

Scope and Sequence

Meet our Stars and Heroes!

page 2

Character introductions I've got...
Questions: What, Where, I love...
How, Why, Who, I am...
Are you...? Do I...?

Welcome

page 4



People
The past
Big numbers

Was he their son? Yes, he was. Were they leaders?
No, they weren't. We saw the film two days ago.
one thousand, one thousand five hundred, one million

Relationship skills:
Being a good leader

	Vocabulary	Grammar	Personal and Social Skills	Cross-curricular
1 All about me page 8 	Personality 1 Personality and appearance Personality 2	What does he look like? He's... He's got... What do they look like? They're... They've got... He was lazy. They were bossy. Was she bossy? Yes, she was. Were you impatient? No, I wasn't.	Self-management: Dealing with changes I feel scared/worried/angry because... I can find out more / talk to / write down... Story: The secret garden	Natural Science: Migration Africa, Europe, kilometres, migrate Mini-project: Create a migration fact file
2 Let's travel! page 18 	Travel activities Places Long adjectives	The airport is more interesting than the harbour. The towers are less colourful than the statues. The harbour is the most beautiful place in the world. The towers are the least famous place in the city.	Social awareness: Celebrating similarities and differences My friend and I are similar/different because... Story: We are different but the same!	Engineering: Transport ideas engineer, toboggan, tuk tuk, zipline Mini-project: Solve a transport problem
3 At home page 28 	Household objects Household chores Places in the home	I swept the floor. He didn't make dinner. Did you do the laundry? Yes, I did. Did you study? No, I didn't. What did...? Where did...? When did...? Who did...? Why did...?	Self-awareness: Knowing when I'm wrong I thought... but I was wrong. I'm sorry that I... Story: Mrs Khan's mistake	Design: Design process improve, redesign, research, test Mini-project: Design an item for your home
4 On the internet page 38 	The internet and computers Technology phrases 1 Technology phrases 2	You must buy this online. We mustn't post comments. I chatted online in the morning / on Thursday / yesterday / last weekend / three days ago.	Relationship skills: Fixing problems with friends I feel... when you... Next time, can you please...? Story: Stella and the selfies	Technology: Staying safe online personal information, privacy, reliable, website Mini-project: Create a 'We stay safe online!' website
Project A personal profile >> page 88 Presentation skills: giving a clear presentation Talk slowly and clearly. Pause between paragraphs. Online module: Phonics dis, im, un				
Project A city map >> page 89 Collaboration skills: collaborating effectively in group discussions Let's put a... in... Yes, good idea! Online module: Phonics ous, cious, rious				
Project A comic strip >> page 90 Self-management skills: a two-step drafting process in pencil, check, go over your work in pen Online module: Phonics y as long e, long i and short i				
Project Online messages >> page 91 Collaboration skills: working together to develop ideas and make decisions positive messages, must/mustn't Online module: Phonics scr, spr, str, tch				

	Vocabulary	Grammar	Personal and Social Skills	Cross-curricular
5 Solve it! page 48 	Machines and inventions Solving problems Simple actions	I have to / don't have to solve the problem. He has to / doesn't have to take notes. Do we have to light the candle? Yes, we do. Does she have to turn the wheel? No, she doesn't.	Responsible decision-making: Solving problems How about...? Let's try... Story: The bird puzzle	Science: Inventions gear, lever, pulley, teeth Mini-project: Make a simple lever
6 Talented and creative page 58 	Adjectives Creative activities Materials	I enjoy baking cakes. We love making vlogs. He doesn't enjoy sewing clothes. She doesn't love doing pottery. How many beads are there? There are a lot of / some / a few beads. How much string is there? There's a lot of / some / a little string.	Self-awareness: Being creative I'm not scared to... Why don't we...? Story: Charlie's creative cakes	Art: Street art artist, ceramic, stone, yarn Mini-project: Plan and draw some street art
7 Future lives page 68 	Jobs 1 Jobs 2 Technology	I'll be a pilot. He'll be a chef. We won't be actors. They won't be photographers. Will you use a drone? Yes, I will. / No, I won't. Will he wear a VR headset? Yes, he will. / No, he won't.	Relationship skills: Good role models He/She is my role model. He/She helps me to be a better person. I want to be like him/her! Story: Ada Lovelace	Technology: Technology and jobs courier, self-driving, self-service checkout, waiter Mini-project: Create a 'Technology and jobs' poster
8 New adventures page 78 	Outdoor items Camping activities Holiday activities	What are you going to cook on the campfire? Who's going to put up the tent? I plan to go abroad. We want to volunteer. She can't wait to learn a new language.	Self-management: What's stopping you? I want to... I'm going to... I won't let that stop me! Story: Barbara Hillary: Explorer	Maths: Measuring centimetres, distance, measure, scale Mini-project: Create a map-reading adventure
Project A job description >> page 93 Presentation skills: using filming to improve presentation skills vlog, make it better Online module: Phonics kn and wr				
Project A job description >> page 94 Collaboration skills: making a group decision vote, put up your hands, group decision Online module: Phonics er and or				
Project An adventure book >> page 95 Presentation skills: focussing on the main points, using visuals main points Online module: Phonics Long and short vowels				

Progress game Activity Book page 94

5 Solve it!

? What interesting objects can you see?
What do we use them for? Share ideas.

1 Listen, find and say. Then tell a friend.



engine



invention

lock

workshop

machine

Disney THE NUTCRACKER AND THE FOUR REALMS Storyboard



2 Watch and answer.

Solving difficult problems

- 1 Why did Clara make a machine with a candle and a balloon?
- 2 What's the problem with Clara's egg?

Responsible decision-making

3 Listen and write.



Concept art

Clara goes to Drosselmeyer's 1 _____. She sees a lot of interesting 2 _____. There's a metal lake with birds. But there's a problem with the 3 _____. Clara fixes it. Can she fix the 4 _____ in the Four Realms, too? Can Clara solve her problem and open the 5 _____ on the egg?

4 Imagine you're in Drosselmeyer's workshop. What can you see?

I can see a large machine on the table.

Talk buddies

1 Read and listen. What can you write in a notebook?

PUZZLE TIPS

Here are some tips to help you solve the puzzles in this book!

-  **Look for clues** – think about the things you can see.
-  **Brainstorm** – think of different ideas to solve the problem and share your ideas with a friend.
-  **Collect information** – find out more about the problem by looking in books or online.
-  **Take notes** – write down important information in your notebook.
-  **Find a solution** – what are you going to do and how?
-  **Do an experiment** – try your solution to see if it works.
-  **Crack the code** – use the code to find the solution!

I've got a great new puzzle book!



solve a puzzle



look for clues



brainstorm



collect information



take notes



find a solution



do an experiment



crack a code

2 Listen and repeat the words in 1.

3 Read and write the phrase. Then write the number from 1.

- a He looks for things he can see. He looks for _____.
- b She tests her solution. She does an _____.
- c He wants to find out more. He _____ information.
- d She thinks of different ideas. She _____.

Review

First, ...
Then, ...
Finally, ...

4 Think about how you can solve a problem.
Tell a friend.

Problem: My pet is missing.

First, I brainstorm places in the house.

I can name phrases for solving problems.

Disney
THE
NUTCRACKER
AND THE
FOUR REALMS



1 Watch and write T (True) or F (False).

- 1 Clara has to solve a difficult puzzle in the film. _____
- 2 She doesn't have to look for clues. _____
- 3 She asks Drosselmeyer to help her. _____
- 4 She doesn't have to crack a code. _____

2 Read and write. Then listen and check.

have to don't have to has to doesn't have to



1 You must find out more. You _____ collect information.



2 He can try his idea if he wants to. But he _____ do an experiment.



3 The information is on my phone. I _____ take notes.



4 He must find a solution. He _____ crack the code.

3 Listen and follow. Then say.

★ Grammar Heroes

I	have to don't have to	solve the problem. take notes.
He	has to doesn't have to	

4 Talk about things you have to or don't have to do when you solve a problem.

I have to brainstorm.

I don't have to solve the puzzle today.

Talk buddies

I can talk about what I have to do.



The Lock puzzle

- 1 Look. How many puzzles are there?
- 2 Listen and read. Can you solve the puzzles in the story?



Think!

What's the name of Mrs Gears' bird?

Levan loves science. His science teacher Mrs Gears says, 'You have to solve three puzzles to find my beautiful bird. Then you have to make the bird move!'

'I can do it!' says Levan.

First, Levan brainstorms the problem. Then, he collects information. Next, Levan finds a solution.

Levan looks at the first puzzle. He has to crack the code to open the door!

Levan puts three numbers into the lock and the door opens!

The LOCK CODE puzzle

7 4 8 One number is correct and in the correct place.
 7 8 5 No numbers are correct.
 6 5 4 One number is correct but in the wrong place.
 1 5 9 Two numbers are correct but in the wrong place.

The BOX puzzle

One message is true and two are false.

The bird is in this box.

The bird isn't in this box.

The bird isn't in Box 1.

The BIRD puzzle

Only one of the shapes makes the bird move.

If $2 + 2 = \text{fish}$ and $3 + 3 = \text{eight}$

What is $7 + 7$?

square ■ circle ● triangle ▲

Then he sees the second puzzle. There are three boxes on the table.

Levan chooses the correct box and it opens. He pulls out a beautiful bird. Now he has to make the bird move.

He then sees the third puzzle. He looks for clues and thinks about the problem.

Levan pushes a shape and the bird moves!

'Well done!' says Mrs Gears, 'You solved all the puzzles!'

3 Read again and write.

- 1 Mrs Gears is Levan's _____ teacher.
- 2 Mrs Gears has got a beautiful _____.
- 3 Levan has to solve three _____.
- 4 Levan makes the bird _____.

5 Act out the story. Then reflect. Which is your favourite puzzle?

4 Think and answer.

Solving difficult problems

- 1 What problem does Levan have to solve?
- 2 What three things does he do first?

Responsible decision-making

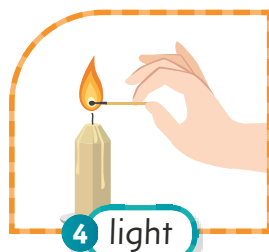
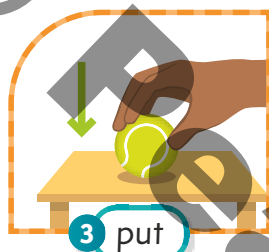


I like the lock code puzzle best!



My favourite puzzle is the bird puzzle!

1 Listen and say. Then tell a friend.



2 Listen and read. Tick (✓) Clara's invention.

Emily: I really like Clara's invention in the film. But how does it work?

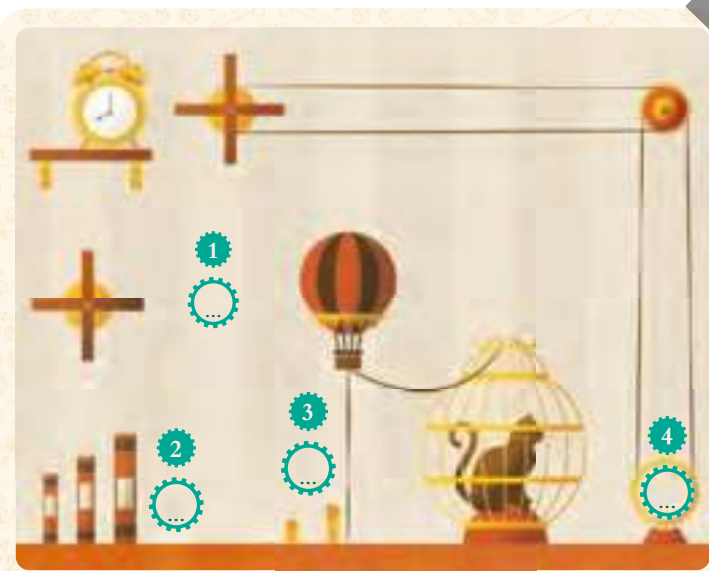
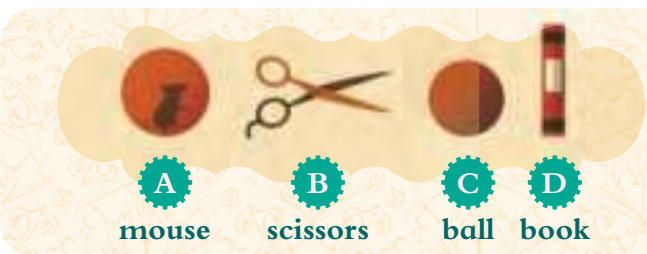
Pablo: Clara lights the candle. Then the balloon goes up in the air. That starts the machine and it catches the mouse!

