

OBJECTIVES

Reading

- Reading comprehension – Can understand short paragraphs on subjects of personal interest (e.g., sports, music, travel) if written using simple language and supported by pictures.
- Reading comprehension – Can understand the main themes of a simplified story.

Listening

- Listening comprehension – Can identify the main points in short talks on familiar topics, if delivered slowly and clearly.
- Response to spoken prompts – Can identify simple information in a short video, provided that the visual supports this information and the delivery is slow and clear.

Speaking

- Spoken production – Can describe a picture showing a familiar scene or activity using simple language, if prompted by questions.
- Spoken production – Can talk about plans for the near future in a simple way.

Writing

- Written production – Can write simple sentences about future plans using fixed expressions.
- Written production – Can write simple facts about a topic on a planning sheet.

KEY LANGUAGE

Key vocabulary	Phonics	STEAM	Grammar
control panel Earth engine fuel gravity handle lights oxygen planet radio screen seat	The sound /tə/ clear hears near nearly year	distances echo energy louder quieter sound source vibrate waves	We will live on a space colony. We won't need fuel. Will we recycle our waste? Yes, we will. No, we won't. Where will you live? What will you eat? When will you arrive? Who will you see? How will you live?

PROJECT: DESIGN A VEHICLE FOR THE FUTURE

Students will find out about how vehicles move and the features they've got, then choose a vehicle and its features suitable for the future. Next, they will make a blueprint for the vehicle and then present their vehicle for the future to the class and ask for suggested improvements.

Materials: pencils, notebooks, colouring pencils, white paper or card

EXPERIMENT LAB: SOUND AND COMMUNICATION

Students will learn about how sound travels and is used to communicate, then how to make and test a telephone.

Materials: pencils, notebooks, plastic or paper cups, string, paper clips

Pearson English Portal digital resources

Go to the Pearson English Portal and click on 'Resources' for more teaching resources, including videos and games.

CODING: FUNCTIONS AND CONDITIONALS

- Students will learn to take pre-existing simple functions and tweak for a different task or outcome.
- Students will learn to understand 'or' to identify when something could be either one thing or another.

MATHS

Students will learn how to identify percentages from fractions.

VALUES AND SOCIAL-EMOTIONAL LEARNING: LOOK AFTER YOUR WORLD

Students will learn how they can protect the environment and look after the world we live in.

CREATIVE ACTIVITIES

Make your own picture dictionary.

This feature occurs in each Vocabulary lesson and encourages students to process new vocabulary through drawing and writing.

Act out the story in groups.

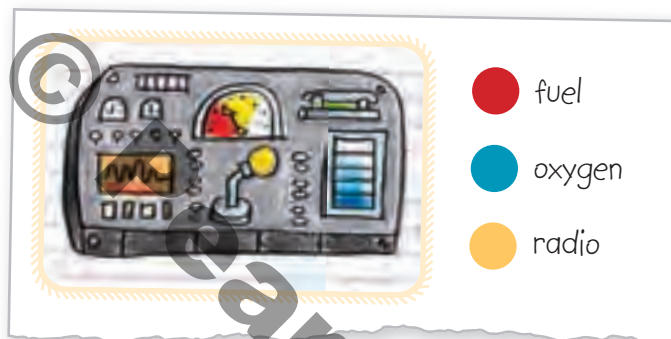
This feature occurs in each Story lab lesson and will help students revisit and produce core language learnt so far in the unit, as well as collaborate with other students in a fun context.

Discuss the future with a partner.

Students use their imagination and question words to discuss what they think their life will be like living on a space colony.

Make a brochure for your space city.

Students use their creative writing skills, persuasion and imagination to invent a brochure for a space city.



How can I design a vehicle for the future?

OPENER

Up into space

How can I design a vehicle for the future?

2 Read the text. Then listen and answer.

UP INTO SPACE

Welcome to the space centre. In space, there is no gravity. This is called **zero gravity** and this is why astronauts float. In the space centre, you can experience zero gravity. You will float! There are handles so you can move around and a control panel which shows you important information about the space station.

3 What can you do in zero gravity? Discuss with a partner.

exercise	<input type="checkbox"/>	get dressed	<input type="checkbox"/>
have a shower	<input type="checkbox"/>	drink from an open cup	<input type="checkbox"/>
eat soup	<input type="checkbox"/>	brush your teeth	<input type="checkbox"/>

We think it's impossible to have a shower. Why?

4 Complete the code.

CODE CRACKER

0	1	2	3	4
5	6	7	8	9

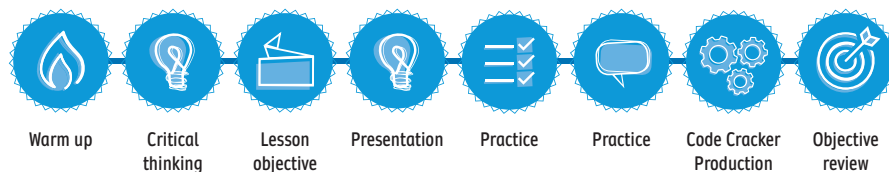
The code to enter the room is

7

↑ → → ↓ ← ↑ ← ←

42 forty-two
43 forty-three

Lesson flow



LESSON OBJECTIVE

I will learn about space.

KEY LANGUAGE

control panel gravity handle

Warm up

- Ask students *What can you see in space?* Then start to draw a spidergram with the word *space* in the middle. Elicit a few answers from students, e.g., *astronaut, Sun, space station, rocket*, and write them around the circle with *space*.

- Have students continue the spidergram in small groups or pairs. Give them big sheets of paper to use and encourage them to use different colours to organise their thoughts.
- Assist** Take time to check students' work and add any words they can't spell or don't know in English to the board.

CRITICAL THINKING

- Ask students *How can I design a vehicle for the future?* Explain that they will design a vehicle for the future as their final project. Ask what they will need to think about for their project. Write ideas on the board (*vehicles in the future, what they will be used for, what they will look like*, etc.).

- **Involve** Ask students to think about what they will learn in order to complete the project in English (vocabulary for vehicles in the future, how to talk about the future, etc.). Ask them to discuss ideas with their partner.
- **Assist** Go around the class and ask each student to share one idea. Write ideas on the board. Encourage students to use English, but also accept ideas in L1 and provide the English translation.

Lesson objective

- Introduce the lesson objective. Say *Today I will learn about space.*
- **Involve** Students will learn to recall and identify what they already know about space and learn some new language to be able to discuss those ideas in English.

CRITICAL THINKING

Presentation

1 Look and think of questions about the photo. Then ask and answer with a partner.

- Ask students to look at the photo and think about questions they can ask their partner. Then have students ask and answer with their partners.
- **Differentiation** Have students write a paragraph about what they think is happening in the photo. Ask questions to give them ideas, e.g., *Who are the people? (They are students) What are they doing? (learning about space) Where are they? (in a space centre).* Less confident students can write in the third person, while more confident students can try to write it in the first person, as if they are one of the children in the photo.

Practice

2 021 Read the text. Then listen and answer.

(Model answers: *They float., At the space centre and in space., So you can move around., It shows important information about the space station.*)

- Have students read the text one by one or all together as a class.
- **Assist** Have students discuss any words they don't know with their partners and work out the meaning from the context and the photo. Remind students that they can use a dictionary.
- Have students listen and answer the questions in their notebooks. Play audio 021.
- **Monitor** Check answers with the class. Play the audio again if needed.
- Introduce the new vocabulary (*control panel, gravity, handle*) and encourage students to say the words out loud.

