1 Answer the questions in your own words.

1. At which altitude does the ISS orbit the Earth? **400 km above the Earth's surface**
2. How many times dies the ISS go around the Earth every day? **15 times**
3. When was the ISS completed and how long is it scheduled to function ? **completed in 2011 and scheduled to be in operation until 2030**
4. What is the ISS used for ? **as a laboratory for scientific experiments and a test site for future missions to Mars and other planets**
5. Who owns the ISS? **nobody owns the ISS; it is a project run by several space agencies**
6. Which countries deliver modules to the ISS? **mostly the United States and Russia**
7. How does working in zero gravity help scientists? **they can conduct experiments that cannot be done on Earth; zero gravity has different effects on plants and animals; mixing fluids react differently in space**
8. What kind of food do astronauts eat? **frozen and canned food**
9. How do they get rid of waste? **it is collected in bags and carried away by an air stream**
10. How do astronauts on the ISS get oxygen? **some is delivered from Earth and some of it is recycled carbon dioxide that astronauts breathe out**
11. How is electricity produced on board the ISS? **solar panels**
12. Describe the typical workday of an ISS scientist or astronaut? **it begins at 6; then breakfast; conference with ground controllers; work, exercise and experiments; lunch break; more experiments and work; dinner and another conference; they go to sleep at about 10**
13. Describe some health risks when travelling in space for a longer period of time? **they are exposed to more radiation; muscles and bones become weaker; the immune system weakens**;
14. How do astronauts exercise on board the ISS? **they have equipment for weightlifting; a treadmill and a stationary bike**
15. What is microgravity? **weightlessness**

2 TRUE or FALSE?

Mark the statements TRUE or FALSE. If the statement is FALSE write a correct statement into the box. The first TWO have been done for you.

		T	F	Correct Statement
1	The ISS is operated by the United States		✓	**The ISS is operated by several space agencies.**
2	The space station orbits the Earth 15 times a day.	✓		
3	The first crew was sent to the ISS 25 years ago.	✓		
4	The ISS will operate for at least another 25 years.		✓	**The ISS is scheduled to operate until about 2030.**
5	The first part of the ISS was launched in 1998 by an American spacecraft.		✓	**The first part of the ISS was brought by a Russian spacecraft.**
6	An American businessman was the first private citizen to travel to the ISS.	✓		
7	Sometimes you can see the ISS with the naked eye.	✓		
8	Waste that is produced on the ISS is brought back to Earth.		✓	**Waste is collected and released into space by an air stream.**
9	The atmosphere on board the ISS is almost the same as on Earth.	✓		
10	Carbon dioxide is a waste material that cannot be used.		✓	**Oxygen can be created by recycling carbon dioxide.**
11	On a typical workday the astronauts have conferences with the ground controllers.	✓		
12	Astronauts are exposed to less radiation than on Earth.		✓	**Astronauts are exposed to more radiation than on Earth**
13	Blood circulation slows down when you are weightless.	✓		
14	Crew members must exercise because muscles become weaker in space.	✓		
15	The immune system becomes stronger in weightlessness.		✓	**The immune system weakens in space.**

3 Match the words on the left with the definitions on the right.

A	altitude
B	zero gravity
C	satellite
D	weightlessness
E	monitor
F	air stream
G	canned
H	exercise
I	equipment
J	muscle
K	oxygen
L	waste
M	stationary
N	radiation
O	treadmill
P	ground controller
Q	conduct
R	fluid
S	panel
T	space agency