Emily: Cool!

Pablo: I've got a puzzle like Clara's. Let's solve it together! We have to put the things A–D in the spaces 1–4.

Emily: Oh, OK! Do we have to use all the things?

Pablo: Yes, we do!



3 Listen and follow. Then say.

★ Grammar Heroes

Do we	have to	light the candle?
Does she		turn the wheel?
Yes, we do.	No, she doesn't.	

4 Solve the puzzle in 2 with a friend.

Do we have to put the ball in space 1?

Yes, we do.

Talk buddies

Go online
Phonics



1 Lessons 1 and 4 How do the characters in the unit solve difficult problems?

2 Listen and read. Then number in order.

HOW TO SOLVE DIFFICULT PROBLEMS



a Let's do it and see if our plan works!

b Let's think about what we know.

c Let's plan what to do.

d So, did our solution work?

e Let's talk about the problem together.

3 Read, look and discuss.

You made a robot out of a metal can but it doesn't work. How can you solve this problem?

Tip

- Check the wires and batteries!

Useful Language

How about ...? Let's try ...

4 Think about 3. Did you do the steps from 2?

Did we think about the problem?

Yes, we did. We thought about what we knew and didn't know.

Be a hero!

What are you going to do next time you have to solve a difficult problem?





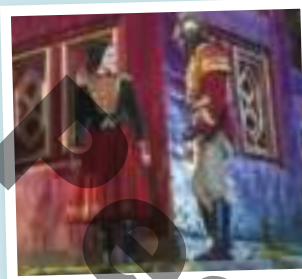
Inventions



In the real world

1 Explore Read, listen and circle.

- Machines make our lives **easier** / more difficult.
- Machines make forces **smaller** / bigger.



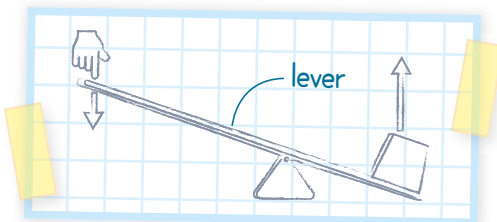
Clara meets a nutcracker in *The Nutcracker and the Four Realms*. A nutcracker is a simple lever.

AMAZING MACHINES

We invent machines to make our lives easier. They do difficult jobs for us by making forces bigger.

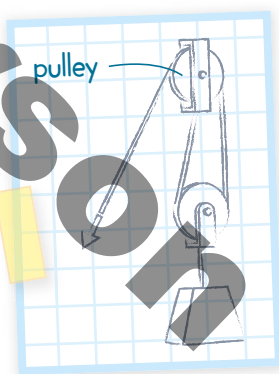
LEVERS

A **lever** helps us to move or lift heavy things. When you push down on one end of the lever, the other end goes up. You don't have to use a lot of force to lift heavy objects. There are levers in a seesaw, a pair of scissors and a nutcracker.



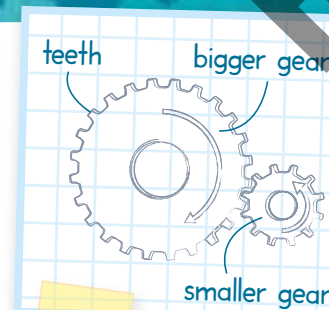
PULLEYS

A **pulley** has got a wheel that can change a force. When you pull down on one end of the pulley, the wheel turns and the object on the other end of the pulley goes up. We use pulleys to pull up water or to lift heavy rocks when we're building things.



GEARS

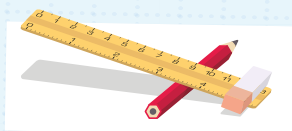
A **gear** is a wheel with **teeth**. The teeth of one gear go into the teeth of another gear. When we turn one wheel, the other wheel turns. Gears make our bikes and cars go quickly.



MINI-PROJECT

3 Make a simple lever. Try lifting different objects.

THINK Discuss. What objects in your classroom can you use to make your lever?



PLAN Research and plan your experiment. **Activity Book** page 53

SHARE Present your ideas to the class.

2 Think Look, read and number.

- a lever
- a pulley
- a gear



I can read and understand how machines work.

I can do it!

1 Read and circle. Then listen and check.

- How can Clara open the **engine** / **lock** on the box? She doesn't have to take **information** / **notes**. She **have** / **has** to look for clues.



- Clara is in the **workshop** / **invention**. She **don't** / **doesn't** have to do an experiment. She has to fix the **solution** / **machine**.

Let's talk!

Do we have to drop the ball?

No, we don't.

2 How does Clara's invention work? Ask a friend.

- Do / have / light / candle?
- Do / have / turn / wheel?
- Do / have / catch / mouse?
- Do / have / put / mouse / pulley?



3 Write some tips for younger students.

HOW CAN WE SOLVE DIFFICULT PROBLEMS?

- We have to think about the problem.
- We have to _____.
- We have to _____.
- We have to _____.

I can...

- name phrases related to inventions and problem-solving ☐
- talk and ask about what I have to do ☐
- solve difficult problems ☐
- understand about how machines work ☐

I completed Unit 5!

5 Solve it!

Disney
THE
NUTCRACKER
AND THE
FOUR REALMS

Video quiz

1 Watch again. Read and circle.

- 1 What does Clara love?
☒ a science ☐ b music
- 2 What does Clara's machine catch?
☐ a a fish ☐ b a mouse
- 3 What shape is Clara's box?
☐ a a bird ☐ b an egg
- 4 What letter is on the box?
☐ a C ☐ b D
- 5 What machine did Drosselmeyer invent?
☐ a a lake ☐ b a forest



2 Think and write. Then share ideas.

Solving difficult problems

- 1 What's the problem with Drosselmeyer's machine?



- 2 How does Clara solve Drosselmeyer's problem?



3



Read, choose and write. Then listen and check.

engine ~~invention~~ lock machine workshop

1 Clara's invention can catch a mouse.

2 But can she open the _____
on her box?

3 Clara visits Drosselmeyer in
his _____.

4 His lake _____ isn't
working. Clara fixes it!

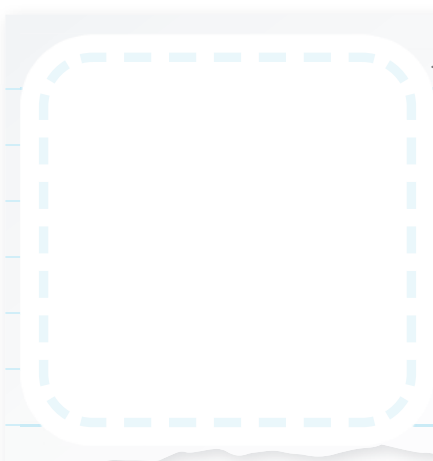
5 But can Clara fix the _____
in the Four Realms?



4



Imagine some inventions in a workshop! Draw, write and say.



My workshop



In my workshop, there's a



Extra time?

What's the best invention
in your house? Why?

I can

name machines and inventions.



1 Follow the maze and write.



- 1 lo_o_k f_o_r cl_u_es
- 2 br__in__t__rm
- 3 c__lle__t inf__rm__tion
- 4 t__ke n__tes
- 5 f__nd a s__luti__n
- 6 d__ an __xper__me__t
- 7 cr__ck a c__de
- 8 s__lv__ a p__zzle

2 Read, choose and write.

cracked experiment information notes puzzle solution

- 1 I found the solution. I solved the _____.
- 2 I wrote down ideas. I took _____.
- 3 I tested my idea. I did an _____.
- 4 I found out more about the problem. I collected _____.
- 5 I have the answer. I _____ the code!

Find out!

How many pieces does the biggest jigsaw puzzle in the world have?

3 Read, imagine and solve the problem. Compare with a friend.

My problem: My computer isn't working.

What can I do? _____

First, I can brainstorm.

Then, _____

Finally, _____

I can brainstorm. I can ask why isn't it working?



Extra time?

What's the mystery word?

t o k n o e o b

1 Read and circle.

- 1 Clara **has** / **have** to solve the puzzle to open the box.
- 2 She has to **look** / **looking** for clues on the box.
- 3 Drosselmeyer **don't** / **doesn't** have to help Clara, but he wants to!
- 4 They **has** / **have** to work together to find a solution.



Grammar Heroes

Read and write.

- 1 Clara thought, 'I **collect** → have to collect information.'
- 2 Clara **crack** → _____ the code.
- 3 Clara and Drosselmeyer **not** / **do** → _____ an experiment.
- 4 Drosselmeyer **not** / **take** → _____ notes.



2 How can you solve the puzzle? Look, choose and write. Then compare ideas.

clues experiment notes places

To find the treasure...

- 1 we have to brainstorm places.
- 2 we don't have to
- 3 _____
- 4 _____

We have to brainstorm places!

Extra time?

What do you have to do tomorrow?

I can

talk about what I have to do.



The bird puzzle



LESSON 4 Story

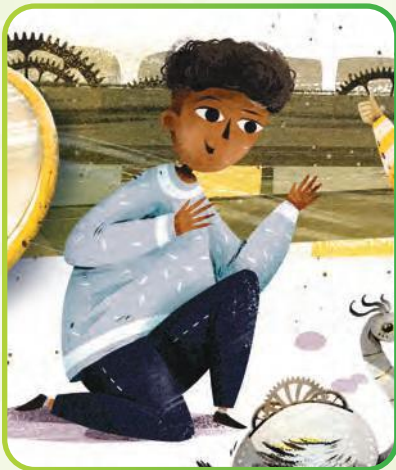


1 Read the story again. Read and write *T* (True) or *F* (False).

- 1 Levan's maths teacher is called Mrs Gears. F
- 2 Mrs Gears has a beautiful bird.
- 3 The first puzzle opens the door.
- 4 The second puzzle makes the bird move.
- 5 Levan solves all the puzzles.



2 Read and write.



What three things did Levan do before he started to solve the puzzles?

First, I _____.

Then, I _____.

Next, I _____.



3 Think about the story. Write.

My favourite puzzle is _____
because _____.



Extra time?

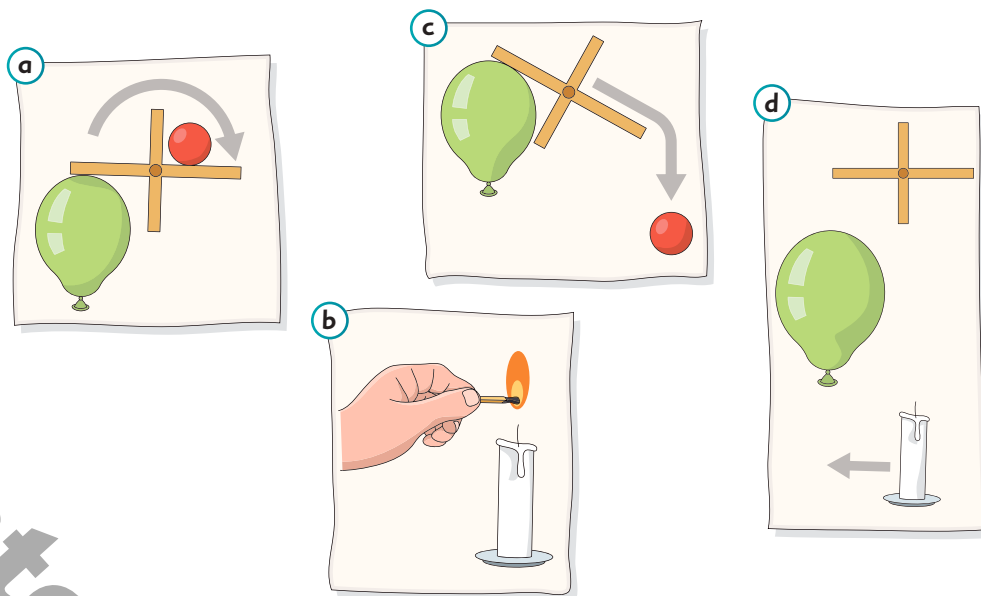
Imagine you're Levan.
How do you feel after you
solve all the puzzles?