COMMUNICATION

Practice

3 What can you do in zero gravity? Discuss with a partner.

(Answers: *exercise, get dressed, brush your teeth*)

- Have two students read the example in the speech bubbles, then ask students to discuss with their partner. Remind them to think about why something is possible or impossible.
- **Monitor** Monitor and provide support and encouragement when needed. Ask students to correct each other's sentence structure.
- **Challenge** Show some pictures of how astronauts live without gravity in space. Ask them to look for similarities and differences, e.g., *drinking liquids through straws, but not in open cups.* Then have them draw and label pictures of ways they could do the actions in Activity 3 in zero gravity.

CODE CRACKER

Production

4 Complete the code.

(Answer: 72480)

- **Coding syllabus:** Students will learn to take pre-existing simple functions and tweak for a different task or outcome.
- Students will learn how to use functions by following the sequence of the arrows to find the number code.
- Have students look at the block of numbers 0–9, then show them the first number of the code and the sequence of arrows below. Explain that the number 7 is the starting point. Ask *What's next?* Show them the arrow pointing up and then point at the number 2. Have students complete the code on their own, then check answers as a class.
- **Assist** Go through an example with students to ensure they understand how to use the arrows and the grid of numbers. Have them put their finger on 7 and then move their finger one block in the direction of the arrow. Then ask *What number is your finger on? (2).*
- **Extra** Have students write their own codes using the numbers and arrows. They can give the code to their partner to find the answer.

Objective review

- Revisit the lesson objective. Say *Now I know about space.*
- **Involve** Encourage awareness of what students know by eliciting full sentences using the new vocabulary.

Lift off!

VOCABULARY



Lift off!

VOCABULARY

1 Listen and number. Sing the song.

Commander Sally Holms is the captain of the spacecraft. She is going to leave the Earth on a mission to another planet. She is checking the percentages on the control panel before lift-off.

SONG TIME

Commander Sally

Control panel on, check the **oxygen**.
Commander Sally, do you hear? Yes, I hear you loud and clear.
Computer on, check the **fuel**.
Commander Sally, do you hear? Yes, I hear you loud and clear.
Radio on, check the **lights**.
Commander Sally, do you hear? Yes, I hear you loud and clear.
Screen on, check the **gravity**.
Commander Sally, do you hear? Yes, I hear you loud and clear.
Take your **seat**. Hold the **handles** tight.
Fire all **engines**! Three, two, one!
Commander Sally, have a nice flight!

Commander Sally, do you hear?

Yes, I hear you loud and clear!

2 What does Commander Sally need for ...? Discuss with a partner.

breathing communicating
controlling moving working

She needs the control panel for
controlling the spacecraft.

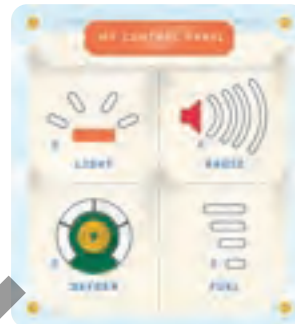
I will learn words to
describe a control panel.

3 Match and colour in the circles.

MATHS ZONE

1/4	75%	
1/2	25%	
3/4	100%	
4/4	50%	

4 Colour the levels. Then ask and answer with a partner.



What percentage
is your fuel at?

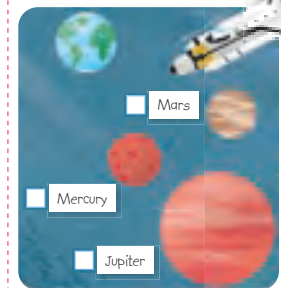
It's at fifty percent.

5 Make your own picture dictionary of a control panel with a colour-coded key.



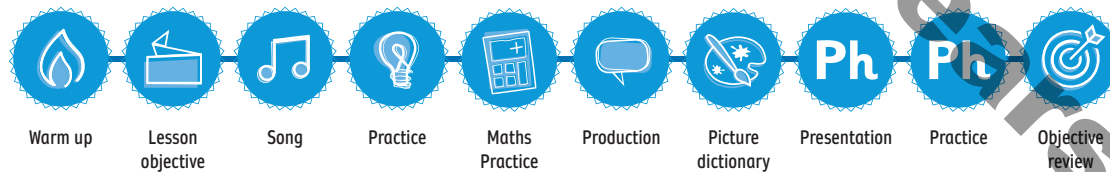
6 Listen and read. Tick the answer.

Commander Sally hears loud and clear.
And off she goes for nearly a year.
The planet isn't far, it's really near.
So, where does she go?



7 Find and circle words with the same sound as ear in 6.

Lesson flow



LESSON OBJECTIVE

I will learn words to describe a control panel.

KEY LANGUAGE

Key vocabulary

control panel
Earth
engine
fuel
gravity
handle

Phonics

The sound /ɪə/
clear
hears
near
nearly
really
year

Warm up

- Put the flashcards from Level 3, Unit 4 Space on the board, or find pictures of the words (space, astronaut, space station, rocket, satellite, work, launch, travel, live, breathe, study, float). Elicit the space words as you point at each picture.
- Write the first letter of one of the words on the board and have students try to guess what the word is. If they can't guess, keep adding letters.
- Challenge** Write space words on the board in jumbled letters, e.g., c t o e r k (rocket). Have students work on their own to solve the puzzles, then check answers as a class and have students spell out the words.

Lesson objective

- Introduce the lesson objective. Say *Today I will learn words to describe a control panel.*
- **Involve** Students will learn new words to describe a control panel.

Song 🎵

1 🎧 022 Listen and number. Sing the song.

(Answers: 1 oxygen, 2 computer, 3 fuel, 4 radio, 5 lights, 6 screen, 7 gravity, 8 seat, 9 handles, 10 engines)

- Play audio 022. Point at the number boxes on the picture and explain that students should number the parts of the control panel in the order they hear them in the song.
- Play the audio again. Have students listen and sing along using the lyrics on the page.
- **Extra** Divide the class into two groups to sing the song. The first group sings the lines Commander Sally sings; the second group sings the lines starting *Commander Sally*. Then they swap, so each group sings the different lines.



CRITICAL THINKING

Practice

2 What does Commander Sally need for ...? Discuss with a partner.

(Answers: She needs the: handles/gravity for moving, lights/screen/seat for working, oxygen for breathing, fuel/computer/engines for controlling the spacecraft, radio for communicating.)

- Have two students read the speech bubbles, then ask students to discuss in pairs.
- **Assist** Go around the class and ask for an answer from each pair. Write the answers on the board and discuss any similarities or differences.

MATHS ZONE

Practice

3 Match and colour in the circles.

(Answers: $1/4 = 25\%$ – colour in one section, $1/2 = 50\%$ – colour in two sections, $3/4 = 75\%$ – colour in three sections, $4/4 = 100\%$ – colour in four sections)

- Students will learn how to identify percentages from fractions.
- **Challenge** Have students repeat the activity in their notebooks, but this time with different fractions and percentages, e.g., $1/5 = 20\%$, $3/6 = 50\%$, $9/10 = 90\%$. Have them draw circles with the same number of segments as the fraction denominator and colour the segments to match.



COMMUNICATION

Production

4 Colour the levels. Then ask and answer with a partner.

- Ask students to imagine they are in a spacecraft and have them colour the levels as high or low as they want on the control panel. Then ask students to ask and answer about their control panel with their partner.



CREATIVITY

Picture dictionary

5 Make your own picture dictionary of a control panel with a colour-coded key.

- Ask students to add to the picture dictionary they started in Unit 1 – see page 13 for reference.
- Ask students to close their Pupil's Books and encourage them to use their imagination to draw a control panel, create a colour-coded key with all the new words and colour their control panel using the key.
- **Differentiation** See TB pages 17–18 for ideas.

