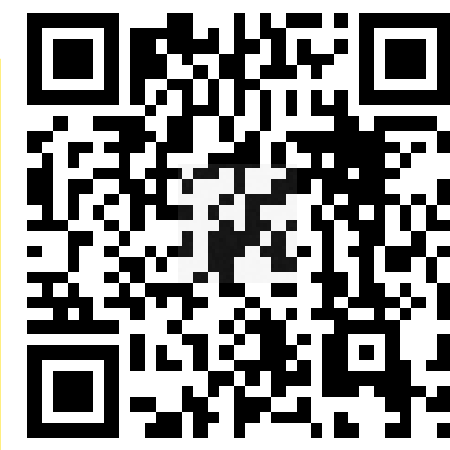




The Expeditions of Tiwi and Boni

Activity Sheet for Students

letsread.asia/TiwiAndBoni



Tiwi and Boni wore a spacesuit, took a spaceship, and set out to find a new planet. Do you know what outer space is like? How is it different from our planet?



Whenever astronauts go out of Earth, they have to wear a heavy spacesuit with so many things attached to it. What would happen if they didn't wear the spacesuit in space?

Let's make our own space helmets and go on a space adventure of our own!

**Before we start making,
Make sure to have these:**

1. Paper cups
2. Stretchy balloons
3. Scissors
4. Paintbrushes
5. Glue (eg. Fevicol)
6. Old newspapers
7. A4 papers
8. A sheet of transparent plastic
9. Painting colors





Let's make a paper strip space helmet



Step 1

Cut out the old newspaper into strips.



Step 2

Pour glue or fevicol into a paper cup.



Step 3

Add water into the cup. The amount of water should be twice the amount of fevicol.



Step 4

Blow up a balloon of adequate size and tie it. You don't have to make it too big, but make sure it fits your head.



Step 5

Adjust the balloon on a base, we are using a paper cup with water here.



Step 6

Soak the newspaper strips into the glue and put it on the balloon. Make sure to avoid touching the balloon and keep a distance.



Step 7

Make sure the whole balloon is covered by strips of paper. Then let it dry for 3-4 hours.



Step 8

Take some A4 papers and cut them into strips too.



Step 9

Soak the strips in glue and stick them on top of the newspaper coating completely. Let it dry again for a few hours.



Step 10

Once the paper is dried, pull the balloon out and mark the outlines to make a space helmet.



Step 11

Cut out the base and the face part. Your helmet will look like this.



Step 12

Paint your helmet according to your wish and let it dry again.



Step 13

Once the paint is dry, it will look like this.



Step 14

Add a transparent face shield to your helmet.

