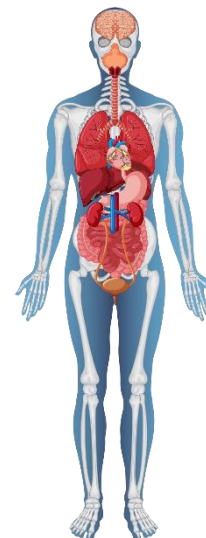


## The Human Body

### Warm up:

- What do you do to take care of your body?
- Which sense (sight, smell, touch, hearing, taste) would be hardest for you to lose and why?
- Why do you think skin is considered an organ?
- Would you be willing to donate your organs after death? Why or why not?
- What muscles do you think you use the most often?
- Do you think you could be a surgeon? Why or why not?
- What are some of the most common health problems people have as they get older?



### 1. Match the pictures below to the words in the box.

liver **3**

brain **6**

lungs **5**

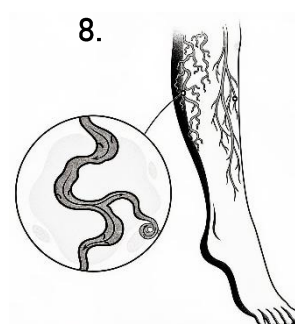
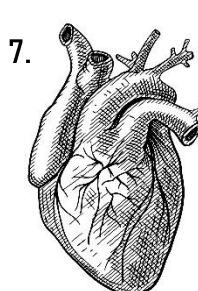
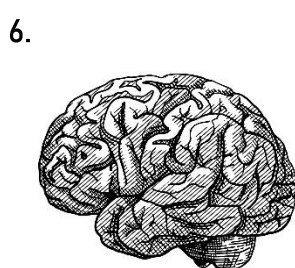
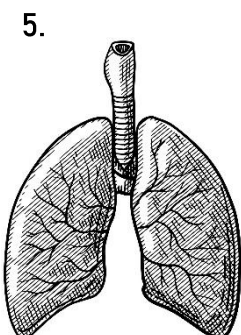
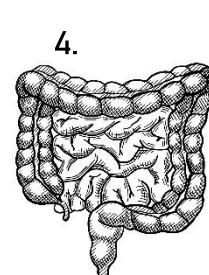
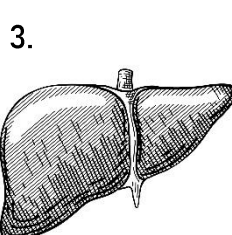
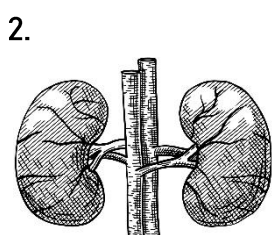
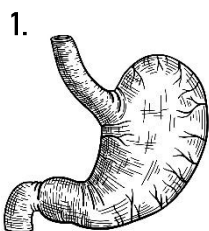
kidneys **2**

veins **8**

heart **7**

stomach **1**

intestine **4**



 2. With a partner read through the statements about each organ. One of the three statements is false. Decide which statement is false for each organ.

### Brain

- a) Although your brain only makes up 2% of your body weight, it uses approximately 20% of your energy.
- b) Regular exercise can change the colour of your brain, generally people who exercise more have brighter pink brains. FALSE*
- c) Your brain itself cannot feel pain, as it has no pain receptors.

### Heart

- a) Your heart pumps enough blood to fill a swimming pool every year.
- b) The sound of a heart beat is not from the overall movement of your heart, but from valves opening and closing.
- c) *Most reptiles (such as snakes and lizards) have two hearts. FALSE*



### Lungs

- a) The right lung is almost always bigger than the left lung.
- b) Breathing through your nose is better for your lungs than breathing through your mouth.
- c) *Practicing holding your breath makes your lungs larger over time. FALSE*

### Stomach

- a) Swallowed chewing gum stays in your stomach for years. FALSE*
- b) 'Butterflies in your stomach' (the feeling in your stomach when you are nervous) is caused because your brain is telling your stomach to stop digesting, because you may need your energy for running or fighting.
- c) A man who had unusually strong stomach acid once ate a whole airplane over 2 years.

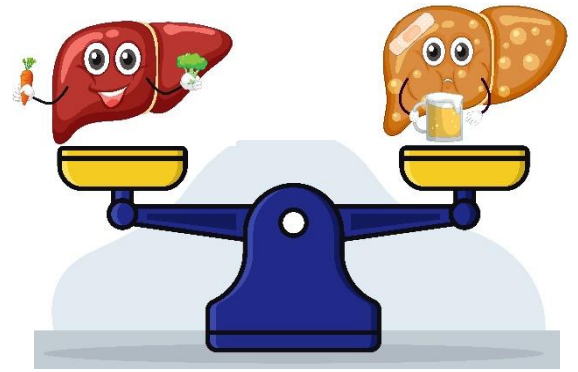


### Liver

a) Your liver can regrow itself, even if it loses two thirds of its mass, it can still regenerate.

