

3

Up into space

How can I design a vehicle for the future?

1 Read and complete.

astronauts computer control panel gravity handles

_____ have a long training before they go to space. They practice moving in a zero _____ chamber. They wear a heavy spacesuit for several hours every day. They use _____ when they practice space walks. They learn to use the _____ and to program the _____.



2 Listen and check .

IN A SPACECRAFT, THE ASTRONAUTS ...

... play soccer.

... eat three meals a day.

... cook.

... take a shower.

... do experiments.

... go on spacewalks.

... do the cleaning.

... sleep.

3 Read and number the instructions for a spacewalk.

- Use the handles outside the shuttle.
- Attach the safety rope.
- Check the control panel.
- Open the portal.
- Put on a spacesuit.
- Use the handles inside the shuttle.

CODE CRACKER



Lift off!

I will learn words to describe a control panel.

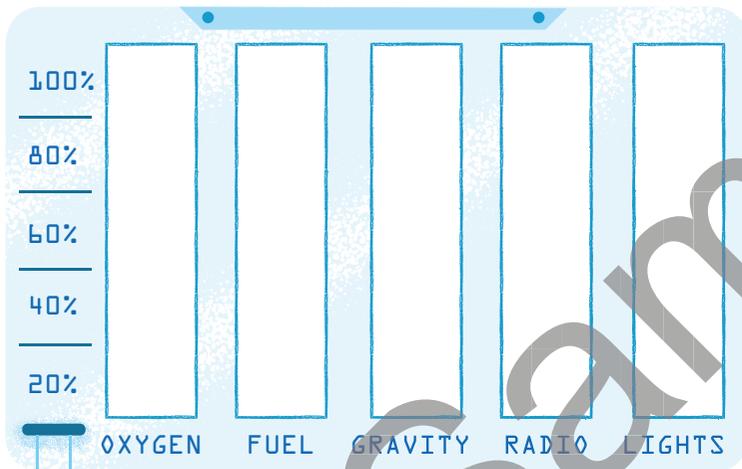
VOCABULARY

1 Read and complete.

The spacecraft is traveling to another _____ .
 The spacecraft has many parts. It has an _____ for firing the shuttle into space. There are _____ tanks for the engine. There are _____ tanks for breathing. There are a lot of _____ for seeing the controls. There's a _____ for the computer and a _____ for communicating with _____ . There's a _____ for checking supplies. There's a _____ in front of the instruments for the astronaut. There are _____ for moving in zero _____ .

control panel Earth engine fuel gravity handles lights oxygen planet radio screen seat

2 Listen and color.



EXTRA VOCABULARY

3 Look and write.

cable camera keyboard screen USB ports



- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

4 Complete the riddles. Then check the answers.

clear ear hear here
near year (x2)

1 You can _____ loud and _____ but it isn't your _____. What is it?

- a a radio
- b a screen

2 The new _____ is _____ . The old _____ is _____ . What's the date?

- a December 31st
- b January 1st

I can use words to describe a control panel.



Language lab

GRAMMAR: *WILL AND WON'T*

I will learn to talk about the future using will.

1 Listen and circle.

A city for the future

- 1 All buildings in the city **will** / **won't** be six floors high.
- 2 People **will** / **won't** grow food on the top of the buildings.
- 3 People **will** / **won't** use water tanks to collect rainwater.
- 4 The air **will** / **won't** be very clean. People **will** / **won't** use oxygen tanks.
- 5 People **will** / **won't** use cars. They **will** / **won't** travel by bus.
- 6 People **will** / **won't** use plastics. They **will** / **won't** recycle food waste.

2 Check eight features for an apartment building in the future.

	bedroom	kitchen	living room	backyard
computer				
screen				
radio				
robot				
smart lights				

3 Look at 2 and complete.

CODE CRACKER

My apartment building

- 1 The have .
- 2 The have .
- 3 The have .
- 4 The have .
- 5 The have .
- 6 The have .

Key

- 1  Use the green words in 2.
- 2  Use *will* or *won't*.
- 3  Use the blue words in 2.

4  Ask and answer with a partner. Take notes.

Name: _____

Features of building

	bedroom	kitchen	living room	backyard
computer				
screen				
radio				
robot				
smart lights				



Will your building have a robot?

Will the robot be in the backyard?

Yes, it will.

No, it won't. It will be in the kitchen.



5  Choose a room from your apartment. Make a model and write a description.

- 1 Find a shoebox. Cut off the lid.
- 2 Cut out the door and the windows.
- 3 Paint the inside of the box.
- 4 Use recycled materials to make the furniture, for example, bottle tops, old card, aluminum foil.
- 5 Paint the furniture. Glue it into position.
- 6 Use modeling clay for extra features.



My _____

This will be the best _____ in the city.

It will _____

It won't _____

I made the model with _____

I can talk about the future using **will**.



Story lab

I will read a story about a space colony.