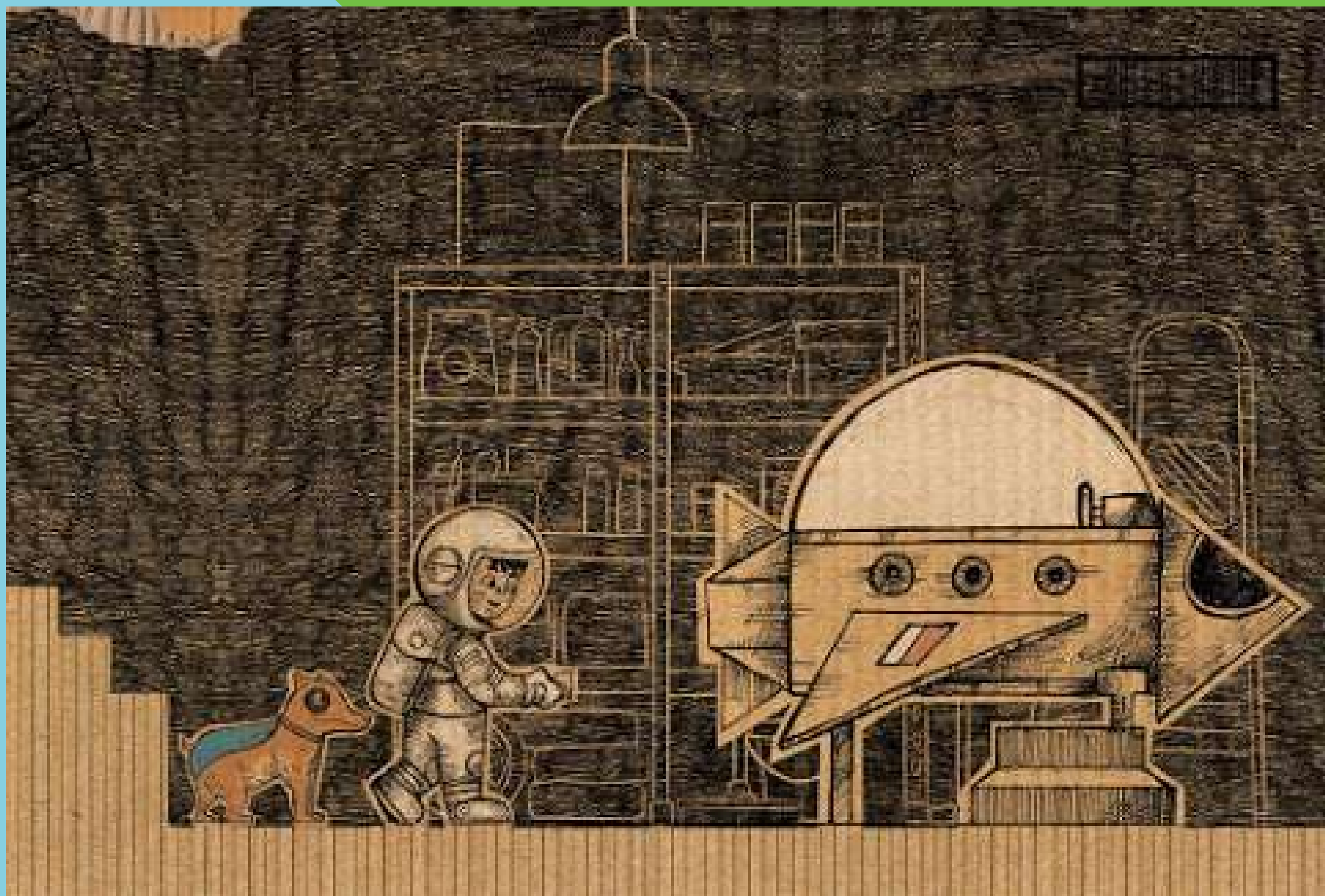


Challenge Your Skills

1. Make other space gear using papers that could help astronauts in space.
2. Add a gadget to your space helmet so that the astronauts could talk to each other easily in space.

Challenge Your Mind

1. What would happen if an astronaut took off their space helmet?
2. Scuba diving is a skill that all astronauts are required to have. Why do you think astronauts need to know scuba diving to become astronauts?

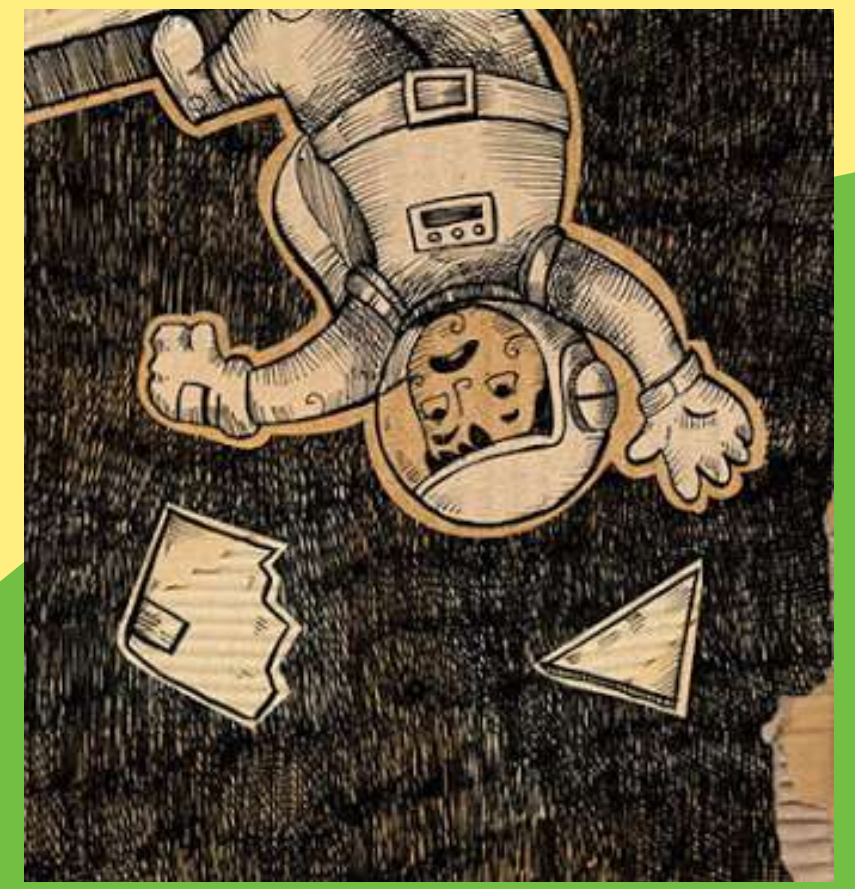


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Worksheet



Here are a few challenges that astronauts should face in outer space because there is no atmosphere. Look at the challenges and guess how the spacesuits help to solve these challenges.