*b) Ancient Roman culture saw the liver as the centre of all emotions, not the heart. FALSE*

c) The liver is the heaviest internal organ, weighing about 1.5 kilograms.



### Kidney

a) You can survive and be healthy with just one kidney.

*b) Kidneys are actually named after kidney beans, not the other way around. FALSE*

c) Your kidneys filter all of your blood roughly every 30 minutes.

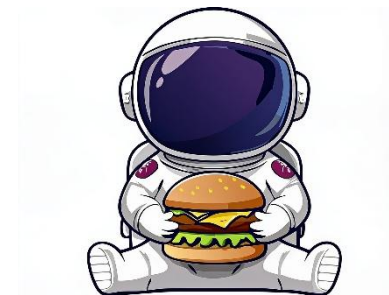


### Intestines

a) The small intestine is actually much longer than the large intestine.

*b) Astronauts often have trouble digesting food because the intestines need gravity to help digest the food. FALSE*

c) Food normally takes 1-3 days to travel through the intestines.

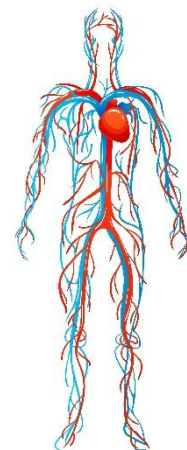


### Veins

a) About 70% of your blood is in your veins at all times.

*b) Your veins grow slightly longer every year. FALSE*

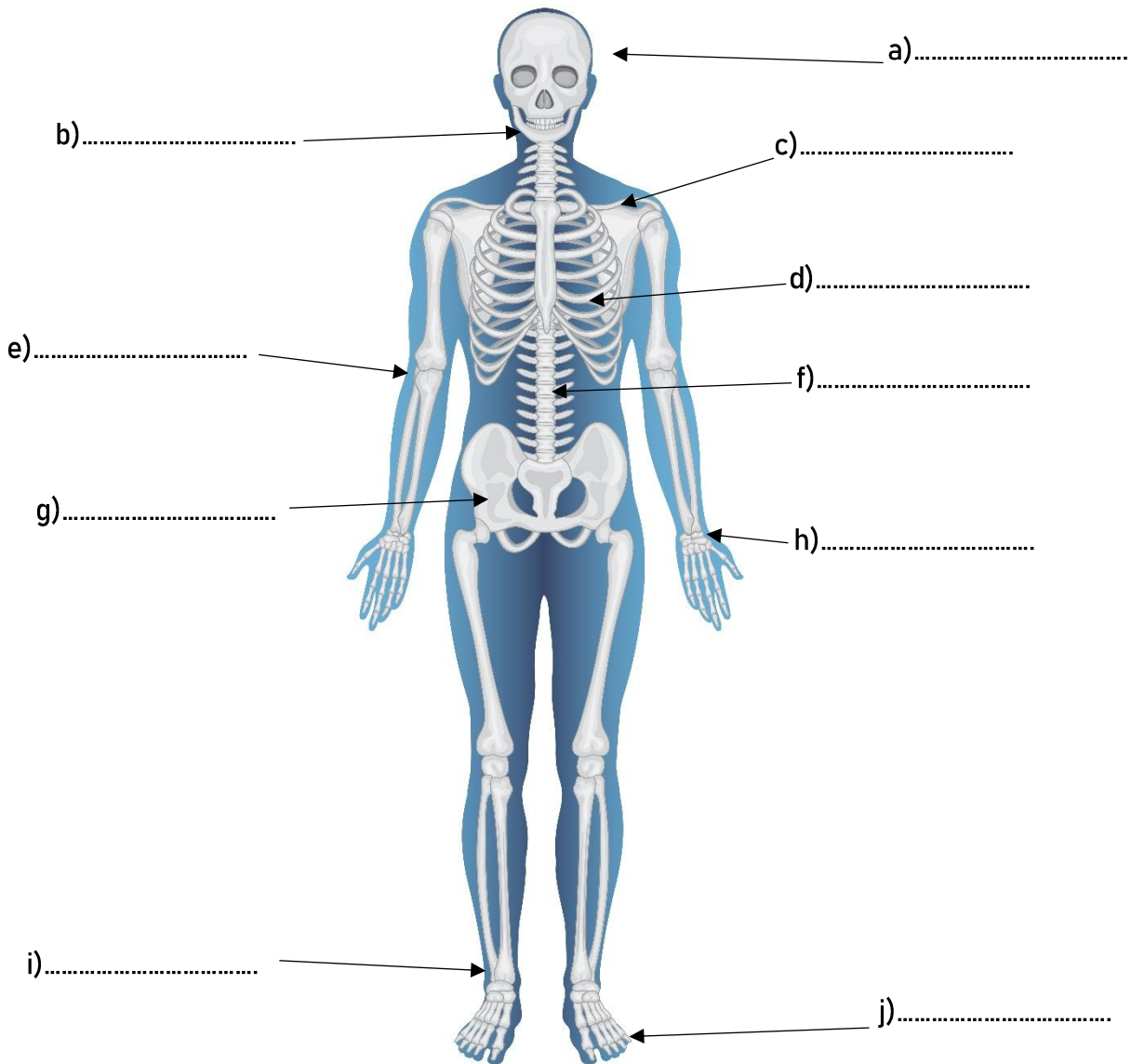
c) Blood with a lot of oxygen in it is bright red, whereas blood with less oxygen is dark red.