1 Look and circle. Then listen and number.



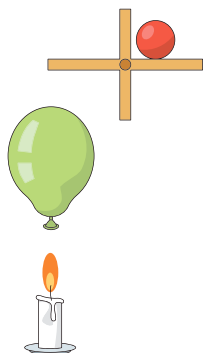
- a put / turn
- b light / drop
- c light / drop
- d put / turn



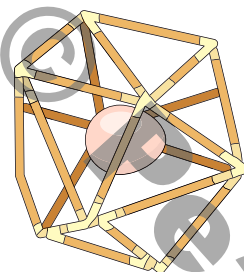
2 Look and write. Then ask and answer.

drop light put turn

CAN YOU SOLVE THE PUZZLES?



- 1 Don't turn the wheel!
- 2 drop the candle and it will turn the wheel!



- 3 First, put the egg in the invention!
- 4 Don't drop the egg!

Do we have to turn the wheel?

No, we don't.

3 Read and write.

- 1 Does she have to turn the key? No, she doesn't.
- 2 Does he have to light the fire? Yes, he does.
- 3 Do we have to drop the ball? No, we don't.
- 4 Do they have to put the batteries in? Yes, they do.



Extra time?

Ask questions about what you have to do for homework this week.

I can

ask questions with *have to*.



Solving difficult problems

LESSON 6

Myself and others

Responsible decision-making

1 Read and number.



HOW CAN WE SOLVE DIFFICULT PROBLEMS?



Find and choose the best solution.



Think about the problem.



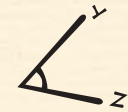
Brainstorm to think of lots of ideas.



Follow the plan.



Look back to see if your solution worked.



2 Use the steps from 1 to solve this problem.

I made some special ink. You can't see it! I mixed baking soda and water. Then I wrote my note and gave it to my friend. It was still wet! My friend painted the note with grape juice, but she can't read my message. Why doesn't it work?



MAKE INVISIBLE INK!

You will need:

- baking soda
- water
- paper
- a paintbrush
- grape juice

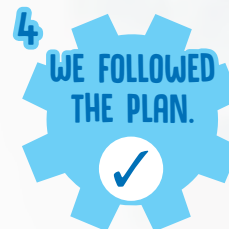
Clue: Read step 3 of the instructions again.

- 1 Mix baking soda and water in a cup.
- 2 Write your note on the paper with the paintbrush.
- 3 Leave to dry and give the note to your friend.
- 4 Your friend can read the message by painting the paper with grape juice!

My portfolio

3 Look at 2 and write.

WE SOLVED A DIFFICULT PROBLEM



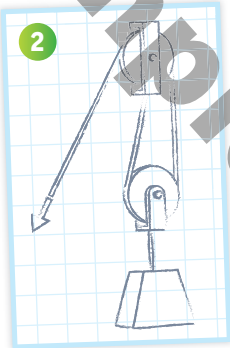
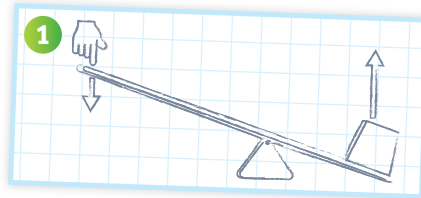




1 Look, choose and write.

gears lever pulley teeth

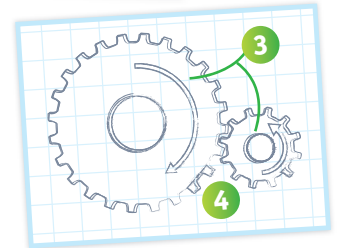
1 This lever helps us to lift heavy things.



2 This _____ is a simple machine with wheels.

3 The large and small _____ turn together.

4 The _____ on the gears fit together to turn the wheels.



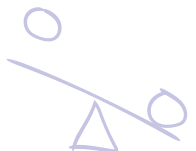
MINI-PROJECT

2 Write notes for your lever.

What objects can we use to make a lever? _____

How can we make the lever?

What objects can we try to lift with the lever?



3 Make your lever and write.

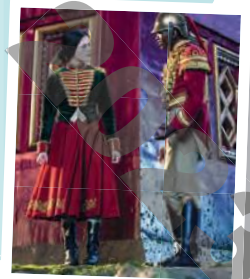
We used _____ to make our lever. We did experiments with our lever.

We tried to lift _____.

We found that _____.

We used a ruler, a pencil and a rubber to make our lever.

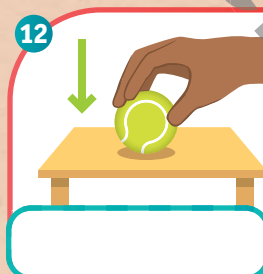
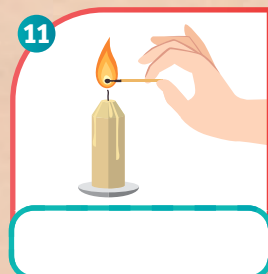
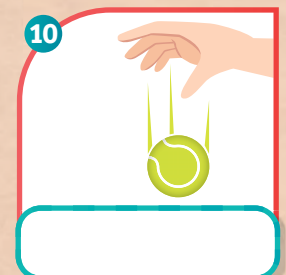
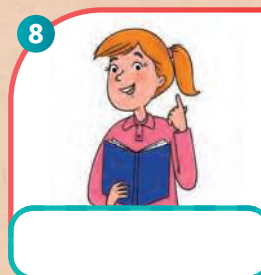
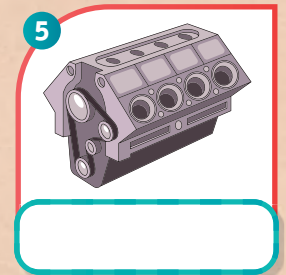
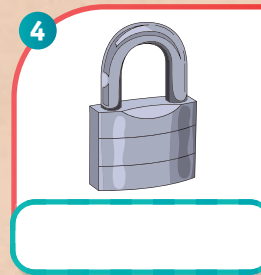
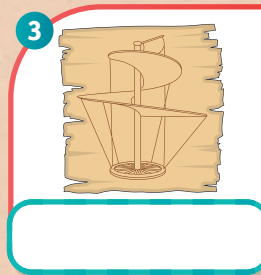
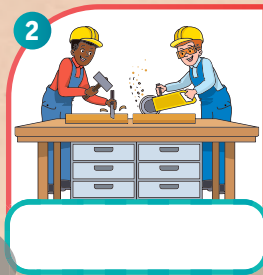
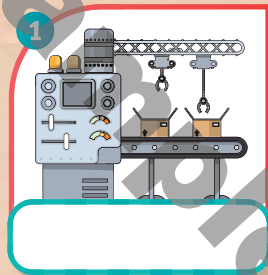
Clara uses a type of pulley to jump down from a tall building in *The Nutcracker and the Four Realms*. Find out: What else do we use pulleys for?



My progress journal



1 Listen and write. Check your spelling. Then answer with a friend.



Which words describe actions?



2 Look and complete.



1	Do I <u>have to</u>	take notes?	Yes, I <u>do</u> .
2	Does he _____	do an experiment?	Yes, he _____.
3	Do we _____	brainstorm?	No, we _____.
4	Do they _____	look for clues?	No, they _____.



Grammar Heroes

Challenge!

Say five things you have to do. You have one minute. Go!

I have to answer the question!

3 Read, choose and write.

Do you want to know how I solve difficult problems?

brainstorm clues information notes solution



I like solving difficult problems. First, I look for **1** clues (things I can see).
Then, I collect **2** _____ (find out more) about the problem.
Next, I **3** _____ (think of different ideas) and take **4** _____
(write ideas).
Finally, I find a **5** _____ (an answer) to the problem!

4 Look and write.

1 They have to solve the puzzle.

2 He _____ the code.

3 _____ Lana _____

the candle? Yes, she _____

4 _____ Pedro and Li _____

the wheel? No, they _____



5 Choose a difficult problem. Write what you have to do and tell a friend.

I have to look for clues.



Star learner

- This unit is ☆☆☆☆☆
- My favourite lesson is _____
because _____
- I can now _____

5

Solve it!

Unit objectives

By the end of this unit, pupils can:

- talk about machines and inventions, and solving problems
- talk about what you have to do
- ask and answer questions with *have to*
- understand and talk about how to solve difficult problems
- read and understand about how machines work, and make a simple lever

Skills development

Listening: understand video stories and dialogues about solving difficult problems, and what you do and don't have to do

Reading: understand a story about solving difficult problems and a factual text about inventions

Speaking: talk about machines and inventions, and how to solve problems; talk and ask and answer about what you do and don't have to do; present a simple lever

Writing: write the steps for solving a difficult problem, a description of a simple lever and tips about solving difficult problems; (optional) write a description

Lesson 1 Vocabulary

engine, invention, lock, machine, workshop

Lesson 2 Vocabulary

brainstorm, collect information, crack a code, do an experiment, find a solution, look for clues, solve a puzzle, take notes

Lesson 3 Grammar

*I have to / don't have to solve the problem.
He has to / doesn't have to take notes.*

Lesson 4 Story

The bird puzzle

You have to solve... to... .

First,... . Then,... . Next,... .

Lesson 5 Vocabulary and Grammar

drop, light, put, turn; Do we have to light the candle? Yes, we do. Does she have to turn the wheel? No, she doesn't.

Lesson 6 Myself and others

Responsible decision-making: Solving difficult problems

How about... ? Let's try... .

Lesson 7 My world

Science: Inventions

gear, lever, pulley, teeth

Mini-project: Make a simple lever

Lesson 8 I can do it!

Let's talk!  Asking what you have to do

Project

A description

Self-management skills: analysing what you need to do in a task
underline, important, instructions

Disney THE NUTCRACKER AND THE FOUR REALMS



Clara

She is smart, curious and independent. She loves inventing new things, and she's very good at understanding mechanics.



Fritz

Clara's younger brother, Fritz enjoys helping her with her science experiments.



Drosselmeyer

Clara's godfather. He's an inventor who not only encourages Clara but also challenges her. He helps her to get to the Four Realms, so that she can find the solution to opening her box.

Captain Phillip

A nutcracker who is brought to life as a brave and loyal soldier in the Four Realms. He becomes friends with Clara, and he supports her throughout her adventure.



In *The Nutcracker and the Four Realms*, Clara's mother, Marie, has recently died. She leaves Clara a locked egg-shaped box as well as the message 'Everything you need is inside.' Clara asks Drosselmeyer for help, and she enters into the Four Realms, a mysterious parallel world where toys come to life. The Sugar Plum Fairy wants to take over the kingdom of the Four Realms. She betrays everyone, and she tries to turn tin soldiers into real soldiers, but Clara is determined to stop her. Eventually, Clara is able to open her box and she finds a mirror inside: all she needs is herself!



Video 5A: Clara's metal egg

Video 5B: Clara has to solve a difficult problem

Did you know?
The story of the Nutcracker originally comes from a book. It's also a well-known ballet by Tchaikovsky!

Online module Phonics

Suffixes *sion* and *tion*
decision, conclusion, information, solution

Extra Lesson

Extra reading >>>>



Objectives

Lesson aim: name machines and inventions

Target language: engine, invention, lock, machine, workshop

Recycled language: design, mouse, shape, metal, key, difficult, problem, object, solution

Receptive language: solve, invent

Materials: Video 5A; Audio

GSE Skills

Listening: can follow the sequence of events in a simple story or narrative, if told slowly and clearly (36)

Reading: can understand short paragraphs on subjects of personal interest, e.g. sports, music, travel, if written, using simple language and supported by pictures (34)

Speaking: can talk about furniture and rooms, using simple language (32)

Writing (AB): can write simple sentences about everyday objects (32)

Teacher toolkit

Video summary – 5A

Clara's metal egg **Videoscript** see p.202

Clara loves science. There's a difficult problem that Clara wants to solve. She's got a metal egg that she can't open. Clara goes to Drosselmeyer, who is an inventor. She helps him solve a problem by fixing a machine. Then she asks if he can help solve the problem of the egg she can't open. Drosselmeyer sends Clara to the Four Realms, where toys come to life. Clara finds a new problem to solve in the Four Realms. How is she going to solve her problems?