Ph PHONICS

Presentation

6 🎧 023 🎧 Listen and read. Tick ☒ the answer.

(Answer: Mars)

- Students will learn the sound /ɪə/ as in *hear* /hɪr/.
- Play audio 023. Have students listen, read and tick the correct planet.
- Play the audio again for students to say the chant in time to the audio. Encourage them to emphasise the /ɪə/ sounds.
- **Assist** Play the *Phonics Pronunciation* video. Ask students to sit and watch quietly. Play it again and ask students to copy what they see and hear.

Ph PHONICS

Practice

7 🎧 Find and circle words with the same sound as *ear* in 6.

(Answers: hears, clear, nearly, year, near)

Objective review

- Revisit the lesson objective. Say *Now I can use words to describe a control panel.*
- **Involve** Encourage awareness of what students know by eliciting full sentences using the new vocabulary and having them identify those words in pictures.

Language lab

GRAMMAR: WILL AND WON'T

Language lab

GRAMMAR: WILL AND WON'T

1 Watch the video.



I will learn to talk about the future using will.

We will live on a space colony.
We won't need fuel.
Will we recycle our waste?
Yes, we will.
No, we won't.

2 Read and number the pictures.



What do you think life will be like in the future?

I think in the future we will live in a space colony like this one. The colony will orbit the Earth. We won't need fuel because we will get all our energy from the Sun. There will be six floors. We will grow food on the 6th floor because it will have the most sunlight. We will recycle all our waste on the 1st floor because it will be the darkest. We will live on the 3rd floor, but we won't live in houses. We will play on the 2nd floor and we will work on the 4th floor. We will do our shopping on the 5th floor.

46 forty-six

3 Read and write four sentences. Discuss with a partner.

We will ...
We won't ...

wear school uniforms.
wear oxygen masks.
use radios to talk to friends.
have computer screens in our hands.
have cars without engines.
live on another planet.

We won't have cars without engines.

I don't agree.



Why?



Because we will have electric cars.

- 1 In the future, _____
- 2 _____
- 3 _____
- 4 _____

4 Complete the lists.

Classrooms in the future?

There will be _____ and _____

There won't be _____ or _____

Bedrooms in the future?

There will be _____ and _____

There won't be _____ or _____

5 Play Find your words.



Will there be beds in the bedroom?

Yes, there will.

No, there won't. Will there be screens in the classroom?



forty-seven 47

Lesson flow



Warm up



Lesson objective



Video



Presentation



Practice



Production



Production



Production



Objective review

LESSON OBJECTIVE

I will learn to talk about the future using will.

KEY LANGUAGE

We will live on a space colony. Yes, we will.
We won't need fuel. No, we won't.
Will we recycle our waste?

Warm up

- Draw a tower with 12 floors on the board and place on each floor a flashcard for control panel words. Ask students to make a sentence starting *On the (9)th floor, there is ...*

- Write the words for the flashcards on the board one at a time and have individual students match them to the flashcards and say the words.
- Extra** Have students sit in a circle. Start by saying *I went into space and I took oxygen*. Then throw a ball to a student and have them continue the sentence, adding something they took into space (*I went into space and I took oxygen and a seat*). Each student continues adding something to the sentence until someone forgets an item or everyone has made a sentence.

Lesson objective

- Introduce the lesson objective. Say *Today I will learn to talk about the future using will*.

- **Involve** Students will learn to talk about the future using *will*. They will practise using statements, and short questions and answers in different contexts.

Video

1 Watch the video.

- Play the Unit 3 video. Ask students to sit and watch quietly.
- **Assist** Play the video again and ask questions to check understanding. Pause after Avatar answers the first question and ask *How will we sleep in space? (standing up) What will we choose? (our dreams)*. At the end, ask *What will people eat in space? (the same food) Will we cook the food? (no) What does Avatar eat? (potatoes and ice cream)*.

Presentation

- Point at the grammar box and read the examples. Ask students to repeat.
- **Assist** Ask students if the sentences refer to the past, present or future (*future*). Then ask when we use *will/won't* (*for positive/negative questions and answers*).
- Ask students for another example of the question, e.g., *Will (you go to school in space)?* Elicit different answers (*Yes, I will. I'll go to space school to learn to fly./No, I won't.*).
- Remind students that they've got a Grammar Reference on page 148 of their Pupil's Books.
- **Differentiation** Have students look at pages 42–43 and make sentences about the picture using *will*, e.g., *The children will float in zero gravity*. More confident students can try to include items not in the picture, e.g., *They won't float on Earth*.

Practice

2 Read and number the pictures.

(Answers: 6th, 3rd, 1st, 2nd, 4th, 5th)

- Tell students to look at the pictures and read the text, then number each picture.
- **Assist** Have students read the text as a class. You could have them read out loud at the same time or read a sentence each one by one. Ask students if there are any words or phrases they don't understand, then have other students try to answer the questions.

COMMUNICATION

Production

3 Read and write four sentences. Discuss with a partner.

- Have students read the text, then choose and write four sentences for things they think will be true in the future.

- Have two students read the speech bubbles, then ask students to discuss the sentences they wrote in pairs. Remind them to give reasons why they agree or disagree using *will*.
- **Monitor** Listen to students and provide support if needed. Take notes on any general issues with giving reasons when agreeing and disagreeing, and sentence structure.

Production

4 Complete the lists.

- Ask students to imagine what life will be like in the future, focusing on classrooms and bedrooms. They can think about what they will or won't have and compare it to now. Then have students complete the lists individually.
- **Assist** Go around the class and ask each student to share one idea. Write the ideas on the board and discuss any similarities or differences.
- **Digital literacy** Discuss with students how to search on the internet to find out what life will be like in the future. Show them how to use a search engine and look for reliable websites, e.g., type in 'What will classrooms be like in the future?' Then go through the list of results and make suggestions as to the most reliable sources, e.g., government websites and official bodies, science museums and research centres.

COMMUNICATION

Production

5 Play Find your words.

- Have two students read the example in the speech bubbles. Then have students walk around the class and ask and answer with other students to find someone with the same item on their lists in Activity 4. Each time they find a student with the same item, they can tick it on their list. The aim is to tick all the items on their lists, if possible.
- **Challenge** Have students choose and draw either a classroom or bedroom in the future. Have them add labels and short explanations for the items that will be new in the future, e.g., *virtual reality headsets – each student will have their own headset so that they can study a subject of their choice at a rhythm that works for them*.

Objective review

- Revisit the lesson objective. Say *Now I can talk about the future using will*.
- **Involve** Encourage awareness of what students can do by asking them to make statements about what life will be like in the future and eliciting answers using *will*.

Story lab

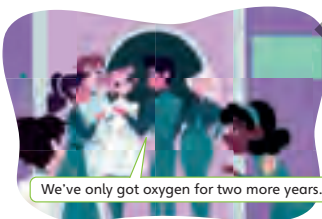
READING

I will read a story about a space colony.

1 Look at the pictures. Where do you think they are?

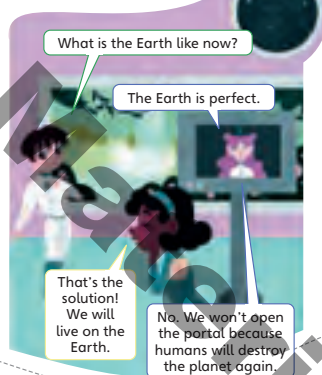
COLONY 369

1 Hundreds of years ago, the Earth was very polluted. People went to live on space colonies. One day, there was a problem with the control panel on Colony 369. Scientists worked day and night to find a solution, but nothing worked.