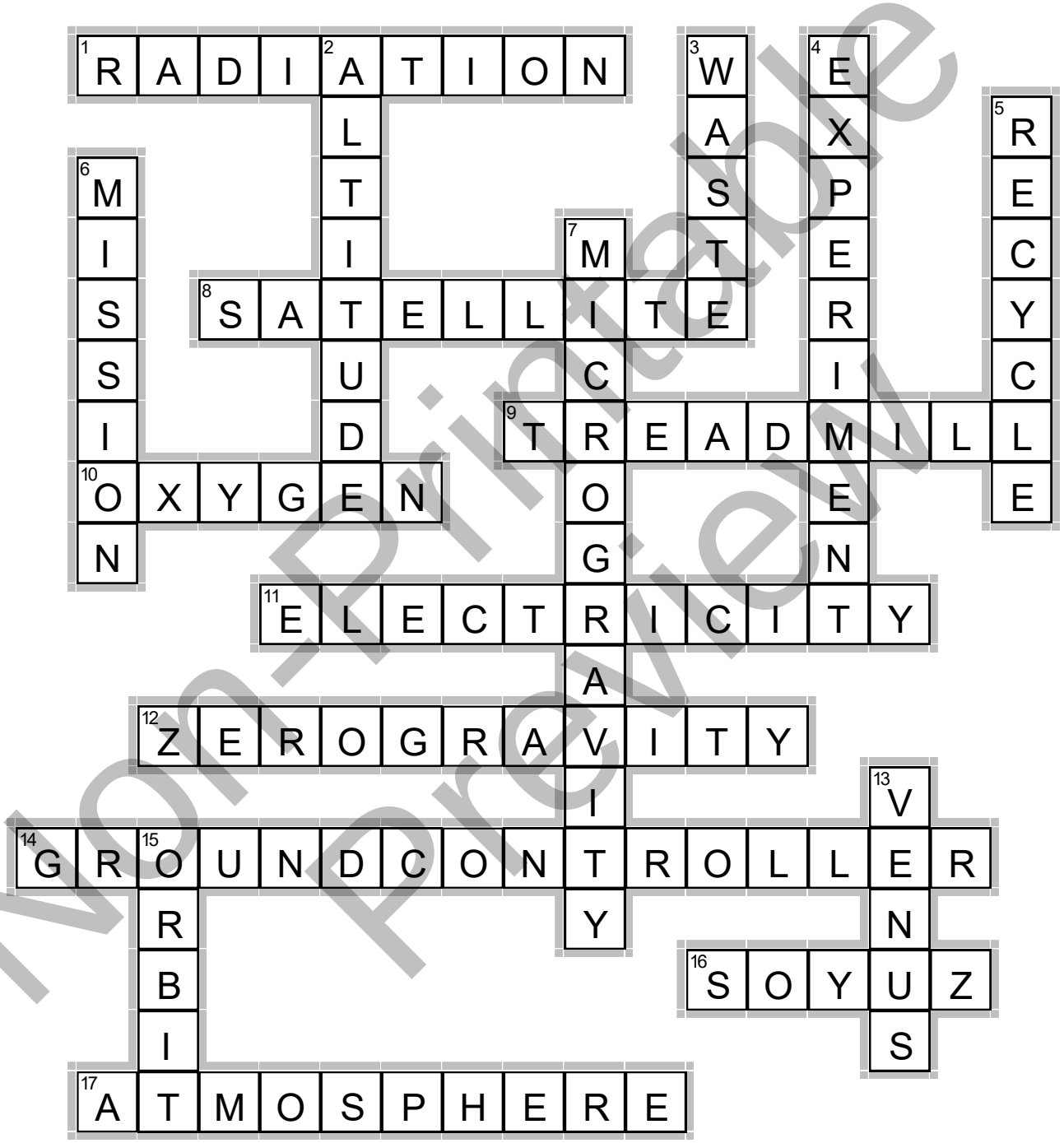
D	something that seems to float and have no weight
K	gas in the air that we need to breathe
G	in a round metal container
M	fixed; something that cannot be moved
B	when there is no force that pulls you down
I	machines or tools that you need to do a certain job
J	piece of flesh inside your body that helps you move
N	energy in the form of light or heat waves
A	height above the surface of the Earth
L	materials that are left over; which we do not need any more
R	liquid like water
H	to do sports or other activities in order to stay healthy
O	machine on which you run on a belt and stay at the same place
C	man-made object that goes around the Earth, moon or another planet
Q	to carry out
F	flow of air
S	a flat piece of metal
E	control, watch
T	organization that controls space research
P	person who watches the space station from Earth

4 **Match the beginnings of the sentences with the endings. There are TWO endings you will not need.**

A	The space station gives scientists an understanding
B	During the past 25 years American and Russian spacecraft
C	Experiments done in a zero-gravity environment
D	Breathable air can be delivered to the ISS from Earth
E	Astronauts on board the ISS
F	Regular exercise is necessary
G	The ISS gets its energy from solar panels
H	Pupils and students from around the world
I	There are a number of health risks
J	In 2001, Dennis Tito

C	cannot be done on Earth
I	connected with long-term space travel
E	are exposed to high levels of radiation
F	to prevent muscles and bones from weakening
A	of how the human body reacts during a longer space trip
	are more efficient than those on Earth
H	can take part in some of the experiments on board
D	or recycled from the air that astronauts breathe out
J	became the first tourist to visit the ISS
	is a test for future missions to Mars
B	have been delivering modules to the space station
G	that turn the sun's power into electricity

5 Crossword



6 Fill in the missing words from the box ! There are THREE words you will not need.

The International Space Station (ISS) is a **(1)** **man-made** object that goes around the Earth about 15 times every day. It orbits the Earth at an **(2)** **altitude** of about about 450 km. The ISS is a project **(3)** **shared** by many countries, including the United States, Russia, Japan, Canada, and European nations. Since 1998, astronauts from 26 countries have lived and worked there.

The ISS is like a science lab in **(4)** **space**. Scientists carry out **(5)** **experiments** there that are not possible on Earth, like studying how plants, animals, and people **(6)** **react** to living without **(7)** **gravity**. This helps us learn what might happen on long trips to places like Mars.

Astronauts on the ISS eat mostly frozen or **(8)** **canned** food, and they **(9)** **recycle** water and air as much as possible. Solar **(10)** **panels** give the station power. The crew's normal day starts at around 6 a.m. and includes work, exercise, **(11)** **conducting** experiments and taking part in conferences with ground controllers.

Living in space is not easy task. Astronauts face more **(12)** **radiation** than on Earth, and their muscles and bones can get **(13)** **weaker**. That's why they have to **(14)** **exercise** every day. Studying these changes helps scientists understand **(15)** **aging** and how to keep astronauts healthy on long missions.

aging
altitude
canned
conducting
exercise
experiments
gravity
man-made
mission
orbit
panels
possible
radiation
react
recycle
shared
space
weaker