Solving difficult problems

Use Video 5A to introduce the topic of solving difficult problems. Elicit how Clara approaches the problem of the metal egg she can't open (*she looks for clues, thinks carefully and asks others for help*). Ask pupils for some general ideas of difficult problems they can experience in their own lives, and invite them to suggest any ideas for how to solve them. Encourage general discussion, making sure that nothing too sensitive is discussed.

Responsible decision-making

Warm-up

- Introduce the unit title and present or check understanding of *solve* (find an answer to a question or problem). Then pre-teach: *invent* (create something new), and ask: *What important things did people invent in the past that help us today?* Brainstorm and write on the board the names of important inventions we use today, e.g. *computer, laptop, tablet, washing machine, mobile phone, oven, GPS, fridge*.

Presentation

Video story

? **What interesting objects can you see? What do we use them for? Share ideas.**

- Pupils look at the Big Picture. Introduce the Disney film *The Nutcracker and the Four Realms* and the characters Clara, Drosselmeyer, Fritz and Captain Phillip, using the information from the unit overview on p.121.
- Pupils work in pairs or groups to answer the rubric questions. Invite individual pupils to report back to the class, and encourage discussion. (**Possible answers:** *a candle, a balloon, a lake with birds on it; a candle is for light, the lake is for decoration, the balloon is for fun*)

1 5.1 **Listen, find and say. Then tell a friend.**

- Play the audio, while pupils listen and find the items in the Big Picture.
- Pupils work in pairs, taking turns to say each of the words. They can use these words in full sentences.

Audioscript (track 5.1)

- Clara fixes the engine.
- Clara's invention can catch a mouse.
- There's a lock on the bag.
- This is a workshop.
- This is a machine.

2 5A **Watch and answer.**

- Pupils read the questions. Play Video 5A, and pupils watch and listen. Pupils work in pairs to answer the questions. If necessary, play the video again for pupils to check. (**Answers:** *1 to catch a mouse, 2 There's no key for the lock, she can't open it.*)
- Discuss ideas as a class, inviting pupils to share their personal opinions. Encourage pupils to think about how they would solve the problem of catching a mouse. Then invite them to share experiences of difficult problems that they have solved in the past.

SUPPORT To help pupils find the answers to the questions, play the first part of the video again, for question 1 pausing after *to catch a mouse*, and for question 2 pausing after *Clara doesn't know how to open it*.

STRETCH Pupils write detailed answers to the questions.

Practice

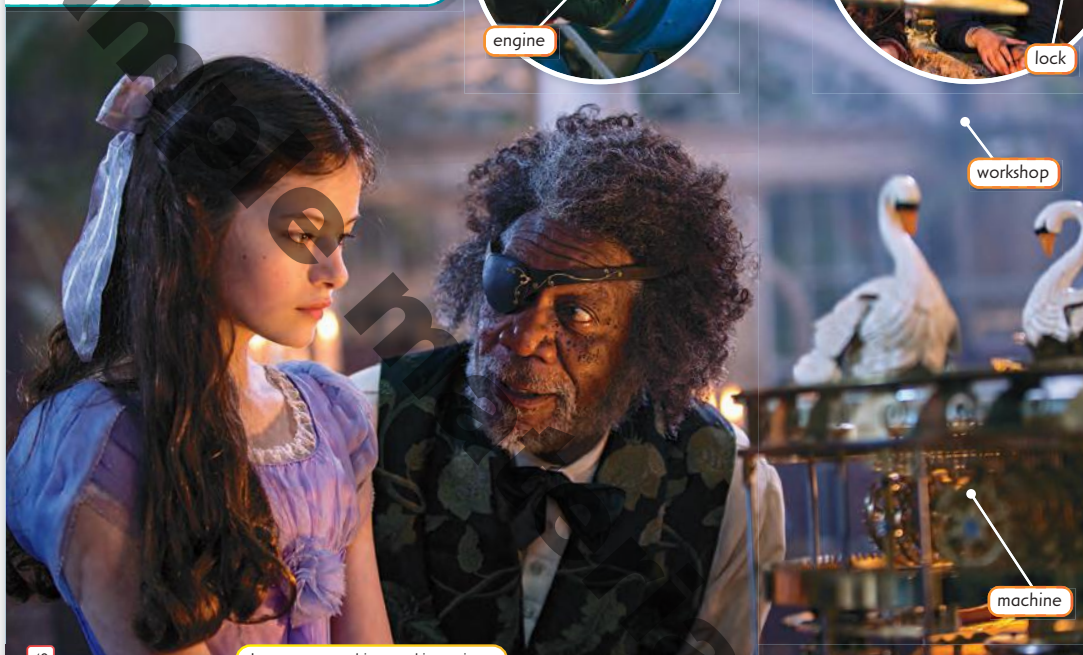
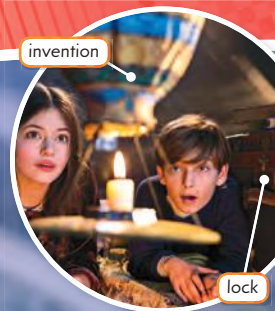
3 5.2 **Listen and write.**

- Pupils complete the gapped paragraph, using the new vocabulary items. Play the audio while pupils listen and check. Elicit and check answers.

5 Solve it!

? What interesting objects can you see?
What do we use them for? Share ideas.

1 Listen, find and say. Then tell a friend.



48

I can name machines and inventions.

Disney
THE NOTCRACKER
WITH THE
FOUR REALMS
Storyboard



2 Watch and answer.

Solving difficult problems

- 1 Why did Clara make a machine with a candle and a balloon?
- 2 What's the problem with Clara's egg?

Responsible decision-making

3 Listen and write.



Clara goes to Drosselmeyer's 1 workshop. She sees a lot of interesting 2 inventions. There's a metal lake with birds. But there's a problem with the 3 machine. Clara fixes it. Can she fix the 4 engine in the Four Realms, too? Can Clara solve her problem and open the 5 lock on the egg?

4 Imagine you're in Drosselmeyer's workshop. What can you see?

I can see a large machine on the table.

Talk buddies

49

- Invite pupils to look at the Big Picture and to talk about how Clara and Drosselmeyer are feeling in each situation, e.g. *Clara feels sad because she can't open the box. Drosselmeyer feels happy because Clara fixes his machine.*

4 Imagine you're in Drosselmeyer's workshop. What can you see?

- Invite a pupil to read aloud the speech bubble model. Pupils work in pairs, taking turns to imagine and talk about the different objects they can see in Drosselmeyer's workshop from the video.

Extra activity (video extension) Play Video 5A with no audio, for pupils to say the names of the vocabulary items when they see them, e.g. *workshop, engine.*

Wrap-up

- Play *Don't say the word!* (see Games Bank p.206) to practise the new vocabulary.

Activity Book

pages 46–47

Audioscript p.204

1 5A Watch again. Read and circle. 1 a, 2 b, 3 b, 4 b, 5 a

- Pupils watch the video again. They read each question and circle the correct answer.

2 Think and write. Then share ideas. Possible answers:

- 1 It isn't working.
 - 2 Clara fixes his machine.
- Pupils think about what they have seen in the video, then they write their answers to the questions. They work in pairs or groups to discuss what they have written. Elicit ideas.
- 3 5.1 Read, choose and write. Then listen and check.
- 1 *invention, 2 lock, 3 workshop, 4 machine, 5 engine*
- Pupils complete the gapped sentences with the correct words in the box. Play the audio for pupils to check.

4 Imagine some inventions in a workshop! Draw, write and say.

- Pupils think about different inventions they have seen in the video or any other inventions they know about, and they draw a picture of two or more inventions. Then they write sentences to describe the inventions, saying how they use them, e.g. *There's a lock. I use the lock to keep my things safe in my box.*
- They work in pairs, taking turns to show their pictures and read aloud their sentences.

Extra time? What's the best invention in your house? Why?

- Pupils think about inventions in their home. They choose the invention they think is the best, and write or say sentences about it, e.g. *The washing machine is the best invention in my house because it cleans my clothes.*

Objectives

Lesson aim: name phrases for solving problems

Target language: *brainstorm, collect information, crack a code, do an experiment, find a solution, look for clues, solve a puzzle, take notes*

Recycled language: *puzzle, different ideas, look online, important*

Materials: Audio; pieces of paper or sticky notes; (optional) small box, pieces of card

Skills

Listening: can recognise simple phrases related to familiar topics in slow, clear speech (33)

Reading: can understand short paragraphs on subjects of personal interest, e.g. sports, music, travel, if written, using simple language and supported by pictures (34)

Speaking: can make suggestions about doing common everyday activities, using a basic fixed expression (38)

Writing (AB): can write two or three related sentences on a familiar topic (33)

Teacher toolkit

Teaching vocabulary

In this lesson, pupils learn some commonly used verb + noun collocations, and you can reinforce the collocations through different types of matching activities. You can do an oral matching activity by saying the verb, e.g. *collect*, for pupils to identify and call out the corresponding noun, e.g. *information*. You could do a written matching activity by writing on the board one column with all the verbs and another column with all the nouns in a different order, for pupils to match the correct verbs and nouns.

Home-school link

At home, pupils can discuss with their families about a difficult problem at home that needs to be solved, e.g. a machine that doesn't work. Encourage them to work with their family members to brainstorm ideas about how to solve the problem. Invite pupils to report back in the next lesson, to tell the class about their problem-solving experience.

Warm-up

- Review the vocabulary from Lesson 1 by playing *Word tennis* (see Games Bank p.206). Play this as a class game. Pupils work in two teams. A pupil from Team A says the first word of a word phrase, e.g. *collect* and a pupil from Team B has to complete the phrase, e.g. *information (collect information)*. Continue until a pupil pauses or can't think of the rest of the phrase, then the other team wins a point. Pupils should switch roles within their team. The team with the most points at the end of the game is the winner.

Presentation

1 5.3 Read and listen. What can you write in a notebook?

- Ask pupils to look at the text, then elicit what the text type is (*a puzzle book*). Play the audio while pupils read and listen. Elicit the answer to the rubric question. (**Answer:** *important information*)
- Ask questions to check pupils' understanding of the new vocabulary items, e.g. *What do you do when you think of lots of ideas?* (*brainstorm*) *What do we do when we take notes?* (*write down ideas using a few words*).

2 5.4 Listen and repeat the words in 1.

- Play the audio, and pupils point to the pictures. Play the audio again, pausing after each word or phrase for pupils to repeat.
- Say a number, e.g. *four*, for pupils to say the corresponding phrase (*collect information*). Do the same with the other numbers and words or phrases.
- Pupils work in pairs, taking turns to say a number from one to eight for their partner to say the corresponding word or phrase. Alternatively, they can mime a word or phrase for their partner to guess.

Teaching star

Classroom management Keep a vocabulary box in your classroom to help pupils remember new words. When you come across a new word, ask a pupil to write it on a piece of card, with the word on one side and the definition on the other, as well as any pronunciation notes. Use the word cards in the vocabulary box to play different vocabulary games (see Games Bank p.206).

Practice

3 Read and write the phrase. Then write the number from 1.

- Read aloud the first gapped item, and elicit the missing word or phrase: *clues*. Then elicit the number of this vocabulary item from activity 1 (*number 2*) and write the number in the box.
 - Pupils work on their own to complete the rest of the activity in the same way.
 - They work in pairs to compare their answers. Then check answers as a class.
- Review** Read aloud the sentence starters. Then invite individual pupils to use the sentence starters with vocabulary items from activity 1 to talk about how to solve puzzles, e.g. *First, I brainstorm. Then, I collect information. Finally, I find a solution.*

LESSON 2

Vocabulary

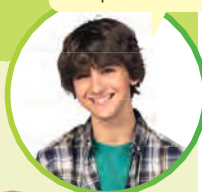
1 Read and listen. What can you write in a notebook?

PUZZLE TIPS

Here are some tips to help you solve the puzzles in this book!

- Look for clues** – think about the things you can see.
- Brainstorm** – think of different ideas to solve the problem and share your ideas with a friend.
- Collect information** – find out more about the problem by looking in books or online.
- Take notes** – write down important information in your notebook.
- Find a solution** – what are you going to do and how?
- Do an experiment** – try your solution to see if it works.
- Crack the code** – use the code to find the solution!