2 Read and listen.

2 Nia wished humans could live on the Earth again. Her robot friend, Bob, told her there were robots on the Earth. Bob used his special radio to communicate with them.



Values Look after your world.

3 Imagine you are Nia and complete.

We promise ...

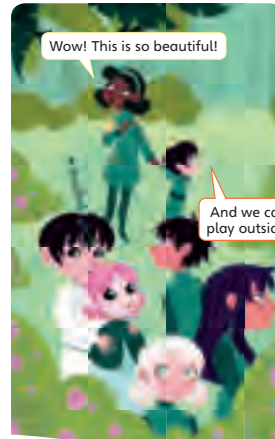
We will _____

We won't _____

Signature: _____

4 Why do the Earth robots trust the children? Discuss with a partner.

3 So Nia and Bob worked out a plan with the Earth robots. All the children went to a secret place. The Earth robots opened the special space door, but only for the children.



4 Back on the colony, the adults were worried. Where were all the children? Then suddenly the screens came on.

Hello! This is Nia. We are on the Earth. Will you promise that you won't pollute the Earth ever again? Then we will open the space door.



5 That night the people from Colony 369 returned to the beautiful Earth.



5 Number the sentences in order. Which sentences happen before the story begins?

- | | |
|--|---|
| <input type="checkbox"/> The Earth robots open the special door. | <input type="checkbox"/> The adults promise they won't pollute the Earth. |
| <input type="checkbox"/> Nia and Bob find a solution. | <input type="checkbox"/> People moved to a space colony. |
| <input type="checkbox"/> Colony 369 has only got oxygen for two years. | <input type="checkbox"/> The children arrive on the Earth. |
| <input type="checkbox"/> People polluted the Earth. | <input type="checkbox"/> The adults arrive on the Earth. |

6 Act out the story in groups.

Lesson flow



Warm up



Lesson objective



Pre-reading



Reading



Values Comprehension



Comprehension



Production



Act out



Objective review

LESSON OBJECTIVE

I will read a story about a space colony.

Warm up

- Ask students *What do we imagine life in the future will be like?* Elicit sentences using the new language from the unit (*There will be space colonies. We will fly around in spacecrafts. We won't live on Earth.*).
- Have students look at their Pupil's Books and make sentences with their partner. Remind them to use the future with *will*.

- Extra** Have one student come to the front of the class and mime doing an activity for other students to guess using *We will (ride bikes)*. You can whisper to them what to do or show them a flashcard. The student who guesses the answer takes the next turn.

Lesson objective

- Introduce the lesson objective. Say *Today I will read a story about a space colony.*
- Involve** Students will listen to and read a story about a space colony. They will use the information from the pictures and words to understand the story.

CRITICAL THINKING

Pre-reading

- 1 Look at the pictures. Where do you think they are?

(Answer: They are in space/on another planet.)

- Ask students to look at the pictures and find clues that tell them where the story is set. Write their ideas on the board. Once you've read the story together, you can compare these ideas and discuss why there are similarities or differences.

Reading

- 2  024 Read and listen.

- Play audio 024 and have students listen and follow the story in their Pupil's Books.
- **Monitor** Ask questions to check understanding. Point at the main characters in the story and ask *Who are they?* (Nia and Bob). Point at the first picture and ask *What's the problem on Colony 369?* (They've only got oxygen for two more years.). Point at the third picture and ask *Where are the children?* (They are on the Earth.). Point at the fifth picture and ask *What did the people from Colony 369 promise Nia?* (They promised they won't pollute the land, air or water.).
- Read the story as a class with students reading a sentence each.
- **Challenge** Have students read the story as a class again, but when they see a word to describe people or species (people, scientists, humans, (Earth) robots, children, adults), they clap instead of saying the word.

Values

Comprehension

- 3 Imagine you are Nia and complete.

(Model answer: We will recycle all our rubbish. We will use clean energy. We won't pollute the water. We won't destroy the forests.)

- Students will learn the value of how they can protect the environment and look after our world.
- Have students discuss in groups what we can do to protect the environment and our world. Then have them make a list of things they think are good and bad for the environment.
- Ask students to write one thing they promise they will do, and one thing they promise they won't do. Remind them to sign their promise.
- **Extra** Have students read their promises to the class and ask students to put their hands up if they agree with the promise.
- Remind students of the value *Look after your world*.

COMMUNICATION

Comprehension

- 4 Why do the Earth robots trust the children? Discuss with a partner.

(Answer: They trust the children because they didn't destroy the Earth.)

CRITICAL THINKING

Production

- 5 Number the sentences in order. Which sentences happen before the story begins?

(Answers: 1 People polluted the Earth., 2 People moved to a space colony., 3 Colony 369 has only got oxygen for two years., 4 Nia and Bob find a solution., 5 The Earth robots open the special door., 6 The children arrive on the Earth., 7 The adults arrive on the Earth., 8 The adults promise they won't pollute the Earth., sentences 1 and 2)

- Have students number the sentences in order, then underline the sentences that happen before the story begins. Check answers as a class.
- **Assist** Ask *How do we know that these things happen before the story begins?* (because they are part of the introduction and the setting).

CREATIVITY COLLABORATION

This activity encourages Collaboration. For further support download our Collaboration checklist.

Act out

- 6 Act out the story in groups.

- Put students in groups of five and ask them to decide who plays the narrator and each character. Ensure students are happy to play the character they have picked.
- Have each group practise individually before bringing them together to act out in front of the class. Encourage students to support each other. After each group has acted out the story, have them clap or say *Well done!*
- **Differentiation** Put students in groups of the same ability. Have less confident groups practise acting out the story as it is, while more confident groups can make changes. For example, they can change the ending, change what happens or extend the story.

Objective review

- Revisit the lesson objective. Say *Now I can read a story about a space colony.*
- **Involve** Encourage awareness of what students can do by asking them to give you a summary of the story. Then read a sentence out loud.

Experiment lab

SCIENCE: SOUND AND COMMUNICATION

Experiment lab

SCIENCE: SOUND AND COMMUNICATION

I will learn how to make a telephone.

Sound is a type of energy that is made when things vibrate, for example, when we hear the engine of a car. We use sound to communicate with others over short and long distances.



1 Tick ☒ the pictures that show sound being used.



2 Read, listen and complete.

Sound travels in waves. Sound waves get quieter as they travel. That's why we hear sound **louder** when we are near the **source**, and **quieter** when we are far away. Sound waves travel in all directions. They have to travel through something, like a gas, liquid or solid that will vibrate, for example: air, water or glass. They cannot travel in outer space because there isn't anything that will vibrate.

3 Read, listen and draw the echo.

When sound waves hit hard objects, they change direction and we hear an echo of the sound. If you stand in an empty room and shout, you will hear the echo. When sound waves hit soft objects, the sound waves stop and we don't hear an echo. We use soft materials to make sound quieter, for example, in music rooms or near busy streets.



))) sound waves (((echo

4 Read and look. Then spell a partner's name in Morse code.

Morse code is an old system for sending messages. It uses short and long sounds to spell words. Written Morse code uses dots for the short sounds and dashes for the long sounds.

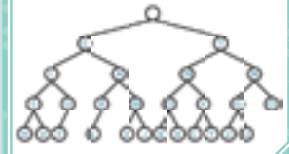
Dot dot dot ... dot dash ... dash dash.