READING



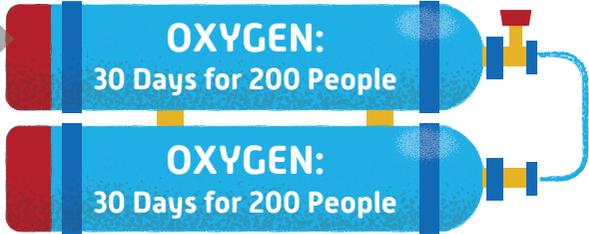
1 Read and answer.

- 1 Why are people living in a space colony? _____
- 2 What is the problem in the space colony? _____
- 3 Why are the Earth robots worried about the humans? _____
- 4 Why do the Earth robots open the secret door for the children? _____
- 5 Where can the children play on Earth? _____
- 6 What do the adults from Colony 369 promise? _____

2 Read and complete with the number of days.

MATH ZONE

- 1 When there are 200 people in the space colony, they have oxygen for ____ days.
- 2 When there are 100 people, they have oxygen for ____ days.
- 3 When there are 400 people, they have oxygen for ____ days.
- 4 When there are 50 people, they have oxygen for ____ days.



3 Find words in the story that mean ...

- 1 ... to make very, very dirty. _____
- 2 ... a new city a long way from the capital. _____
- 3 ... a moving machine with a computer program. It does human tasks. _____
- 4 ... to make something so bad it cannot survive. _____
- 5 ... to send and receive a message. _____
- 6 ... to find a solution. _____

Experiment lab

SCIENCE: SOUND AND COMMUNICATION

I will learn how to make a telephone.

1 Read and match.

WE CAN SHOW SOUND WAVES IN GRAPHS

1

Sound can have a high frequency or pitch. We hear this as a high sound, like a bird. There are a lot of waves in the graph for a high sound.

2

Sound can have a low frequency or pitch. We hear this as a low sound like the bark of a big dog. There aren't a lot of waves in the graph for a low sound.

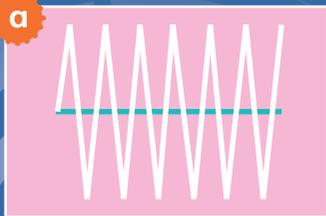
3

Sound can be very loud with a high volume. When a sound is loud, the lines on the graph are taller.

4

Sound can be very quiet with a low volume. When a sound is low, the lines on the graph are shorter.

a



b



c



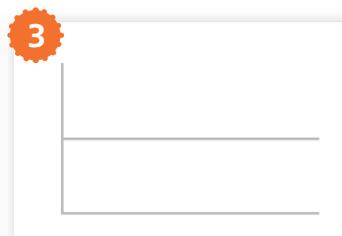
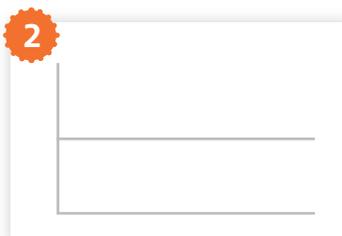
d



2 Listen and circle.

- 1 Pitch: **high** / low Volume: **loud** / quiet
- 2 Pitch: **high** / low Volume: **loud** / quiet
- 3 Pitch: **high** / low Volume: **loud** / quiet
- 4 Pitch: **high** / low Volume: **loud** / quiet

3 Draw graphs for the sounds in 2.



Values

Communicate with deaf people.

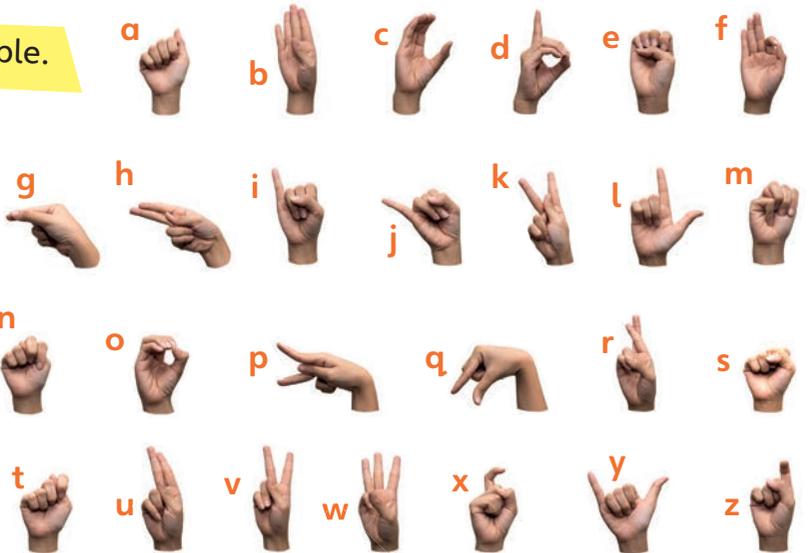
4 Read and check .

When you speak to a deaf person, ...

a ... look at the person.

b ... speak clearly.

c ... shout.



5 Sign your name to a partner.

EXPERIMENT TIME

Report

1 Check the correct picture and complete the sentences.



Experiment results

My friend can hear me when ...

1 _____ . 2 _____ .

2 Read and circle. Then discuss with a partner.

How difficult was the experiment?