I've got a great new puzzle book!



2 Listen and repeat the words in 1.

3 Read and write the phrase. Then write the number from 1.

- a He looks for things he can see. He looks for **clues**. **2**
- b She tests her solution. She does an **experiment**. **7**
- c He wants to find out more. He **collects** information. **4**
- d She thinks of different ideas. She **brainstorms**. **3**



4 Think about how you can solve a problem. Tell a friend.

Problem: My pet is missing.

First, I brainstorm places in the house.

50

I can name phrases for solving problems.

4 Think about how you can solve a problem. Tell a friend.

- Invite a pupil to read aloud the example writing text. Elicit other similar problems pupils may need to solve in their everyday lives, e.g. *I can't find my school bag*. Pupils work on their own to write their problem. Then they think about how they can solve this problem.
- Pupils work in pairs, taking turns to talk about their problem and how they can solve it. Remind them to use *First, ...*, *Then, ...* and *Next, ...*.

SUPPORT Work with pupils to choose a problem, then brainstorm ideas about how to solve it and write these on the board for pupils to refer to as they do the pair work speaking activity.

STRETCH As a follow-up activity, a pair of pupils can swap their problems with another pair of pupils. They take turns to say how they can solve the new problem.

Extra activity (fast finishers) Pupils think about their favourite type of puzzle, e.g. wordsearch or crossword. They write sentences to explain how they solve this type of puzzle, saying why they enjoy it. They can swap with a partner and read what their partner has written.

Wrap-up

- Play *What word is on my head?* (see Games Bank p.206) to review the vocabulary from this lesson. Write vocabulary items on pieces of paper or sticky notes. Invite a pupil to come to the front of the class and stick a vocabulary item to their forehead. They ask the class yes/no questions until they have guessed the vocabulary item on their forehead. Repeat with different pupils and different vocabulary items.

Activity Book

page 48

- 1 **Follow the maze and write.** 1 look for clues, 2 brainstorm, 3 collect information, 4 take notes, 5 find a solution, 6 do an experiment, 7 crack a code, 8 solve a puzzle
- Pupils follow the lines of the maze from START to find each numbered picture. Then they write the missing letters to complete the corresponding phrase. Pupils work in pairs to compare their answers.
- 2 **Read, choose and write.** 1 solution, puzzle; 2 notes; 3 experiment; 4 information; 5 cracked
- Pupils read the gapped sentences and complete them with the words in the box. Then they work in pairs, taking turns to read aloud their completed sentences.

Find out! How many pieces does the biggest jigsaw puzzle in the world have?
551,232 pieces

- Pupils look in books or search online to find out about the world's biggest jigsaw puzzle. Elicit pupils' answers and encourage discussion. Ask pupils if they would like to do this puzzle, giving reasons why or why not.

3 Read, imagine and solve the problem. Compare with a friend.

- Pupils work on their own to think about a solution to the problem and complete the notes.
- Invite a pupil to read the speech bubble model. Then pupils work in pairs, taking turns to say their ideas for how to solve the problem.

Extra time? What's the mystery word?
notebook

- Pupils unscramble the letters to find the mystery word.

Objectives

Lesson aim: talk about what I have to do

Target language: *I have to / don't have to solve the problem. He has to / doesn't have to take notes.*

Recycled language: phrases for solving problems; metal, key

Materials: Video 5B; (optional) Video 5A; vibrant music and prepared word cards (machines and inventions, solving problems); Audio

CSE Skills

Listening: can identify basic factual information in short, simple dialogues or stories on familiar everyday topics, if spoken slowly and clearly (33)

Reading: can understand some simple details in a short text (34)

Speaking: can take part in a very simple conversation on a familiar topic, e.g. their home, family, school, if the other speaker repeats questions as necessary and speaks slowly and clearly (32)

Writing (AB): can write short, basic descriptions of everyday activities, given prompts or a model (35)

Teacher toolkit

Video summary – 5B

Clara has to solve a difficult problem

Videoscript see p.202

Clara has to solve a difficult problem. She has to look for clues. She has to brainstorm. She has to find a solution, so she asks Drosselmeyer for help. The video presents examples of the target grammar in context, e.g. *She has to look for clues. He doesn't have to help Clara, but he wants to!*

Teaching grammar

Provide pupils with plenty of practice to distinguish between *mustn't* and *don't have to*. There are lots of free worksheets available for download from the internet. Search: *English worksheets mustn't don't have to*.

Warm-up

- Pupils share what they can remember about the Lesson 1 video. Play Video 5A again, if necessary.
- Review the vocabulary from Lessons 1 and 2 by playing the game *Pass the word card* (see Games Bank p.206). Pupils sit in a circle. Give prepared word cards to different pupils. Play music, and pupils pass the word cards around the circle. When the music stops, the pupils with the word cards take turns to make a sentence, using the new vocabulary.

Presentation

Video story

1 5B Watch and write T (True) or F (False).

- Pupils look at the picture. Ask: *What has Clara got in her hand? (a metal egg) What's she trying to do? (open the egg).*
- Pupils work on their own to read the sentences. Then play Video 5B, while pupils watch and listen. They decide if each sentence is true or false. Then play the video again for pupils to check their answers.
- Pupils work in pairs to compare their answers. Then check answers as a class.

2 5.5 Read and write. Then listen and check.

- Pupils read and complete the gapped sentences, using the words in the box. Play the audio, and pupils check their answers.
- Pupils work in pairs to compare their answers. Check answers as a class by inviting individual pupils to read aloud their completed texts.

Grammar Heroes

3 5.6 Listen and follow. Then say.

- Elicit sentences with *must/mustn't*, which pupils learnt in Unit 4. Write two example sentences on the board, e.g.
You must buy this online. We mustn't post comments.
Elicit how *must/mustn't* change the meanings of the sentences: *must* means *Do it! You have no choice*; *mustn't* means *Don't do it. You have no choice*.
Now write each sentence with *have to* instead of *must*.
You have to buy this online. You don't have to post comments.
- Explain that *must* and *have to* have similar meanings, i.e. *have to* also means *Do it! You have no choice*. However, *mustn't* and *don't have to* have different meanings. Explain that *don't have to* means *You can do it if you want to; it's your choice*.
- Pupils look at the grammar box. Play the audio, and they listen and read. Then play the audio again, pausing after each sentence for pupils to repeat.
- Pupils work in pairs, taking turns to read aloud the sentences in the grammar box.

Teaching star

Application Apply the target language to a scenario that pupils will personally relate to, e.g. school rules. Elicit different school rules, e.g. *Don't run in the school building*, and transform these into sentences with (*don't*) *have to*, e.g. *You have to walk in the school building*. Pupils could then work in groups to make up their own imaginary school rules, e.g. *You don't have to do any homework!*

Disney
NOTCRACKER
THE
FOUR REALMS**1** Watch and write T (True) or F (False).

- Clara has to solve a difficult puzzle in the film. **T**
- She doesn't have to look for clues. **F**
- She asks Drosselmeyer to help her. **T**
- She doesn't have to crack a code. **F**

2 Read and write. Then listen and check.

have to don't have to has to doesn't have to



1 You must find out more. You **have to** collect information.



2 He can try his idea if he wants to. But he **doesn't have to** do an experiment.



3 The information is on my phone. I **don't have to** take notes.



4 He must find a solution. He **has to** crack the code.

3 Listen and follow. Then say.

★ Grammar Heroes

I	have to don't have to	solve the problem.
He	has to doesn't have to	take notes.

4 Talk about things you have to or don't have to do when you solve a problem.

I have to brainstorm.

I don't have to solve the puzzle today.

I can talk about what I have to do.

Talk buddies

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Wrap-up

- Invite individual pupils to say one thing they have to do or don't have to do by the end of today.

Activity Book

page 49

1 Read and circle. 1 has, 2 look, 3 doesn't, 4 have

- Pupils read and circle the correct options to complete the sentences.

★ **Read and write.** 1 have to collect, 2 has to crack, 3 don't have to do, 4 doesn't have to take

- Pupils follow the prompts and the example to complete the sentences.

2 How can you solve the puzzle? Look, choose and write. Then compare ideas.

Possible answers: 1 we have to brainstorm places, 2 we don't have to do an experiment, 3 we have to look for clues, 4 we don't have to take notes

- Pupils look at the map and read the words in the box. They work on their own to think about how they can solve the puzzle, finding the correct route on the map. Then they write sentences, about how to find the treasure, using *have to* and *don't have to*.
- They work in pairs, taking turns to read aloud what they have written, to compare their answers.

Extra time? What do you have to do tomorrow?

- Pupils work in pairs to say what they (don't) have to do tomorrow e.g. *I have to tidy up my room. I don't have to go to school because it's Saturday.*

Practice

4 Talk about the things you have to or don't have to do when you solve a problem.

- Invite two pupils to read aloud the speech bubble model.
- Pupils work in pairs, taking turns to talk about the things you *have to* or *don't have to* do when solving a problem, referring back to the text in Lesson 2 activity 1.

SUPPORT Before pupils begin this activity, brainstorm some ideas and write them on the board for pupils to refer to as they do the pair work speaking activity, e.g. *crack a code, collect information, have a snack, listen to music.*

STRETCH Pupils can add a reason for each (*don't*) *have to* sentence they say, e.g. *I have to take notes. I don't want to forget what she says.*

Extra activity (extension) Pupils imagine that a new pupil is starting at their school. They work on their own to write advice for the new pupil, using (*don't*) *have to*, e.g. *We have to arrive at school by 8:10 a.m. We don't have to eat our lunch in the cafeteria.* Then they work in pairs to compare what they have written. Alternatively, pupils can work in pairs to say sentences.

Objectives

Lesson aim: read a story about solving problems

Story language: *You have to solve... to...; First,... Then,... Next,...*

Recycled language: phrases for solving problems, ordinal numbers

Materials: Audio

CSE Skills

Listening: can follow the sequence of events in a simple story or narrative, if told slowly and clearly (36)

Reading: can follow simple stories with basic dialogue and simple narrative (35); can identify specific information in a simple story, if guided by questions (35)

Speaking: can act out parts of a picture, story using simple actions and words (31); can contribute to simple discussions when asked a question by the teacher (39)

Writing (AB): can write two or three related sentences on a familiar topic (33)

Teacher toolkit

Story summary

The bird puzzle

Levan loves science. His science teacher gives him three puzzles to solve, so that he can find her beautiful bird and make it move. Levan brainstorms ideas, he collects information and he solves each puzzle, one by one.

Solving difficult problems

Use the story to talk about solving difficult problems. Invite different pupils to explain each of the difficult problems (the puzzles) that Levan has to solve. Ask pupils what they do when they have a difficult problem (or puzzle) to solve. Encourage them to share any experiences of solving difficult problems or puzzles, if they feel comfortable doing so.

Responsible decision-making

Warm-up

- Write this puzzle on the board: *What's in seasons, minutes and seconds, but not in years, days or hours? (the letter 'n').* Elicit ideas from pupils and give clues if they can't think of the answer. Tell pupils that they will have the chance to solve more puzzles in the story.
- Introduce the story title and ask pupils to predict what sort of puzzles might be in this story.

Presentation

1 Look. How many puzzles are there?

- Ask pupils to explore the pictures and find and count the puzzles. Elicit the answer, then ask pupils which puzzle they are most looking forward to, giving reasons why. (**Answer:** *There are three puzzles.*)

2 5.7 Listen and read. Can you solve the puzzles in the story?

- Play the audio, and pupils listen and read the story. Then ask the rubric question, and pupils work on their own to read the story again and try to solve each of the puzzles. Elicit and check answers. (**Answers:** *The Lock puzzle: 941; The Box puzzle: messages 1 and 2 are false, message 3 is true, the bird is in the second box. The Bird puzzle: the triangle – the mirror image of the number is joined with the number to make the shape.*)
- Play the audio again, pausing to ask comprehension questions: *What subject does Ben like at school? (science) What's the name of his science teacher? (Mrs Gears) What animal does Mrs Gears have? (a beautiful bird) What does Ben have to do after solving three puzzles? (make the bird move) Does Levan solve the puzzles? (Yes, he does.).*

 **Think!** Pupils look at the story pictures to find the name of Mrs Gear's bird. (**Answer:** *Ben Bird, written above the picture of the cogs top right p.52.*)

Practice

3 Read again and write.

- Pupils work on their own to read the gapped sentences, then read the story again and complete the sentences. Elicit the answers.