A ---	H	O ---	V
B	I ..	P ---	W ---
C ---	J ---	Q ---	X ---
D ---	K ---	R ---	Y ---
E ..	L	S	Z ---
F	M ---	T ---	
G ---	N ..	U	

5 Listen and write the word. Then play *Guess the word*.

CODE CRACKER

The binary tree helps you learn Morse code. The left branches are dots and the right branches are dashes.



EXPERIMENT TIME

Can you make a telephone?

- Make a hole in the bottom of each cup.
- Tie one end of the two-metre length of string to one of the paper clips. Put the other end in the hole, so the paper clip is inside the cup.
- Put the other end of the string in the hole in the other cup. Tie a paper clip on the end, so that it is inside the other cup.
- Give one cup to your friend and walk away until the string is tight. Talk normally into your cup and tell your friend to listen.
- Test your telephone several times speaking louder and quieter each time.



Materials

two paper cups
a two-metre length of string
2 metal paper clips



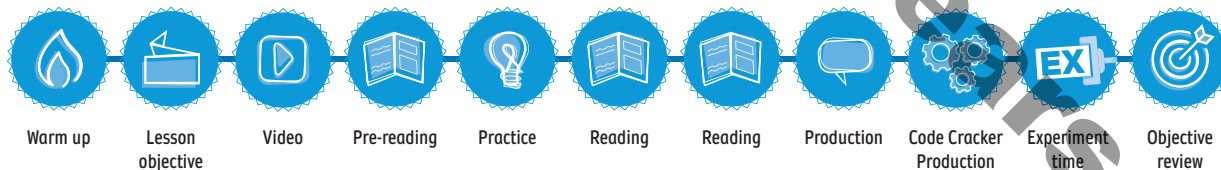
1 What vibrates when you talk into the cup?

2 What do the sound waves travel along?

50 fifty

fifty-one 51

Lesson flow



LESSON OBJECTIVE

I will learn how to make a telephone.

KEY LANGUAGE

distances	louder	source
echo	quieter	vibrate
energy	sound	waves

Warm up

- Ask students *What do you know about sound?* Encourage students to think about how sound travels (e.g., through phones), where sound comes

from (e.g., vehicles, voices), and how sound can be made louder or softer, and quicker or slower (e.g., with musical instruments).

- Have students make a spidergram with the word *sound* in the middle in groups. They should write names of objects that produce sound and group them with similar objects, e.g., *musical instruments: drum, piano; communication equipment: phone, radio*.
- Challenge** Have students work on their own and choose three objects from their spidergram. Then they write how the sound is made, e.g., *When you hit a drum, it makes a sound*.

Lesson objective

- Introduce the lesson objective. Say *Today I will learn how to make a telephone.*

- **Involve** Students will learn about sound as an energy, and how we use sound waves to communicate, then they will make a telephone.

Video

Go to the Pearson English Portal and click on 'Resources' for more teaching resources about this topic, including a video on sound and communication.

Pre-reading

- Point at the pictures of sound being used on page 50 and ask *What makes sound? What do we use to communicate?* Once you've read the texts on page 50, you can compare these ideas.



CRITICAL THINKING

Practice

- 1 Tick ☒ the pictures that show sound being used.

(Answers: running race, alarm clock, phone held to ear, radio)

- Have students read the introduction and tick the pictures that show sound being used.

Reading

- 2 025 Read, listen and complete.

(Answers: 1 quieter, 2 louder, 3 source)

- Play audio 025 and have students listen and follow in their Pupil's Books.
- Have students read the text silently and complete the labels on the pictures using the red words in the text.

Reading

- 3 026 Read, listen and draw the echo.

(Answers: Students draw echo lines moving towards the girl in the empty room, bouncing from the walls.)

- Play audio 026 and have students listen and follow in their Pupil's Books.
- Have students read the text, choose the correct picture and draw the red echo lines.



COMMUNICATION

Production

- 4 Read and look. Then spell a partner's name in Morse code.

- Have students read the text, then write their name in Morse code. Next, have students work with their partner and spell each other's name.

Production

- 5 027 Listen and write the word. Then play *Guess the word.*

(Answer: hello)

- Students will learn to identify when something could be either one thing or another.
- Students will learn to understand how to use a binary tree to spell out words in Morse code.
- Read the introduction text with students, then play audio 027. Students write the word they hear by using the binary tree to find the letters.
- **Assist** Go through a few example letters to ensure students understand what to do.
- Have students choose and write down five words they want to spell with the binary tree. Then students can take turns to say *dots* and *dashes* spelling out their own words. Their partner finds the word using the binary tree.



COLLABORATION

This activity encourages Collaboration. For further support download our Collaboration checklist.

Experiment time

Can you make a telephone?

- **Materials:** (per pair or group) pencils, notebooks, plastic, string, paper clips
- **Assist** Before you start, read the instructions with students. Check understanding by asking *What do you need? How can you do the experiment?*
- Go through an example with students. Make a hole in the bottom of each cup. Then tie the string to a paper clip and pull it through the hole so that the paper clip is left inside the cup. Next, pull the string through the hole in the other cup, and tie it to the other paper clip. Give one cup to a student and have them walk away from you until the string is tight. Then talk into the cup and ask the student to listen into the other cup.
- Students can work in pairs or small groups. They make their telephone together, then test it several times. Then they answer the questions.
- **Extra** Have students try the experiment again, this time using shorter or longer string. Then have them compare the differences in the quality of the sound.

Objective review

- Revisit the lesson objective. Say *Now I know how to make a telephone.*
- **Involve** Encourage awareness of what students know by asking about sound and communication.

Questions with will

COMMUNICATION

Questions with will

COMMUNICATION

I will ask and answer about the future using will.

1 Ask and answer with a partner.

Warning! The Earth is polluted. We will move to a space colony soon. Everybody will work together to plan for our future.

Where will you live?
What will you eat?
When will you arrive?
Who will you see?
How will you live?

Who will the commander be?

Who will the navigator be?

Where will you go?

When will you go?

How will you get there?

What fuel will you use?

2 Discuss the future with a partner.

- Press out the cards.
- Complete the questions with *what*, *where*, *when*, *who* and *how*.
- Answer the questions for you.
- Ask your partner and write their answers.

3 Explain your plans to your friends.

I will go to a space colony near Mars.
I will live in a floating house.

How will you get inside your house?

52 fifty-two

Writing lab

A BROCHURE

I will learn to write a brochure.

1 Read and number.

A paragraph is a group of sentences about one main idea or topic.

WELCOME TO PAIDON CITY

the city of the future!

- ☐ In the centre of the city, there will be a school in a big forest. All the children will walk to school.
- ☐ The houses will be small but beautiful. The houses will have gardens and spaces to leave bicycles.
- ☐ The park will have swimming pools, outdoor sports centres and a special zero-gravity playground.
- ☐ There won't be any traffic, noise or pollution in Paidon City. People will take electric trains to work.
- ☐ There will be clean buildings for people to work in. Nearby, there will be shopping centres and hospitals.

- 1 = work places
- 2 = transport
- 3 = schools
- 4 = outdoor places
- 5 = houses

Will you come and live in Paidon City?

Call 0836 551116 to plan a visit.

2 Look at 1. How do we know it will be a healthy city? Underline the answers.

3 Imagine you are making a space city and complete.

Name of the city: _____
Outdoor places: _____ Transport: _____
Work places: _____ Schools: _____
Houses: _____ Other places: _____

4 Make a brochure for your space city.

fifty-three 53

Lesson flow



Warm up

Lesson objective

Presentation

Practice

Production

Production

Objective review

LESSON OBJECTIVE

I will ask and answer about the future using *will*.

