

Brixel and Voxel

A free pack for reception classes

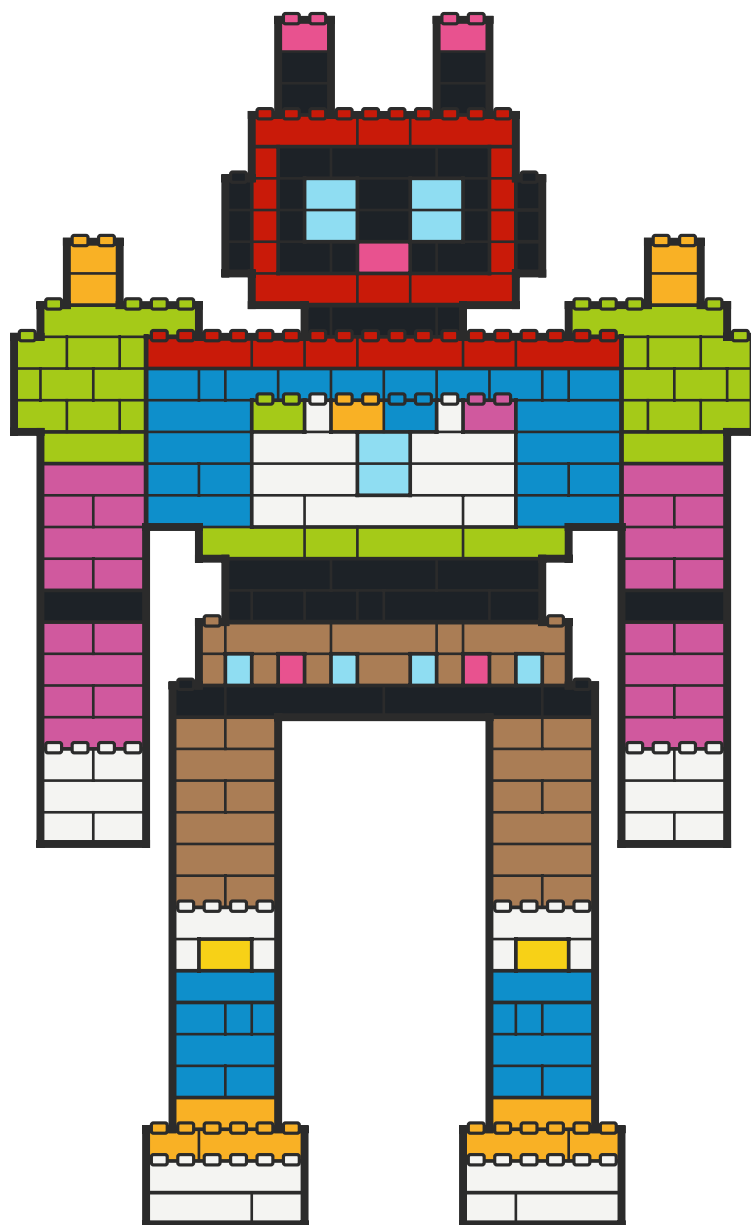
A picture book about starting school, a 20-minute build-along, a circle-time idea and a colouring sheet. Free to print and copy.



Inside: **Best Bit, Tricky Bit**, a story about starting school

In this pack

1	A note for teachers	2
2	A 20-minute build-along	3
3	The story: Best Bit, Tricky Bit	4 to 11
4	Antenna time, for circle time	12
5	Colouring sheet and draw your own robot	13 and 14
6	Links and QR codes	15



From brixelandvoxel.com, made at home by a dad and his son.

A note for teachers



Brixel and Voxel is a free website of robots built from one box of LEGO® Classic 11045 bricks, with picture-book stories about them. It was made at home by a dad and his son. This pack brings one of the stories into the classroom, with a build and a circle-time idea to go with it.

What's in it

- **Best Bit, Tricky Bit** (pages 4 to 11). Voxel starts school and can't say how his day went. Big Bot shows him antenna time: tell one best bit and one tricky bit. Then Voxel uses his four helper buttons to make a new friend.
- **A 20-minute build-along** (page 3). Read, build a robot, then talk about it. It works with the LEGO® box or with any bricks you already have.
- **Antenna time** (page 12). The story's idea as a circle-time routine, with a note you can send home.
- **A colouring sheet** (pages 13 and 14). Mega Voxel to colour, and a brick grid to draw your own robot. Photocopy as many as you like.