- | | |
|------------------------------|-----------------------|
| 1 Making a hole in the cup. | Difficult / OK / Easy |
| 2 Tying a knot. | Difficult / OK / Easy |
| 3 Connecting the paper clip. | Difficult / OK / Easy |
| 4 Hearing my partner. | Difficult / OK / Easy |
| 5 Talking into the cup. | Difficult / OK / Easy |

Tying a knot was difficult because I'm not good with my fingers.



I know

how to make a telephone.



Questions with *will*

COMMUNICATION

I will ask and answer about the future using will.

1  Read and check or cross .

There are three Eco groups. They all make promises for the future. all the promises are different. All groups will recycle two things. They will only travel one way. They won't use one thing.

- ▶ **Group A** won't recycle glass. **Group C** will recycle food and glass. **Group B** won't recycle food.
- ▶ **Group B** won't travel by foot or by bus. **Group A** will travel with Group B. **Group C** won't use a vehicle.
- ▶ **Group C** will use plastic. **Group A** will use plastic bags, but they won't use plastic bottles. **Group B** will use plastic bottles, but they won't use plastic bags.



	Recycle			Travel by			Use		
	food	glass	paper	foot	bike	bus	plastic bags	cars	plastic bottles
Group A									
Group B									
Group C									

2  Complete your plan. Then ask a partner and take notes.

FUTURE PLANS

	Me	My partner
Recycle		
Travel by		
Stop using		



What will you recycle in the future?

I'll recycle plastic and paper.



Writing lab

A BROCHURE



I will learn to write a brochure.

1 What will it be like in the future? Choose one and discuss.



a street



a school



a park



a shopping mall



What equipment will there be at a school in the future?

I think there'll be computers for all the students.



2 Make a brochure and draw a picture for the place you chose in 1.

FOR THE FUTURE

Name: _____

Location: _____

Indoor features: _____

Outdoor features: _____

3 Write about the place you chose in 2.

_____, there will be _____

I can

write a brochure.



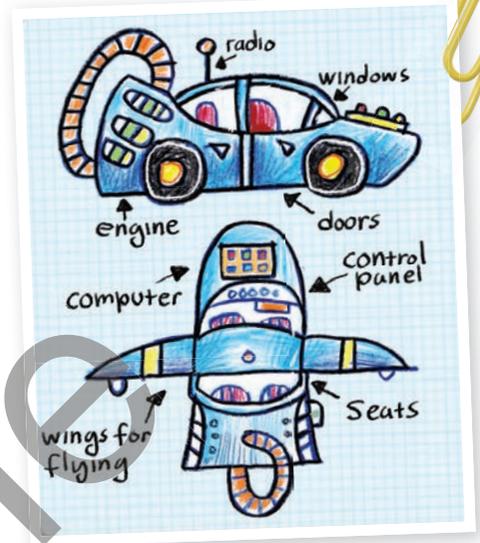
PROJECT AND REVIEW UNIT 3

Design a vehicle for the future

Project report

1 Check the features on your vehicle.

computer	<input type="checkbox"/>	engine	<input type="checkbox"/>	handles	<input type="checkbox"/>
lights	<input type="checkbox"/>	radio	<input type="checkbox"/>	screen	<input type="checkbox"/>
	<input type="checkbox"/>	seats	<input type="checkbox"/>		<input type="checkbox"/>



2 Read and answer.

1 How long will the vehicle be?

2 How much will the vehicle weigh?

3 How fast will it go? _____

4 What will be on the control panel? _____

3 Write a description of your vehicle.

Name: _____

It can _____.

My vehicle is _____.

On the outside, _____.

On the inside, _____.

4 Complete the sentences and answer.

difficult	It is _____ drawing a blueprint.
easy	It is _____ following instructions.
OK	It is _____ talking in English.

What did you learn?

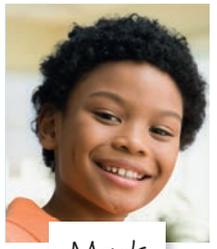
1 I learned _____.

2 _____

3 _____



5  Listen and write the names.



Mark



Anna



Simon



Tessa

_____ 'S FUTURE PLANS

- live in a space colony
- play indoors
- work in the control room

_____ 'S FUTURE PLANS

- live in a space colony
- work in the vegetable garden
- play indoors

_____ 'S FUTURE PLANS

- live in an underwater city
- work in the vegetable garden
- play outdoors

_____ 'S FUTURE PLANS

- live in a underwater city
- work in the control room
- play indoors

6 Look at 5. Read and circle T (True) or F (False). Then correct the false sentences.

- 1 Mark will wear a spacesuit. T / F _____
- 2 Anna won't work in the control room. T / F _____
- 3 Tessa will play outdoors. T / F _____
- 4 Simon won't wear a swimsuit. T / F _____
- 5 Mark won't grow vegetables. T / F _____
- 6 Anna will wear a spacesuit. T / F _____
- 7 Tessa won't work in a control room. T / F _____
- 8 Simon will live underwater. T / F _____

7 Complete the plans for your future.

IN THE FUTURE

Live: _____

Work: _____

Play: _____

Will you live in this city?

What work will you do?



8  Ask and answer with a partner.