KEY LANGUAGE

Where will you live? Who will you see?
What will you eat? How will you live?
When will you arrive?

Warm up

- Ask students to imagine that the school was closed. Ask *What will you do?* and elicit examples (*I will ask my teacher for work to do at home. I will go to my friend's house and play football with them.*).

- Have students make sentences in pairs. Remind them to think about every aspect of school life, e.g., studying different subjects, playing with their friends, eating lunch, having music classes.
- Extra** Have students sit in two lines. Tell the first student in each line to make a sentence and whisper it to the next student, e.g., *My friends will come to my house to play.* Students continue to whisper the sentence to each other until it reaches the last student in the line. The last student has to tell the class what they think they heard.

Lesson objective

- Introduce the lesson objective. Say *Today I will ask and answer about the future using will.*

- **Involve** Students will learn how to ask and answer about the future using *will*. They will gain confidence using the new language through real-life conversations.

Presentation

- Show students the grammar box and read the examples. Ask students to repeat.
- **Assist** Ask *What are the five question words? (Where, What, When, Who, How) What's the sixth question word? (Why) Why can we call these the 6 Ws? (Because five of them start with W, and How ends with W.).*
- Ask students for example answers to each of the questions to ensure understanding, e.g., *We will live in a space colony. We will arrive in 2050. We will live by breathing oxygen.*
- Remind students that they've got a Grammar Reference on page 148 of their Pupil's Books.

COMMUNICATION

Practice

1 Ask and answer with a partner.

- Ask students to read the introduction together, then have two students read the examples in the speech bubbles. Tell students to imagine that this warning is real and have them ask and answer with a partner about what they will do.
- **Monitor** Monitor and provide support if needed. Ask individual students questions and listen to their answers. Take notes on any general issues with pronunciation and intonation.
- **Extra** Have students work with a different partner and ask and answer about a different situation using the same question words. Write this message on the board: *Warning! The water in the seas is rising. We will move to the closest mountains and make our homes there. Everybody will work together to plan for our future.*

CREATIVITY

Production

2 Discuss the future with a partner.

- Students use the press-out space colony cards in the back of the Pupil's Books.
- Have students press out the cards and write the missing question words to complete the questions. Then have them write their answers to the questions on the card *My answers*.
- Students ask and answer with their partner and write their friend's name on the other card, e.g., *Kelly's answers*. Remind students to write full sentences.

- **Digital literacy** Ask students questions about how they think digital equipment will improve in the future, e.g., *How will phones improve? (We'll talk into the phone and it will type our messages for us.) What will happen to computer screens? (They'll become projections on the wall.) What will happen to digital systems in cars? (They'll drive our cars for us and we won't need to look where we're going.).* Have students discuss other ideas in small groups, then share those ideas with the class.
- **Challenge** Have students work in pairs and make a fact file for a new or improved digital technology of their choice. They can draw and label a picture and write a summary of what it will be used for and how it will be used.

COMMUNICATION

Production

3 Explain your plans to your friends.

- This is an exam preparation type activity for the Pearson Test of English for Young Learners: Breakthrough, Speaking, Task 8.
- You can put students in groups or do this as a class. Explain that each student will have one minute to explain their plans from Activity 2. Then the other students will ask at least three questions about their plans.
- Give students time to look back at their answers in Activity 2 and think about what they will say. Then have each student stand in front of the rest of the class (or group) and present their plans. Encourage students to provide support and encouragement for each other, and after each student has finished, have them clap or say *Well done!*
- **Monitor** Monitor and provide support if needed. Take notes on any general issues with language and presentation skills.
- **Differentiation** Have students compare their plans to another student's plans and write a paragraph to explain the similarities and differences. Remind students that they can use *and*, *but* and *too*, e.g., *Kelly will go to a space colony and I will, too! Kelly will live in a floating house, but I won't. I'll live in a house on the space colony.* Fast finishers could try to compare their plans to two other students' plans.

Objective review

- Revisit the lesson objective. Say *Now I can ask and answer about the future using will.*
- **Involve** Encourage awareness of what students can do by asking them questions about what life would be like in a space colony using *will*.

Writing lab

A BROCHURE

Questions with *will*

COMMUNICATION

I will ask and answer about the future using will.

1 Ask and answer with a partner.

Warning! The Earth is polluted. We will move to a space colony soon. Everybody will work together to plan for our future.

Who will the commander be?

Who will the navigator be?

Where will you go?

When will you go?

How will you get there?

What fuel will you use?

Where will you live?
What will you eat?
When will you arrive?
Who will you see?
How will you live?

2 Discuss the future with a partner.

- 1 Press out the cards.
- 2 Complete the questions with *what*, *where*, *when*, *who* and *how*.
- 3 Answer the questions for you.
- 4 Ask your partner and write their answers.

3 Explain your plans to your friends.

I will go to a space colony near Mars.
I will live in a floating house.

How will you get inside your house?

52 fifty-two

Writing lab

A BROCHURE

I will learn to write a brochure.

1 Read and number.

A paragraph is a group of sentences about one main idea or topic.

- 1 = work places
- 2 = transport
- 3 = schools
- 4 = outdoor places
- 5 = houses

WELCOME TO PAIDON CITY the city of the future!

- ☐ In the centre of the city, there will be a school in a big forest. All the children will walk to school.
- ☐ The houses will be small but beautiful. The houses will have gardens and spaces to leave bicycles.
- ☐ The park will have swimming pools, outdoor sports centres and a special zero-gravity playground.
- ☐ There won't be any traffic, noise or pollution in Paidon City. People will take electric trains to work.
- ☐ There will be clean buildings for people to work in. Nearby, there will be shopping centres and hospitals.

Will you come and live in Paidon City?

Call 0836 551116 to plan a visit.

2 Look at 1. How do we know it will be a healthy city? Underline the answers.

3 Imagine you are making a space city and complete.

Name of the city: _____
Outdoor places: _____ Transport: _____
Work places: _____ Schools: _____
Houses: _____ Other places: _____

4 Make a brochure for your space city.

fifty-three 53

Lesson flow



Warm up



Lesson objective



Practice



Practice



Production



Production



Objective review

LESSON OBJECTIVE

I will learn to write a brochure.

Warm up

- Ask students to look back at the picture of the space colony on page 46 and talk about what they can see on each floor. Have them make notes in their notebooks.
- Then explain to students that they need to choose one of the floors and write a short paragraph about what happens there. Encourage students to write about different floors for variety. They can use the picture, the text and their imaginations.

- **Assist** Explain that a paragraph is a group of sentences about one main idea or topic. Have students look at page 53 and ask them to find the five paragraphs in Activity 1.
- **Extra** Put students in groups depending on the floor they chose in the previous activity. Have them compare their paragraphs by reading them out loud and discussing the similarities and differences. Then ask them to write a new paragraph as a group, ensuring that it is only about one main idea or topic. Give them a limit of 5–6 sentences.

Lesson objective

- Introduce the lesson objective. Say *Today I will learn to write a brochure.*
- **Involve** Students will learn to write a brochure. They will gain confidence through scaffolded writing tasks, to enable them to write their own brochure.