3. Match the words in the box to the picture of the skeleton below.

- |                 |                      |                 |                 |                |
|-----------------|----------------------|-----------------|-----------------|----------------|
| ankle <i>i)</i> | elbow <i>e)</i>      | skull <i>a)</i> | spine <i>f)</i> | ribs <i>d)</i> |
| wrist <i>h)</i> | collarbone <i>c)</i> | toes <i>j)</i>  | jaw <i>b)</i>   | hips <i>g)</i> |



3. Ask and answer the questions with a partner.

- a) Have you ever had an injury that affected any of your joints?
- b) Have you ever broken a bone? Which bone did you break and how?
- c) Why do you think skulls are such a common symbol?
- d) What are some things you think people can do to take care of their joints and bones?

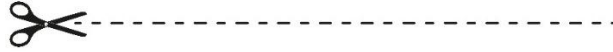
4. James Mason had a bike accident and has been taken to the hospital. Read the initial report of his injuries, then listen to the conversation between two doctors and answer the questions below.

<u>Patient name:</u> James Mason	D.O.B: 22/02/1989      Gender: Male
<u>Incident description:</u>	Serious bike accident, arrived in ambulance.
<u>Injuries</u>	Bruised head (possible skull fracture), swollen and jaw. Patient complains of back pain, possible spine injury. Severely swollen ankle and bruises on chest. May need cast and/or crutches for ankle.
<u>Required tests</u>	X-ray, MRI, blood tests for possible damage to kidneys.

- a) Why were the doctors relieved after examining the patient's brain and skull? *Because there is no sign of damage to them*
- b) What is causing the patient's back pain? *Bruised back muscles*
- c) Which injury made it difficult for the patient to breathe? *Broken ribs and bruised lung*
- d) What damaged the patient's liver? *A bad diet, not the accident*
- e) What two pieces of advice will the doctor give the patient about his jaw injury? *Eat soft foods and see a dentist*
- f) How long do the doctors think it will take Mr Mason to recover? *A few weeks*



5. Your teacher will split you into groups and give you cards with the names of body parts on them. Take turns describing the word on the card without using the word or pointing to a body part. The first team to get through all of their cards wins.



spine	fingernail	liver	toes
lungs	knees	forehead	thigh
kidney	stomach	collarbone	skull
jaw	teeth	brain	hips
intestines	chest	wrist	tongue
ankle	nostril	skin	beard
thumb	belly button	elbow	palm
heart	veins	eyebrows	ribs



### Audio Transcript

Dr Avery: Hi Dr Helson, do you have Mr Mason's test results?

Dr Helson: I do, we ran quite a lot of scans on him, he had a very serious accident. The good news is there's no sign of damage to the **brain** or the **skull**. He was lucky because he hit his head quite hard.

Dr Avery: Ok wow, that's quite surprising given how bad his bruises are, but good to hear. I was also quite worried about his **spine**, he was complaining about back pain.

Dr Helson: Actually we did an X-ray, and his spine is fine. He has a lot of bruises on his back muscles, so that's what is causing the pain, not the spine itself. However, the X-ray did show that he has two broken ribs.

Dr Avery: I thought so. He said breathing was painful, so I'm not surprised he has broken ribs.

Dr Helson: Well it's not just that, it looks like his broken ribs have also damaged his **lungs**, you can see on the X-ray that they are bruised. But they should heal in the next couple of days.

Dr Avery: Ok, but have we checked his other internal organs?

Dr Helson: We have, apart from his **lungs** everything seems fine. His **liver** is not particularly healthy, but we think that's from bad diet, not from the accident.

Dr Avery: Well, I think I'll mention that to him anyway, maybe he can eat some more vegetables. Did you do other X-rays? I noticed some swelling in his left **wrist**.

Dr Helson: We did, it's a small fracture, we'll put it in a cast today. His right **ankle** is also quite badly sprained, it's very swollen, but it's not broken.

Dr Avery: Ok, and did you find anything else?

Dr Helson: Well, his **jaw** is very swollen, but it's not actually broken. He should eat only soft food for the next few days, and he should probably see a dentist. There seems to be some damage to his teeth, but that's not really our area.

Dr Avery: Ok I'll let him know. All in all it seems better than I expected, especially regarding the head injuries. When I first saw him I was almost certain he had a fractured skull at least.

Dr Helson: Luckily not. The next few weeks aren't going to be easy for him, but ultimately it could have been much worse. With some rest and physiotherapy he should be back to normal in a few weeks.