Free, with nothing to sign up for

The pack and the website are free. The website has no adverts, cookies, accounts or tracking. Children never need to type anything: they look, listen, build and colour.

Nothing in this pack asks you to send anything back: no names, no photos, no children's work. The privacy page at brixelandvoxel.com/privacy says exactly what the site does.

Printing

The story looks best in colour. The colouring pages (13 and 14) are black and white, ready to photocopy.

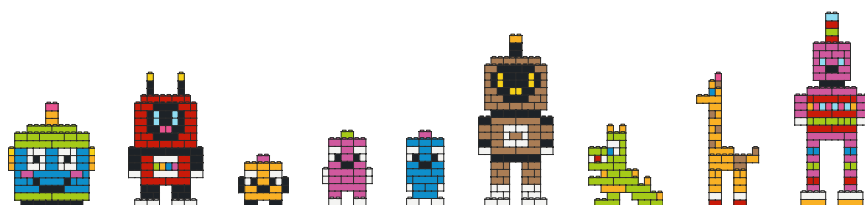
How the pieces fit together

Start with the story. It gives the class two ideas to use all week: antenna time, and Voxel's helper buttons for making a friend. Then build a robot, together or in groups. End in the circle with antenna time. The colouring sheet is for later, in class or at home.

You only need the LEGO® box for one part: building a robot from the online guide. The story, antenna time, the free build and the colouring sheet all work without it.

Where to find it online

Everything is at brixelandvoxel.com. On the board, the story reads itself aloud: press Read to me and it turns its own pages. The robot guides are in 3D and go one step at a time, showing the bricks each step needs. The QR codes on page 15 go straight to each one.



A 20-minute build-along

Read a little, build a robot, then talk about it. For a group, or the whole class on the carpet.



Story

5 minutes

Press Read to me on the board. The story takes about 4 minutes. When Big Bot explains antenna time, point to Voxel's two antennae.

Build

10 minutes

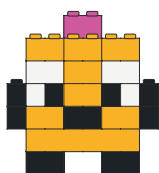
Route A or route B, below. The children press the bricks on. Adults hold the model steady and help find the next brick.

Show and tell

5 minutes

Each child holds up their robot and says one thing about it. Then antennae up: one best bit and one tricky bit about building it.

A Build Dot The smallest robot friend, built with a box of LEGO® Classic 11045



33 bricks
9 steps
7 cm tall

- Open brixelandvoxel.com/robots/friends/ on the board, tap Dot (first in the top row) and press Start. Each step shows the bricks it needs. If the 3D won't turn, the steps and plans still work.
- **Groups:** one box has the bricks for two Dots, so two groups of three or four can build at once, taking turns a step each.
- **Whole class:** build one Dot together on the carpet, children taking turns to add the next brick.
- Skip the tip to build Bixel and Voxel first. That's only for building every robot from one box.

Set-up: sort Dot's 33 bricks into a tray for each group

yellow-orange 2x6 x 2 2x4 x 5 2x2 x 3 1x4 x 2 1x2 x 7 black 2x4 x 4 1x2 x 3 1x1 x 2
white 1x2 x 2 1x1 x 2 pink 2x2 x 1

B A free build

With any bricks you have

Build a robot with a head, a body and two antennae.

- Set-up: a tray of whatever bricks you have on each table. Bigger bricks suit small hands.
- There's no picture to copy, so every robot will be different.
- Ask each builder: what's your robot called? What can it do? The draw-your-own page (page 14) asks the same, for later.

What you need

- The story on the board, or printed (pages 4 to 11).
- Route A: a box of LEGO® Classic 11045, a tray per group and a hard, flat table.
- Route B: a tray of bricks per table.
- Somewhere to stand the finished robots.

Adult tips

- Press Next, not Play, so the guide waits for everyone.
- Name colours and sizes: 'a black brick with 8 studs'.
- Dot's eyes are tiny 1x1 bricks. Press them on one at a time.
- Finished? Press Dance and Dot waves.
- Out of time? Next time, the slider at the bottom of the guide jumps to your step.

Links to the EYFS

- **Personal, Social and Emotional Development:** taking turns, saying how something felt.
- **Communication and Language:** listening to a story, talking about their robot.
- **Physical Development:** fine motor control.
- **Expressive Arts and Design:** making a robot of their own.



Small parts, not for children under 3. Supervise the build. Count the bricks back into the box, check the floor afterwards, and keep loose bricks away from younger siblings at drop-off and pick-up.