Practice

1 Read and number.

(Answers: 3, 5, 4, 2, 1)

- Show students the yellow box and read the sentence about paragraphs. Ask students to repeat.
- **Assist** Explain to students that brochures often include several paragraphs about different ideas or topics on the main subject of the brochure. Ask *What's this brochure about? (Paidon City) What are the paragraphs about? (work places, transport, schools, outdoor places, houses).*
- Show students the key and have them read the text and number the paragraphs to show which one covers each main idea or topic. They can use the picture to help them visualise the city.
- **Monitor** Monitor and provide support if needed. Take notes on any general issues with understanding the content of the brochure.

Practice

2 Look at 1. How do we know it will be a healthy city? Underline the answers.

(Answers: children will walk to school; houses will have gardens and spaces to leave bicycles; there will be swimming pools; there will be outdoor sports centres; there won't be any traffic, noise or pollution; people will take electric trains to work)

- Have students read the text again and underline the words or phrases that show that Paidon City will be a healthy city. Check answers with the class.
- **Assist** Check understanding of what a healthy city is by asking students *What make a healthy city? (green spaces, outdoor spaces for sports, public transport, electric vehicles, no pollution).* Remind students to use their dictionaries to look up any words they don't understand.
- **Digital literacy** Use the internet to find three different brochures about healthy cities. Show students that you are using reliable websites. Have students read the brochures and discuss the similarities and differences. Then have them choose the city they think will be the healthiest to live in and write a paragraph explaining their choice.

- **Differentiation** Have students find their own example of a brochure about a healthy city and present it to the class. Remind them to give reasons why they think it's a healthy city. Less confident students can give three or four reasons, while more confident students can try to give several reasons.



CREATIVITY

Production

3 Imagine you are making a space city and complete.

- Give students time on their own to imagine what their space city will be like. Then have students complete, making brief notes about each main idea or topic.
- **Assist** Have students draw pictures to help visualise what their space city will look like and make notes in their notebooks. Remind them that this is an imaginary activity and there are no limits; they can invent new objects and concepts if they want to.
- **Challenge** Have students sit back to back and describe their space city to their partner. Their partner listens to the description and draws a picture of what they imagine the city will look like. Encourage students to think about how their partner imagines the city, and not to make it look like their own.



CREATIVITY

Production

4 Make a brochure for your space city.

- Have students use the notes they made in Activity 3 to make a brochure about their space city in their notebooks. Remind them to look back at the brochure in Activity 1 (and the picture their partner drew in the Challenge activity) for ideas.
- **Involve** Have students swap their finished brochure with their partner. They can read it and give points for spelling and content, making comments about how well they explained each aspect of their space city. They can write the number of points and *Well done* or *Good try* on the brochure. Then they return it so that their partner can try to improve it.

Objective review

- Revisit the lesson objective. Say *Now I can write a brochure.*
- **Involve** Encourage awareness of what students can do by having them show you and read their brochure out loud.

Project and Review

DESIGN A VEHICLE FOR THE FUTURE



PROJECT AND REVIEW

Design a vehicle for the future

Step 1

Research

Find out about vehicles.

- ☐ Make a table with how vehicles move.
- ☐ Add features that the vehicles have got to the table.
- ☐ Decide which features the vehicles will have in the future.

	Now	In the future
land	cars have got wheels	no wheels
air	planes have got wings	different types of wings
water	sailing boats have got sails	they will have balloons

Step 2

Plan

Choose a vehicle and its features.

- ☐ Decide if your vehicle is for people, objects or both.
- ☐ Think about how your vehicle will move and the features it needs.
- ☐ Complete the information for your vehicle.

Vehicle: _____

Features on the control panel: _____

Length: _____ cm

Weight: _____ kg

Fuel: _____

Top speed: _____ km per hour

Number of seats: _____

Number of lights: _____

Number of engines: _____

Step 3

Create

blueprint = plan

Make a blueprint.

- ☐ Draw your vehicle from the front, the back and the side.
- ☐ Add the information.
- ☐ Think of a name for your vehicle.
- ☐ Think about what your vehicle will do.

Step 4

Show and tell

Present your vehicle.

- ☐ Share your vehicle drawing.
- ☐ Discuss details of your vehicle.
- ☐ Ask for improvements or suggestions for your vehicle.
- ☐ Find friends who chose the same type of vehicle as you.

The Amaxa is a new vehicle. It will fly and move on land. It will have a control panel.

It will use water for fuel. It will get the water from the air.

Show your family your blueprint. Build your vehicle.

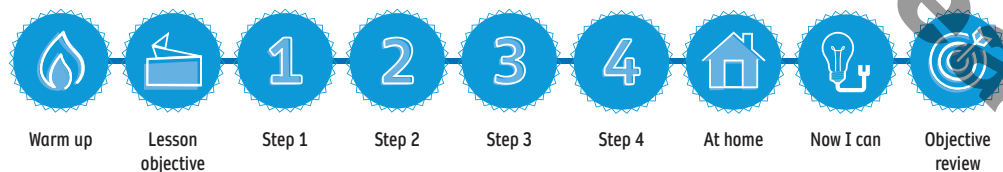
54 fifty-four

Now I can ...

- ... describe space and the future.
- ... talk about the future using *will*.
- ... ask and answer about the future.
- ... write a brochure.

fifty-five 55

Lesson flow



LESSON OBJECTIVE

I will design a vehicle for the future.

Warm up

- Ask students to look at their picture dictionary and revise the new words from the unit. Have them work with a partner and make sentences using the words (e.g., *You can see the Earth on the screen.*).
- Have students make sentences with their partner about what life will be like in a space colony using the future with *will* (e.g., *We won't live on the Earth, but we will go there on holiday.*).

- Have students ask and answer questions with their partner about what life will be like in 2050 using the future with *will* (e.g., *Will students go to school in 2050? No, students won't go to school; they will study at home on tablets.*).

Lesson objective

- Introduce the lesson objective. Say *Today I will design a vehicle for the future.*

- **Involve** Students will learn how to design a vehicle for the future. They will use the language learnt from the unit to understand how to complete their project and present their vehicle to the class.

Step 1

Research

- Students work in pairs or small groups. Ask them to think about how vehicles move on land, in the air and in water. Have them make a table, adding features that vehicles have to make them move.
- Students discuss which features the vehicles will have in the future and add a column to their table. Encourage students to use their imaginations and the language learnt from the unit.
- **Monitor** Take time to check students' work and add any words they can't spell or don't know in English to the board. Take notes on any general issues with spelling.

Step 2

Plan

- Students work individually to decide on a vehicle for the future and its features. They can think about how their vehicle will move, what it will transport and how and if it will transport both people and objects. They can use the notes they made in Step 1 to help them.
- **Assist** Encourage students to think about what we will use transport for in the future, if their vehicle will be public transport or for one person.
- Students complete the information for their vehicle. Encourage them to use the internet and reference books to get an idea of features in vehicles today and use them to stimulate ideas.

Step 3

Create

- **Materials:** (per pair or group) pencils, notebooks, colouring pencils, white paper or card
- Ensure each student has got the space, tools and materials needed to make their vehicle blueprint.
- Have students draw their vehicle blueprint, using grid paper to ensure accurate measurements. Remind them to draw the front, back and side of the vehicle and check that they have included the same visible features from each side. Then they label the features and give their vehicle a name.



COLLABORATION

Step 4

Show and tell

- Have students present the blueprint of their vehicle to the class and explain each feature and its use. Then they ask for suggestions to improve their vehicle.

- After the presentations, students find friends who chose the same vehicle type as them and compare the similarities and differences. They take notes on three suggestions that will improve their vehicles.
- **Differentiation** Have students amend or make a new blueprint to show the suggestions to improve their vehicles. Less confident students can make one or two changes, while more confident students can try to make three or four changes.

At home +

Show your family your blueprint. Build your vehicle.