4 Think and answer.

- Pupils read the questions, then work in pairs or small groups to discuss. (**Possible answers:** *1 He has to find the bird and make it move. 2 He brainstorms the problem, collects information and finds a solution.*)
- Ask pupils what they think about Levan's method of addressing a difficult problem. Then invite pupils to suggest what they do when they are faced with something difficult. Elicit how we might feel in this situation, e.g. *excited, scared*. Reassure pupils that many people feel a bit scared when they have a difficult problem to solve. Highlight that it's better to face up to the problem and try to solve it rather than ignoring the problem and hoping it goes away.

SUPPORT Direct pupils towards the first three paragraphs in the story, where they can find the answers to the two questions.

STRETCH Pupils write detailed answers to the questions.



The bird puzzle

- 1 Look. How many puzzles are there?
- 2 Listen and read. Can you solve the puzzles in the story?

Think!

What's the name of Mrs Gears' bird?

Levan loves science. His science teacher Mrs Gears says, 'You have to solve three puzzles to find my beautiful bird. Then you have to make the bird move.'

'I can do it!' says Levan.

First, Levan brainstorms the problem. Then, he collects information. Next, Levan finds a solution.

Levan looks at the first puzzle. He has to crack the code to open the door!

The LOCK CODE puzzle

7 4 8 One number is correct and in the correct place.
7 8 5 No numbers are correct.
6 5 4 One number is correct but in the wrong place.
1 5 9 Two numbers are correct but in the wrong place.

Levan puts three numbers into the lock and the door opens!

The BOX puzzle

One message is true and two are false.

The bird is in this box.

The bird isn't in this box.

The bird isn't in Box 1.

The BIRD puzzle

Only one of the shapes makes the bird move.

If $2 + 2 = \text{fish}$ and $3 + 3 = \text{eight}$

What is $7 + 7$?

square ■ circle ● triangle ▲

Then he sees the second puzzle. There are three boxes on the table.

Levan chooses the correct box and it opens. He pulls out a beautiful bird. Now he has to make the bird move.

He then sees the third puzzle. He looks for clues and thinks about the problem.

Levan pushes a shape and the bird moves!

'Well done!' says Mrs Gears, 'You solved all the puzzles!'

3 Read again and write.

- 1 Mrs Gears is Levan's science teacher.
- 2 Mrs Gears has got a beautiful bird.
- 3 Levan has to solve three puzzles.
- 4 Levan makes the bird move.

4 Think and answer.

Solving difficult problems

- 1 What problem does Levan have to solve?
- 2 What three things does he do first?

Responsible decision-making

5 Act out the story. Then reflect. Which is your favourite puzzle?



I like the lock code puzzle best!



My favourite puzzle is the bird puzzle!

5 Act out the story. Then reflect. Which is your favourite puzzle?

- Put pupils into pairs, and ask them to role-play the characters of Levan and Mrs Gears.
- Give the pairs time to practise acting out the story. Then invite more confident pairs to act out the story for the rest of the class.
- Invite two pupils to read aloud the speech bubble model. Pupils work with a different partner to talk about their favourite puzzle from the story.

Extra activity (story extension) Pupils imagine that they are Levan. They work on their own to write a diary entry about their visit to Mrs Gears' workshop.

Wrap-up

- Play *Who said it?* (see Games Bank p.207). Say a sentence from the story for pupils to name the character who said it, e.g. *You have to solve three puzzles (Mrs Gears).*

Activity Book

page 50

1 Read the story again. Read and write T (True) or F (False).

1 F, 2 T, 3 T, 4 F, 5 T

- Pupils read the story again. Then they read each sentence and write *T* if it is true or *F* if it is false.

2 Read and write. (Possible answers: 1 brainstormed, 2 collected information, 3 found a solution)

- Pupils work on their own to read the question and complete the sentences. Then they work in pairs to compare their answers.

3 Storytellers club Think about the story. Write

- Pupils complete the sentence about their favourite puzzle in the story. They work in pairs, taking turns to read aloud what they have written.

Extra time? Imagine you're Levan. How do you feel after you solve all the puzzles?

- Pupils think about how Levan feels after he has solved all the puzzles. They tell a partner, e.g. *I feel happy and proud.*

Objectives

Lesson aim: ask and answer questions with *have to*

Target language: *drop, light, put, turn; Do we have to light the candle? Yes, we do. Does she have to turn the wheel? No, she doesn't.*

Recycled language: *puzzle, solve*

Materials: Audio

CSE Skills

Listening: can identify basic factual information in short, simple dialogues or stories on familiar everyday topics, if spoken slowly and clearly (33)

Reading: can understand some simple details in a short text (34)

Speaking: can ask simple questions about people or things in their immediate surroundings or in pictures (35)

Writing (AB): can write correctly structured questions with question marks (35)

Teacher toolkit

Teaching grammar

In this lesson, pupils learn how to form questions with *have to*. Elicit and write on the board the questions and answers from the Grammar Heroes box using different personal pronouns, e.g. *Do you have to light the candle? (Yes, I do. / No, I don't.) Does he have to turn the wheel? (Yes, he does. / No, he doesn't.)*

Highlight that *have to* stays in the same form for all personal pronouns (*I, you, he/she, we, they*) but that *Do* changes to *Does* for *he/she*.

You could also elicit some *Wh-* questions with *have to*, e.g. *What do you have to do today? Where does she have to go after school?*

Home-school link

At home, pupils ask their families three questions about activities for the upcoming week using *have to*, e.g. *Do we have to go to the supermarket at the weekend?*

Warm-up

- In one corner of the board, write one thing you have to do today and one thing you don't have to do today, e.g. *I have to go to the supermarket. I don't have to play tennis.* Elicit similar sentences from individual pupils, and write these on the board.

Presentation

1 5.8 Listen and say. Then tell a friend.

- Pupils look at the pictures and say any words they know.
- Play the audio. Pupils listen, read the words and point to the pictures. Play the audio again, pausing after each item for pupils to repeat each word.
- Say a number, e.g. *one*, and pupils say the corresponding word (*drop*). Do the same with the other numbers and words.
- Pupils work in pairs, taking turns to say a number from one to four for their partner to say the corresponding word. Encourage them to say a sentence or do an action or mime to show the meaning of each word, e.g. *I drop my pencil on the floor.*

2 5.9 Listen and read. Tick (✓) Clara's invention.

- Ask pupils to look at the pictures and name the characters (*Clara and Fritz*). Explain that pupils are going to read and listen to Pablo and Emily talking about Clara's invention.
- Play the audio, and pupils listen and follow in their Pupil's Books. Then pupils tick the correct picture. Check answers as a class.
- Play the audio again, pausing to ask questions: *What does Clara do first? (lights the candle) What does Clara's invention catch? (a mouse) How can Pablo and Emily solve the puzzle? (They have to put things A–D in spaces 1–4) Do they have to use all the things? (Yes).*

Grammar Heroes

3 5.10 Listen and follow. Then say.

- Pupils look at the grammar box. Play the audio, and pupils listen and read. Play the audio again, pausing after each question and answer for pupils to read and repeat.
- Pupils work in pairs, taking turns to read aloud the questions and answers.

Practice

4 Solve the puzzle in 2 with a friend.

- Invite two pupils to read aloud the speech bubble model. Pupils work in pairs, taking turns to ask and answer questions about the puzzle in activity 2, using the target language.
- When pupils have solved the puzzle, they write letters A–D in the circles below the numbers 1–4 in the diagram in activity 2. Check answers as a class.

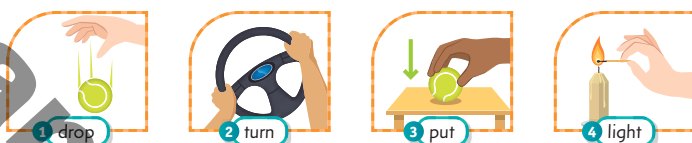
SUPPORT Pupils could work with a more confident pupil, following their lead to solve the puzzle.

STRETCH Pupils could work with a less confident pupil, asking the questions for their partner to give the short answers only: *Yes, we do.* or *No, we don't.*

LESSON 5

Vocabulary and Grammar

1 Listen and say. Then tell a friend.



2 Listen and read. Tick (✓) Clara's invention.

Emily: I really like Clara's invention in the film. But how does it work?

Pablo: Clara lights the candle. Then the balloon goes up in the air. That starts the machine and it catches the mouse!

Emily: Cool!

Pablo: I've got a puzzle like Clara's. Let's solve it together! We have to put the things A–D in the spaces 1–4.

Emily: Oh, OK! Do we have to use all the things?

Pablo: Yes, we do!



3 Listen and follow. Then say.

★ Grammar Heroes

Do we	have to	light the candle?
Does she		turn the wheel?
Yes, we do.	No, she doesn't.	

Do we have to put the ball in space 1?

Yes, we do.

talk buddies

4 Solve the puzzle in 2 with a friend.

54

Extra Lesson

Go online

Phonics

I can ask questions with have to.

Activity Book

page 51

Audioscript see p.204

1 5.2 Look and circle. Then listen and number. a turn, 3; b light, 2; c drop, 4; d put, 1

- Pupils look at the pictures, match them to the options, then circle the correct option.
- Explain that they will hear Pablo and Emily talking about this experiment. They have to listen and number the actions in the correct order, from 1 to 4. Play the audio, and pupils listen and write the numbers 1 to 4 next to the correct actions.

2 Look and write. Then ask and answer.

1 turn, 2 Light, 3 put, 4 drop

- Pupils read the gapped sentences and complete them with the words in the box.
- Then invite two pupils to read aloud the speech bubble model. Pupils work in pairs to ask and answer questions with *have to*, referring to their completed sentences.

3 Read and write. 1 Does, have to, she doesn't; 2 Does, have to, he does; 3 Do, have to, we don't; 4 Do, have to, they do

- Pupils complete the gapped questions, then compare answers in pairs.

Extra time? Ask questions about what you have to do for homework this week.

- Pupils work in pairs, taking turns to ask and answer about homework they have to do this week e.g. *Do you have to study for a maths test?* Yes, I do.

Teaching star

Diversity and inclusion Encourage pupils to change their partners across the pair work activities, so that they work with partners of different abilities. This will help encourage peer learning and will develop pupils' ability to provide different kinds of peer support.

Extra activity (class survey) Elicit from pupils different questions about things they have to do this week, e.g. *Do you have to do a science project?* Choose five questions, then ask each these to the class. Have a show of hands for each question and record the answers.

Wrap-up

- Play *Whispers* (see Games Bank p.207) to review the language from this lesson. Pupils sit in two lines. Start by whispering a question to the pupil at the front of each line, e.g. *Do you have to turn the wheel when you drive a car?* Pupils whisper the question to each other along their line. The last pupil tells the class what they think the question is. Compare with your original question.

Online module-Phonics

Extra Lesson

Suffixes *sion* and *tion*

decision, conclusion, information, solution



Objectives

Lesson aim: understand and talk about how to solve difficult problems

Target language: *How about...? Let's try...*

Recycled language: *brainstorm, collect information, find a solution, robot, metal can*

Receptive language: *wires, batteries*

Materials: (optional) Video 5A; Audio

Skills

Listening: can identify key information, e.g. places, times, from short audio recordings, if spoken slowly and clearly (31)

Reading: can understand the main ideas in simple informational texts, if supported by pictures (35)

Speaking: can take part in a very simple conversation on a familiar topic, e.g. their home, family, school, if the other speaker repeats questions as necessary and speaks slowly and clearly (32)

Writing: can write simple sentences about familiar things, given prompts or a model (32)

Teacher toolkit

Solving difficult problems

In this lesson, pupils expand upon what they learnt in Lessons 1 and 4 about following steps to solve difficult problems. At this age, pupils are developing their ability to keep working at difficult tasks for longer periods of time. However, sometimes difficult problems can feel overwhelming and pupils don't know how to proceed. By following a step-by-step approach to solving difficult problems, pupils can feel that the problems are more manageable and easier to solve.