1. The astronauts can't breathe because there is no air.



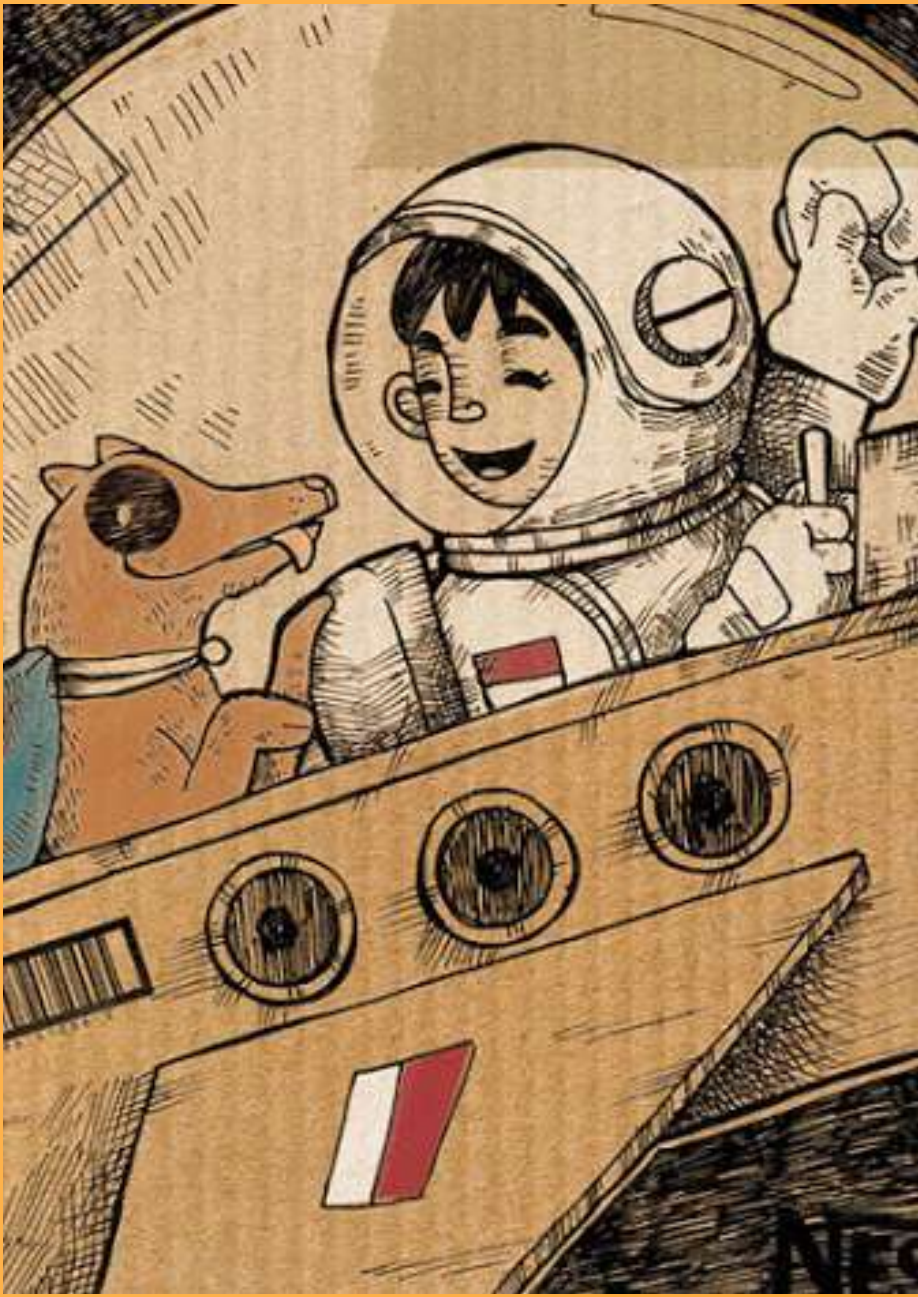
2. Because there is no air pressure like on the earth, our blood vessels may explode in space.

3. The astronauts can't hear each other because there is no air to carry the sound.



The Expeditions of Tiwi and Boni

Handout



LIFE OF AN ASTRONAUT

The International Space Station (ISS) is a big research station moving around the earth. Astronauts go to the station for a long time and study and research about space, Earth and many other things.

Right now, there are about 5 astronauts working in the ISS.
Some of them have been there for many months.

The daily lives of the astronauts living in the ISS are very different from ours.

For example, after brushing their teeth, astronauts just swallow the toothpaste because spitting it out takes a lot of effort to clean it. Think of other things that you do in your daily life that might be very different in space. How do you think astronauts eat soup or take a shower in space?