- Have students show their blueprints to their family. Their family can help them make a model of their vehicles using recyclable materials. Tell students to take a photo of their model vehicle to show the class (if possible, share them on a class app or web page).
- **Extra** Have students present their model vehicles, or a photo of them, to the class. At the end, they can have a class vote on the most interesting, most beautiful and most unusual vehicle.

Now I can ...

- Show students the *Now I can ...* box and read the examples. Have students repeat, then ask questions to check understanding, e.g., *Can you name three things on a control panel? (handle, lights, screen).*
- **Involve** Ask students to consider how they feel about these statements. Explain that if they feel confident about a statement, they can stick on the light bulb sticker. If they do not feel confident about a statement, tell them that they can come back to that statement and stick on the sticker when they do feel confident.
- **Monitor** Go around the class and have students choose and say the statement they are the most confident about. Make notes of the statements that the fewest students choose and make sure to revise the content in the future.

Objective review

- Revisit the lesson objective. Say *Now I can design a vehicle for the future.*
- **Involve** Encourage awareness of what students can do by having them show you their blueprint and asking questions about their future vehicle.

Pearson English Portal games

Go to the Pearson English Portal Presentation Tool, choose the unit and the Project and Review lesson for a Class game.

Assessment pack

- For grammar and vocabulary assessment, have students complete the Practice and Unit Tests in the Assessment Pack.

Activity Book answer key and notes

UNIT 3: UP INTO SPACE

1 Read and complete.

(Answers: Astronauts, gravity, handles, control panel, computer)

2 012 Listen and tick ☒.

(Answers: eat three meals a day, do experiments, go on spacewalks, do the cleaning, sleep)

- Students discuss what astronauts can and can't do in a spacecraft with zero gravity and give reasons why.

3 Read and number the instructions for a spacewalk.

(Answers: 6, 3, 1, 4, 2, 5)

- In this coding activity, students number in order the instructions for a spacewalk.

Lift off!

1 Read and complete.

(Answers: planet, engine, fuel, oxygen, lights, screen, radio, Earth, control panel, seat, handles, gravity)

2 013 Listen and colour.

(Answers: oxygen 60%, fuel 80%, gravity 0%, radio 20%, lights 100%)

3 Look and write.

(Answers: 1 camera, 2 screen, 3 keyboard, 4 USB ports, 5 cable)

- New vocabulary is presented and practised in this activity (*cable, camera, keyboard, USB ports*).

4 Complete the riddles. Then tick ☒ the answers.

(Answers: 1 hear, clear, ear, a, 2 year, here, year, near, b)

Language lab

1 014 Listen and circle.

(Answers: 1 will, 2 will, 3 will, 4 will, won't, 5 won't, will, 6 won't, will)

2 Tick ☒ eight features for a flat in the future.

- Students choose and tick eight features to use in Activity 3. One item in one place is one feature.

3 Look at 2 and complete.

(Model answer: The bedroom won't have a robot. The bedroom will have a computer.)

- In this coding activity, students learn to use variables to make sentences that describe features in a flat in the future.

- Students use the features they chose in Activity 2 to complete the sentences.

4 Ask and answer with a partner. Take notes.

- Students ask and answer to find the features their partner chose in Activity 2.

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

- Students choose a room from the flat and make a model from a shoebox and other recycled materials. Then they write a short description.

Story lab

1 Read and answer.

(Model answers: 1 Because the Earth is very polluted., 2 They've only got oxygen for two years., 3 Because the humans destroyed the Earth., 4 Because the children won't pollute the Earth., 5 The children can play outside., 6 They promise they won't pollute the air, water or land.)

2 Read and complete with the number of days.

(Answers: 1 60, 2 120, 3 30, 4 240)

- In this maths activity, students learn to use multiplication and division to calculate time with the given number of people and quantity of oxygen.

3 Find words in the story that mean ...

(Answers: 1 polluted, 2 colony, 3 robot, 4 destroy, 5 communicate, 6 work out)

4 Make a promise tree for the future.

- Students draw a tree with a lot of branches, then write promises they've got for the future on leaves which they stick on the branches.

5 Complete and circle the story review.

(Answers: Colony 369, Nia and Bob, on a space colony and the Earth, future, They've only got oxygen for two more years., They return to the Earth and they make promises for the future.)

6 Write your opinion of the story.

- Give students some example adjectives to help them to decide how they feel about the story, e.g., *exciting, happy, boring, interesting, scary*, etc. Remind them to think about what they liked and didn't like in the story.

Experiment lab

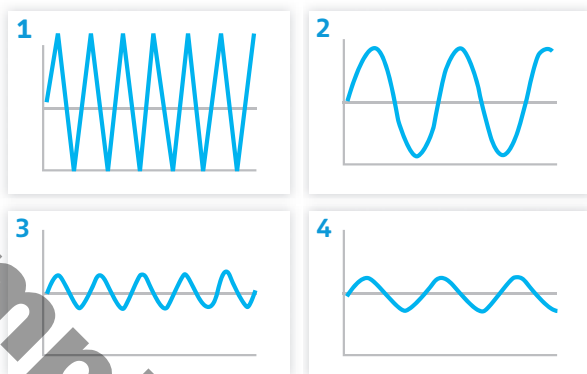
1 Read and match.

(Answers: 1 a, 2 d, 3 b, 4 c)

2 015 Listen and circle.

(Answers: 1 high, loud, 2 low, loud, 3 high, quiet, 4 low, quiet)

3 Draw graphs for the sounds in 2.



4 Read and tick ☒.

(Answers: a and b)

- In this Values activity, students learn how to communicate with deaf people.

5 Sign your name to a partner.

- Students use the alphabet in sign language to sign their name to their partner.

Experiment time

1 Tick ☒ the correct picture and complete the sentences.

(Answers: 3, 1 he/she has got his/her ear to his/her cup, 2 the string is tight)

- Discuss with students the importance of recording results during experiments. Then have them tick the correct picture and complete the sentences with information about their experiment and the results.

2 Read and circle. Then discuss with a partner. How difficult was the experiment?

- Students think about and choose their answers before discussing their opinions.

Questions with will

1 Read and tick ☒ or cross ☒.

(Answers:)

	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.

- Students complete their own plan for the future, and then ask and answer to find out about their partner's plan.

Writing lab

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

- Students choose a place and discuss what it will be like in the future with their partner.

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

- Students make a brochure and draw a picture for the place they

chose in Activity 1.

3 Write about the place you chose in 2.

- Students write a paragraph about the place they chose in Activity 2.

PROJECT AND REVIEW

1 Tick ☒ the features on your vehicle.

- Students think about the project they completed in their Pupil's Books and tick the features on their vehicle.

2 Read and answer.

- Students answer the questions about their vehicle using full sentences.

3 Write a description of your vehicle.

- Students write a description of their vehicle using their answers to Activities 1 and 2.

4 Complete the sentences and answer.

- Students think about and complete the sentences, and then answer the question. Remind them to think about the skills and language they learnt.

5 016 Listen and write the names.

(Answers: 1 Mark, 2 Tessa, 3 Simon, 4 Anna)

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

(Answers: 1 T, 2 F. Anna will work in the control room., 3 F. Tessa won't play outside., 4 F. Simon will wear a swimming costume., 5 T, 6 F. Anna won't wear a spacesuit., 7 T, 8 T)

7 Complete the plans for your future.

- Students complete the plans for their future to use in Activity 8.

8 Ask and answer with a partner.

- Students ask and answer to find out about their partner's plans for the future using the new grammar structures from the unit.