Responsible decision-making

Home-school link

Encourage pupils to follow the strategic steps they learn in this lesson as they approach problems at home. In a follow-up lesson, invite individual pupils to report back to the class, saying how they solved a difficult problem by following the steps.

Warm-up

- Elicit ideas about a range of difficult problems people can face, both personally and in society, e.g. *I have to do a difficult school project. I have to protect the environment.* Have a class discussion, focussing on general problems rather than any specific problems individual pupils may be facing. You could leave some of the ideas on the board, for pupils to consider in the **Extra activity**, if they do this.

Presentation

1 Lessons 1 and 4 How do the characters in the unit solve difficult problems?

- Pupils work in pairs or small groups to answer the rubric question. They discuss the situations and the characters in Video 5A and the Lesson 4 story. If necessary, play Video 5A again to remind pupils of the situations and the characters' reactions.
- Elicit and discuss pupils' ideas. Ask questions to guide pupils: *What was Clara's difficult problem? How did she solve the problem? What was Levan's difficult problem? How did he solve the problem?* (**Possible answers:** Clara's problem: how to open her box with the special lock. She looks for clues, brainstorms, then she asks Drosselmeyer for help. Levan's problem: how to find Mrs Gears' bird and make it move. He brainstorms, he collects information and he finds a solution.)
- Ask pupils to think about how the characters feel when they are faced with a difficult problem. Say: *How do you think Clara feels when she can't open the box? How do you think Levan feels when he has to find the bird and make it move?*

2 5.11 Listen and read. Then number in order.

- Pupils look at the title and the step-by-step text. Play the audio, and pupils listen.
- Then pupils work on their own to read the suggestions a-e below the text, which match each of the steps given in the text. They number the suggestions in the correct order 1-5. Then they work in pairs to compare answers.
- Elicit answers, and have a class discussion about what pupils think they have learnt from this activity.

Practice

3 Read, look and discuss.

- Invite a pupil to read aloud the scenario. Check understanding of the problem (*pupils have to work out why the robot isn't working*) and check understanding of the recycled words: *wire* (*a long piece of metal that carries electricity*), *batteries* (*small objects that provide electricity*).
- Introduce the sentence starters in the *Useful Language* box, and elicit different ways of completing each sentence in relation to the scenario given in this activity.
- Pupils work in pairs to discuss and solve the problem in the scenario, using the strategies from activity 2.
- Invite individual pupils to share their ideas for solutions, and encourage discussion.



Solving difficult problems

LESSON 6
Myself and others

1 **Lessons 1 and 4** How do the characters in the unit solve difficult problems?

2 Listen and read. Then number in order.

HOW TO SOLVE DIFFICULT PROBLEMS



3 Read, look and discuss.

You made a robot out of a metal can but it doesn't work. How can you solve this problem?

Tip

- Check the wires and batteries!

Useful Language

How about ...? Let's try ...

4 Think about 3. Did you do the steps from 2?

Did we think about the problem?

Yes, we did. We thought about what we knew and didn't know.

Be a hero!
What are you going to do next time you have to solve a difficult problem?

Responsible decision-making I can solve difficult problems.

How to build your robot



Be a hero! Pupils work on their own to think about different ideas for solving a difficult problem. Encourage pupils to share their ideas with the class, e.g. watching a video online that can help them with the problem, or asking an adult for help. Encourage discussion.

Extra activity (fast finishers) Pupils choose one of the problems on the board from the **Warm-up**, then follow the steps in activity 2 to think about a possible solution to this problem. They can discuss in pairs.

Wrap-up

- Have a class discussion about the importance of step 5 in activity 2 (Look back – did your solution work?). Ask pupils why they think it is important to reflect on solutions, e.g. *to learn for the next time, to make improvements, to keep a note of what worked*. Elicit that this step 5 supports us in developing a growth mindset, as it can help us keep learning as we solve difficult problems.

Activity Book

page 52

1 Read and number. 3, 2, 5, 1, 4

- Pupils work on their own to number the steps in order from 1 to 5, referring to Pupil's Book activity 2.

2 Use the steps from 1 to solve this problem.

The ink didn't work because the girl didn't leave it to dry as per step 3 of the instructions.

- Invite one pupil to read aloud the girl's problem and another pupil to read aloud the instructions for making invisible ink.
- Check understanding of the problem: *Why doesn't the girl's invisible ink work?* Then pupils work in pairs to solve the problem, following the steps from activity 1. If they get stuck, tell them to read the clue at the bottom of the instructions.

3 **Look at 2 and write.**

- Pupils reflect on how they solved the problem in activity 2 and if they did each of the steps in activity 1. They write simple notes about what they did for each step.
- Invite pupils to share their ideas with the class. Have a class discussion about how they can use the strategies to help them improve their ability to solve problems.

SUPPORT Work with pupils to brainstorm reasons for the problem, using the visual prompts, then solve the problem together.

STRETCH Once pupils have discussed and solved the problem, join two pairs of pupils together to compare their ideas.

4 Think about 3. Did you do the steps from 2?

- Pupils work with their partner to reflect about how successfully they used the strategies in activity 2. Then elicit ideas and have a class discussion.
- Ask pupils which strategy from activity 2 they think is the most useful one for solving difficult problems. Have a class vote.

Teaching star

Creativity Discuss with pupils that sometimes we have to think 'outside the box' to solve difficult problems. Encourage pupils to think creatively and to share confidently any ideas they may have for solving the problem in activity 3, e.g. *maybe the metal can still has a drink in it?*

Objectives

Lesson aim: read and understand about how machines work, and make a simple lever

Target language: gear, lever, pulley, teeth

Recycled language: machines, forces, heavy, scissors, wheel

Receptive language: end, seesaw, nutcracker

Materials: Audio; (optional) sheets of paper

GSE Skills

Listening: can identify key information, e.g. places, times, from short audio recordings, if spoken slowly and clearly (31)

Reading: can understand the main ideas in simple informational texts, if supported by pictures (35); can understand the main information in basic diagrams related to familiar topics (37)

Speaking: can take part in a very simple conversation on a familiar topic, e.g. their home, family, school, if the other speaker repeats questions as necessary and speaks slowly and clearly (32)

Writing (AB): can write short, basic descriptions of everyday activities, given prompts of a model (35)

Teacher toolkit

Cross-curricular

Machines make our lives easier by doing difficult jobs for us. We don't need to use a lot of force to make machines work. Examples of machines are levers, pulleys and gears. Levers help us move or lift heavy things. Pulleys also help us lift heavy things or they help us pull up water. Gears help make our bikes and cars move quickly.

Home-school link

At home, pupils find an example of either a lever or a pulley or a gear. They talk with their families about how it works.

Warm-up

- Introduce the lesson title and elicit the meaning of *invention* (something new that someone creates for the first time). If necessary, refer pupils back to Lesson 1 where this word is presented.
- Read aloud the *Disney in the real world* text. Explain that in this lesson pupils are going to read and understand about simple machines, e.g. the lever.

Presentation

1 5.12 Explore Read, listen and circle.

- Pupils look at the diagrams. Ask them to describe what they can see (*objects going up and down, machines*).
- Invite two pupils to read aloud the two sentences with options above the text. Play the audio. Pupils listen and read the text in their Pupil's Books.
- Pupils work on their own to read the sentences again and circle the correct options. Check answers as a class.

Practice

2 Think Look, read and number.

- Pupils work on their own to match the photos to the correct simple machines.
- Then pupils work in pairs to compare their answers. Check answers as a class.

Teaching star

Communication As pupils work in pairs to compare their answers, invite them to take turns to explain how each machine works, summarising what they have learnt from the text in activity 2. Encouraging pupils to communicate what they have learnt will help them to remember the information.

Thinking skills Apply

Pupils can work in pairs to apply what they have learnt in this lesson to a simple everyday problem, e.g. picking up a pencil from the floor. They discuss how a lever, pulley or gear could help them solve this simple problem. Invite different pairs to present their ideas to the class. Have a class vote for the best idea.

Mini-project

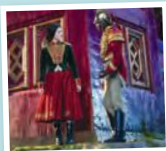
3 Make a simple lever. Try lifting different objects.

- THINK** Pupils work in pairs to think about the question and brainstorm ideas.
- PLAN** Pupils now go to their Activity Books and create their mini-project.



1 Explore Read, listen and circle.

- Machines make our lives **easier** more difficult.
- Machines make forces **smaller** bigger.



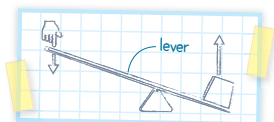
Clara meets a nutcracker in *The Nutcracker and the Four Realms*. A nutcracker is a simple lever.

AMAZING MACHINES

We invent machines to make our lives easier. They do difficult jobs for us by making forces bigger.

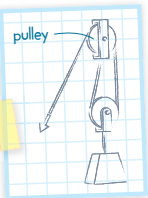
LEVERS

A **lever** helps us to move or lift heavy things. When you push down on one end of the lever, the other end goes up. You don't have to use a lot of force to lift heavy objects. There are levers in a seesaw, a pair of scissors and a nutcracker.



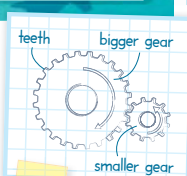
PULLEYS

A **pulley** has got a wheel that can change a force. When you pull down on one end of the pulley, the wheel turns and the object on the other end of the pulley goes up. We use pulleys to pull up water or to lift heavy rocks when we're building things.



GEARS

A **gear** is a wheel with **teeth**. The teeth of one gear go into the teeth of another gear. When we turn one wheel, the other wheel turns. Gears make our bikes and cars go quickly.



MINI-PROJECT

2 Think Look, read and number.

- a lever
- a pulley
- a gear



3 Make a simple lever. Try lifting different objects.

THINK Discuss. What objects in your classroom can you use to make your lever?

PLAN Research and plan your experiment. **Activity Book** page 53

SHARE Present your ideas to the class.

56

I can read and understand how machines work.

Pupils work in pairs to research in books or search online to find out information about other things we can use pulleys for. Elicit ideas.
Possible answers: We use pulleys to lift heavy things when we build houses. Also in theatre curtains, lifts, wells.

SHARE Pupils work in groups, with each pair taking turns to present their lever. Alternatively, pairs can present to the class. Encourage the pupils who are listening to ask questions and to give positive peer feedback.

SUPPORT Brainstorm items that pupils can use to create a simple lever. Direct pupils to the picture in the Pupil's Book showing a ruler and a pencil as a lever.

STRETCH As a follow-up, pupils can think of or research to find out more about other levers that we use in everyday life, then write a few sentences to describe how they work.

Extra activity (extension) Write on the board: *How do machines make our lives easier?* Pupils can either work in pairs to discuss, or they can work on their own to write a paragraph to answer the question.

Wrap-up

- Point to each photo in Pupil's Book activity 2 and invite individual pupils to name each simple machine and explain how it works.

Activity Book

page 53

1 Look, choose and write. 1 lever, 2 pulley, 3 gears, 4 teeth

- Pupils read the gapped sentences and complete them with the words in the box. They work in pairs, taking turns to read aloud their sentences to check their answers.

2 Write notes for your lever.

- Pupils think about the ideas they discussed in Pupil's Book activity 3. Then they write notes to answer the questions about their lever.

3 Make your lever and write.

- Pupils work in pairs to make their lever. They use their lever to try to lift different classroom objects.
- Invite a pupil to read aloud the model sentence. Pupils work on their own to complete the sentences about the lever they have made. They can write on a separate sheet of paper if they need more room.

Objectives

Lesson aim: review target language from Unit 5

Target language: machines and inventions, phrases for solving problems, action verbs; *She has to look for clues. She doesn't have to do an experiment. Do we have to light the candle? Yes, we do.*

Recycled language: open, box, wheel, mouse, pulley

Materials: (optional) Video 5A, Video 5B; Audio

CSE Skills

Listening: can identify basic factual information in short, simple dialogues or stories on familiar everyday topics, if spoken slowly and clearly (33)

Reading: can understand some simple details in a short text (34)

Speaking: can take part in a very simple conversation on a familiar topic, e.g. their home, family, school, if the other speaker repeats questions as necessary and speaks slowly and clearly (32)

Writing: can write short, basic descriptions of everyday activities, given prompts or a model (35)

Teacher toolkit

Video review

You can return to Video 5A to reinforce the theme of solving difficult problems. Elicit the difficult problem Clara has to solve (*to open the metal egg*) and how she solves it (*she looks for clues, brainstorms, then asks Drosselmeyer for help*). Play Video 5B again and then invite individual pupils to say sentences about what Clara has to do, e.g. *She has to solve a difficult problem.*

Home-school link

Pupils take home the lever they made in Lesson 7 to show and talk about with their families. Encourage them to use the strategies they learnt in Lesson 6 to think creatively about how they can use this lever to solve a problem at home. In a follow-up lesson, invite individual pupils to report back to the class.

