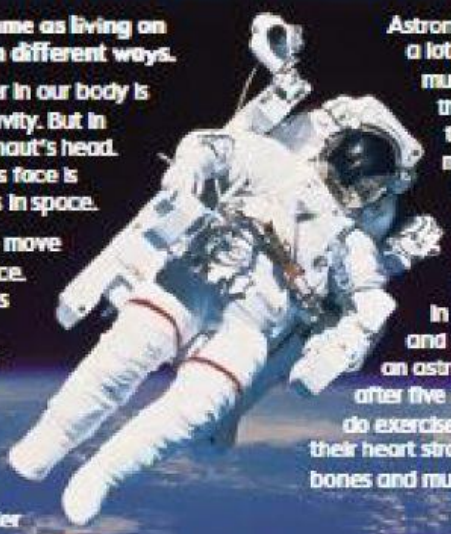
2 **Find out more** Read and listen. What parts of an astronaut's body change in space?

How does the human body change in space?

Living in space is not the same as living on Earth. Our bodies change in different ways.

On Earth, the blood and water in our body is pulled down to our feet by gravity. But in space, it is pulled to the astronaut's head. This means that an astronaut's face is often bigger when she or he is in space.

It's also easier for the heart to move blood around the body in space. Because of this, an astronaut's heart can become smaller and weaker. The shape of the astronaut's heart changes in space, too. In 2015, the British astronaut Tim Peake spent 186 days on the International Space Station , but his heart was 20 years older when he returned to Earth!



Astronauts float in space because there isn't a lot of gravity. They don't use their legs very much, so the bones in their legs become thinner. Astronauts also lose calcium from their bones. This can make the bones more fragile. So astronauts have a special diet in space which gives them the extra calcium they need.

On Earth, the muscles in our legs and back support our bones when we walk. In space, these muscles become weaker and smaller very quickly. Do you know that an astronaut can lose 40% of their muscles after five months in space? Astronauts need to do exercise for two hours every day to keep their heart strong, and to maintain healthy bones and muscles.

Reading tip!

Read the questions carefully. Then identify which part of the text has the answer.

1. **How's the astronaut's face different in space?**

2. **What happens to an astronaut's heart?**

3. **Why do astronauts' leg bones become thinner?**

4. **Why do astronauts need a special diet in Space?**

5. **What happens to astronaut's muscles in space?**

6. **How do astronauts keep their heart and muscles healthy?**

LIVEWORKSHEETS