Warm-up

- Play *Parachute* (see Games Bank p.207) to review the unit vocabulary.

I can do it!

1 5.13 Read and circle. Then listen and check.

- Pupils work on their own to read the sentences and circle the correct options. Then play the audio, and pupils listen and check their answers.
- Invite individual pupils to read aloud the completed sentences.

SUPPORT Play the audio before pupils do the circling activity.

STRETCH Pupils write another sentence about each picture using *has to* / *doesn't have to*, e.g. *Clara has to find a solution.*

2 How does Clara's invention work? Ask a friend.

- Invite three pupils to read aloud the rubric and the speech bubble model. Pupils look at the picture, then work in pairs, taking turns to ask questions using the prompts, for their partner to answer.
- Invite pairs of pupils to say their questions and answers in front of the class.

SUPPORT Before pupils do the pair work speaking activity, work together to make questions from the prompts, e.g. *Do we have to light the candle?*, making sure pupils know which words they need to add to the prompts. Question 4 also needs the preposition *in*: *Do we have to put the mouse in the pulley?*, so pupils don't need to do this question if it seems too challenging for their level.

STRETCH Pupils can ask and answer more (*don't*) *have to* questions about Clara's invention, e.g. *Do we have to let the mouse go?*

3 Write some tips for younger pupils.

- Pupils think about what they have learnt in this unit, then write tips for solving problems.
- Pupils work in pairs, taking turns to read aloud their completed sentences.

SUPPORT Elicit and write on the board useful vocabulary for pupils to use as they write the tips, e.g. *brainstorm, plan*.

STRETCH Pupils can write more tips, using *don't have to*.

Teaching star

Learning to learn Introduce the concept of *continuous improvement* by explaining that we keep improving by learning from our mistakes as well as by learning from others. As pupils work in pairs to share their tips, invite them to say what they have learnt from the activity: from their own mistakes and from what their partner has written.

I can...

- Read aloud the *I can...* statements as a class. Pupils tick what they feel they can do after they have completed Unit 5.
- Invite individual pupils to read aloud the sentences they ticked.

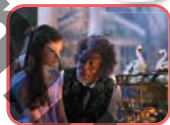
Extra activity (whole class) Pupils go to p.2 in their Pupil's Books and look at the picture of Clara. They use the unit language to write sentences or talk in pairs about Clara and how she solves a difficult problem. Invite individual pupils to report back to the class.

I can do it!

LESSON 8 Review

1 Read and circle. Then listen and check.

- 1 How can Clara open the **engine** **lock** to the box?
She doesn't **have** to take **information** **notes**.
She **have** **has** look for clues.



- 2 Clara is in the **workshop** **invention**.
She **don't** **doesn't** **have** to do an experiment.
She has to fix the **solution** **machine**.

Let's talk!

Do we have to light the candle?

Yes, we do.

2 How does Clara's invention work? Ask a friend.

- 1 Do / have / light / candle? 3 Do / have / catch / mouse?
2 Do / have / turn / wheel? 4 Do / have / put / mouse / pulley?



3 Write some tips for younger pupils.

HOW CAN WE SOLVE DIFFICULT PROBLEMS?

- We have to think about the problem.
- We have to _____.
- We have to _____.
- We have to _____.

I can...

- name phrases related to inventions and problem-solving ☐
- talk and ask about what I have to do ☐
- solve difficult problems ☐
- understand about how machines work ☐

I completed
Unit 5! ★★

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- 2 Look and complete. 1 have to, do; 2 have to, does; 3 have to, don't; 4 have to, don't
- Pupils read and complete the gapped questions and answers with the correct words.

Challenge! Say five things you have to do. You have one minute. Go!

- Invite a pupil to read the speech bubble model. Then pupils work in pairs, taking turns to say true sentences using *have to*.

- 3 Read, choose and write. 1 clues, 2 information, 3 brainstorm, 4 notes, 5 solution

- Pupils read and complete the gapped text with the words in the box. Then they work in pairs, taking turns to read aloud the completed text.

- 4 Look and write. 1 have to solve; 2 doesn't have to crack; 3 Does, have to light, does; 4 Do, have to turn, don't

- Pupils complete the gapped sentences, questions and answers. Then they work in pairs to compare answers.

- 5 Choose a difficult problem. Write what you have to do and tell a friend.

- Pupils think about a difficult problem, which can be real or imaginary. They write about what they have to do to solve this difficult problem, using the language they have learnt in this unit. Then they work in pairs, taking turns to read aloud what they have written.

Star learner

- Pupils reflect on how much they enjoyed the unit and colour in the number of stars to give it a rating from one star to five stars.
- Pupils choose their favourite lesson from the unit, giving reasons why. Then they describe one new skill they have learnt. Elicit and discuss what pupils have written.

Wrap-up

- Pupils reflect on what they learnt in Unit 5. Ask: *What was your favourite activity? Why? What's the most interesting thing you learnt?* Have a class vote and choose one activity to do again as a class, e.g. watch one of the videos, play a game or retell the story.

Activity Book

pages 54–55

Audioscript see p.205

My progress journal

1 5.3 Listen and write. Check your spelling. Then answer with a friend.

1 machine, 2 workshop, 3 invention, 4 lock, 5 engine, 6 solve a puzzle, 7 collect information, 8 find a solution, 9 crack a code, 10 drop, 11 light, 12 put, 12 turn

- Pupils look at the pictures and predict the words. Play the audio, and pupils write the words. They refer back to the Pupil's Book to check that they have spelled each word correctly.
- They then work in pairs to discuss their answers to Pablo's question.

Objectives

Lesson aim: write a description of an object

Target language: underline, important, instructions

Recycled language: forces, invention, nutcracker, lever

Materials: Audio; pens, pencils, paper; (optional) popular science books or magazines for young people

CSE Skills

Listening: can recognise simple phrases related to familiar topics in slow, clear speech (33)

Reading: can understand some simple details in a short text (34)

Speaking: can take part in a very simple conversation on a familiar topic, e.g. their home, family, school, if the other speaker repeats questions as necessary and speaks slowly and clearly (32)

Writing (AB): can write simple sentences about everyday objects (32)

Teacher toolkit

Project skills: Self-management

In this lesson, pupils learn to take responsibility for making sure they understand exactly what they need to do before they start a new task. They learn to underline important words in instructions and identify anything they aren't sure about, e.g. the meaning of words or the sequence in which they should do things. Encourage pupils to ask questions when they aren't sure about something. Highlight that when we ask questions we may also be helping other people, too, as they may also be unsure about the same thing.

Extend

Bring to class popular science books or magazines. Put pupils into groups, and hand out a book or magazine to each group. Give them some time to look through and identify a description of an interesting object. Encourage them to discuss the description and any features they notice about it, e.g. details about how the object works or how it looks. Invite each group to report back to the rest of the class and to say what they have learnt from this, e.g. *Next time I write a description, I'm going to use comparative adjectives to compare it with other objects.*

Warm-up

- Ask pupils if they enjoy reading science books or magazines about real-life topics, i.e. non-fiction instead of fiction. Have a class discussion about why these types of texts are important (e.g. *they help us learn about the world*). Explain that in this project pupils are going to write a description of a real-life object, i.e. a non-fiction text.

Review

1 9.5 Listen, read and write.

- Invite a pupil to read aloud the words in the box.
- Play the audio. Pupils listen and read the gapped description. Then they write the missing words.
- Invite individual pupils to read aloud different sentences in the completed description. Discuss how the text is factual and contains an explanation of how the object works.

Get ready

2 Work with a friend to plan your description.

- Invite two pupils to read aloud the speech bubble model. Pupils work in pairs to brainstorm and share ideas for an interesting object to write about. Encourage them to think creatively as they brainstorm ideas, then to choose the interesting object they want to write about.

Create

Tips

Self-management

Read aloud the tips as a class. Explain that these tips will help them make sure they understand what they need to do in a task. Point out that these tips will help them with tests and exams, as points are awarded for answering all parts of a question or task.

3 Write your description.

- Pupils now go to their Activity Books and create their project.

Activity Book

page 90

1 Read. Underline important words and make a list of the information you have to write. Possible answers: Pupils underline: *interesting object, describe, explain, works*. Pupils write: 1 Brainstorm different objects and choose one. 2 Describe it. 3 Write about how it works. 4 Read and check my description.

- Pupils can do this activity on their own or in pairs, perhaps with a more confident pupil working with a less confident pupil. First, they underline the important words in the instructions. Next, they write a step-by-step plan to clarify the steps they need to follow as they do the task.
- Elicit and check the important words that pupils have underlined. Then invite individual pupils to read aloud their step-by-step plan, and encourage other pupils to correct them, as necessary.

A description

1 Review Listen, read and write.

invention lever have to

AN INTERESTING OBJECT!

I want to write about a nutcracker. The nutcracker is a great 1 **invention**.

You can use a nutcracker to open some nuts.

You 2 **have to** put the nut in the nutcracker. Then you have to close it.

The nutcracker is a 3 **lever**. Levers make forces bigger.

2 Get ready Work with a friend to plan your description.

What interesting object do you want to write about?

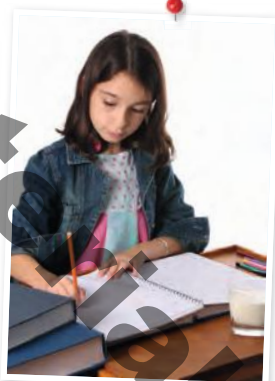
How does it work?

Tips

Self-management

Before you start...

- ☐ underline important words in the instructions.
- ☐ make a list of the information you have to write.

3 Create Write your description. **Activity Book** page 904 Share Share your description with the class.

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I can write a description of an object.

2 Make notes about your object. Then write your description.

- Invite individual pupils to read aloud the questions to cover in each paragraph. Remind pupils to make sure they answer all these questions in their text. Point out that they can follow the model in Pupil's Book activity 1.
- Pupils work on their own to write their description of the object they chose in Pupil's Book activity 2. Then they check what they have written and correct any mistakes.

3 Reflect on your project.

- Pupils colour the stars, then work in pairs and reflect on their project work.

- Pupils can either use their completed planning in the Activity Book as their final work, or they can use their planning as a draft and develop their description on a separate sheet of paper, improving it if possible.
- Circulate around the class, helping as necessary. Encourage pupils to put up their hands and ask for help if needed.

Share

4 Share your description with the class.

- Pupils can work in groups, taking turns to read aloud the description they have written, or they can present their description to the class. Encourage pupils to give one another positive feedback.

ACHIEVE

Pupils write at least seven sentences to describe an interesting object. They name the object, say why they want to write about it, explain what they use the object for and describe how the object works. Before pupils write their description, they identify and underline the important words in the task instructions, and they write a step-by-step plan to outline what they have to do in the task.

SUPPORT

Pupils can write a shorter text to describe an interesting object. They name the object, say why they want to write about it, explain what they use the object for and describe how the object works. They can work with a more confident pupil to help them identify and underline the important words in the task instructions, and create a step-by-step plan to outline what they have to do in the task.

STRETCH

Pupils can write a longer text of eight or more sentences to describe an interesting object. They name the object, say why they want to write about it, explain what they use the object for and describe how the object works. They can work with a less confident pupil to support them as they identify and underline the important words in the task instructions, and create a step-by-step plan to outline what they have to do in the task.

Extra activity (fast finishers) Pair together pupils who have written their description about the same object or about a similar object. They exchange what they have written and read their partner's description. Then they talk about where their descriptions are the same and where they are different.

Wrap-up

- Invite individual pupils to say one sentence about why they think their object is interesting.