Best Bit, Tricky Bit

A Brixel and Voxel story about starting school



1

Voxel had started at big school. It was a great big playroom, full of new toys.

So many new faces! Voxel stayed close to Brixel all day long.



2

At home time Big Bot asked, 'How was your day?'
'Fine,' said Voxel.
'What did you do?' 'Nothing.'
'Who did you play with?' 'Can't remember.'



3

But it wasn't nothing. Voxel's whole day was jumbled up inside him, like a box of bricks tipped out on the floor.
He didn't know which bit to pick up first.



4

At bedtime Big Bot had an idea. ‘Let’s have antenna time. You have two antennae, so we tell two things.’
‘One **best bit**. One **tricky bit**. I’ll go first.’



5

Big Bot said, ‘My **best bit**: I mended the wobbly wheel on the toy train.’
‘My **tricky bit**: I dropped a whole box of bricks. **Crash!** I felt cross.’
Voxel giggled. Even Big Bot had **tricky bits**.



6

Then it was Voxel's turn. **Ting!** 'My **best bit**: I painted a red rocket.'

Ting! 'My **tricky bit**...' Voxel went quiet.

'There are so many new toys. I only know Brixel. I don't know how to make a new friend.'



7

Big Bot gave him a great big squeeze.

'Thank you for telling me. **Tricky bits** get smaller when you tell them. And now we can work it out together.'



8

‘Your helper buttons can help you make a friend,’ said Big Bot.

‘Green. Stop and breathe.’

‘Yellow. Say hello, and say your name.’ ‘Hello, I’m Voxel,’ said Voxel.



9

‘Blue. Ask a question,’ said Big Bot. ‘What are you making? Can I play?’ said Voxel.

‘And pink is for when they say not now,’ said Big Bot.
‘That is all right. Find somebody else to ask, or ask your teacher to help.’



10

The next day two toys were playing trains.

Voxel pressed his green button. **In... and out.**

‘Hello, I’m Voxel. Can I play?’

‘Not now,’ they said. ‘We’re in the middle of our game.’



11

Voxel’s tummy went wobbly. But he pressed his pink button and had a good look around.

There was a little purple robot, building all alone.



12

‘Hello, I’m Voxel. What are you making?’

‘A bridge,’ said the little robot. ‘I’m Tock. Do you want to help?’

‘Yes, please!’ said Voxel.



13

They built the longest bridge in the whole school.

Then Voxel called Brixel over. ‘This is my new friend, Tock.’

‘Hello, Tock!’ said Brixel. **Boing, boing, boing!**



14

At home time Big Bot didn't even have to ask.

'Antenna time!' said Voxel. **Ting!** 'My **best bit**: I made a new friend called Tock.'

Ting! 'My **tricky bit**: two toys said not now, and my tummy went wobbly. But I tried again.'



15

Big Bot listened to every word.

Because **best bits** and **tricky bits** are both worth telling.

And somebody who loves you always wants to hear them.

Antenna time

Circle time from the story. Voxel has two antennae, so he tells two things: one best bit and one tricky bit.



'Fine' and 'nothing' are normal answers at home time in reception. Children are tired, and a whole day is too big a thing to describe. Antenna time gives them two small things to tell instead.

How to run it

- 1. Same time every day.** Just before home time works well: children go home with two things ready to tell.
- 2. Antennae up.** Everyone puts two fingers on their head, like Voxel.
- 3. Go first.** Tell your own best bit and a real tricky bit, so the class hears that grown-ups have both.
- 4. Ting!** Touch one antenna, say 'Ting!' and ask, as the book does: 'What was the best bit of your day?' Then the other antenna: 'What was the tricky bit?'
- 5. Partners first.** Everyone tells a partner, so everyone gets a turn. Then a few children tell the circle.
- 6. Say thank you.** When a tricky bit comes, say what Big Bot says: 'Thank you for telling me.' Fixing can wait. Children tell more when telling feels safe.
- 7. Passing is fine.** A best bit on its own is still a good turn.

If a tricky bit worries you, follow it up quietly afterwards, in the usual way for your school.



Voxel at antenna time, both antenna tips glowing

A note for home

Copy it into your newsletter if it helps.

This week we read Best Bit, Tricky Bit, a free story about starting school. At home time, try antenna time: ask for one best bit and one tricky bit, and tell yours too. You can read the story together at brixelandvoxel.com.



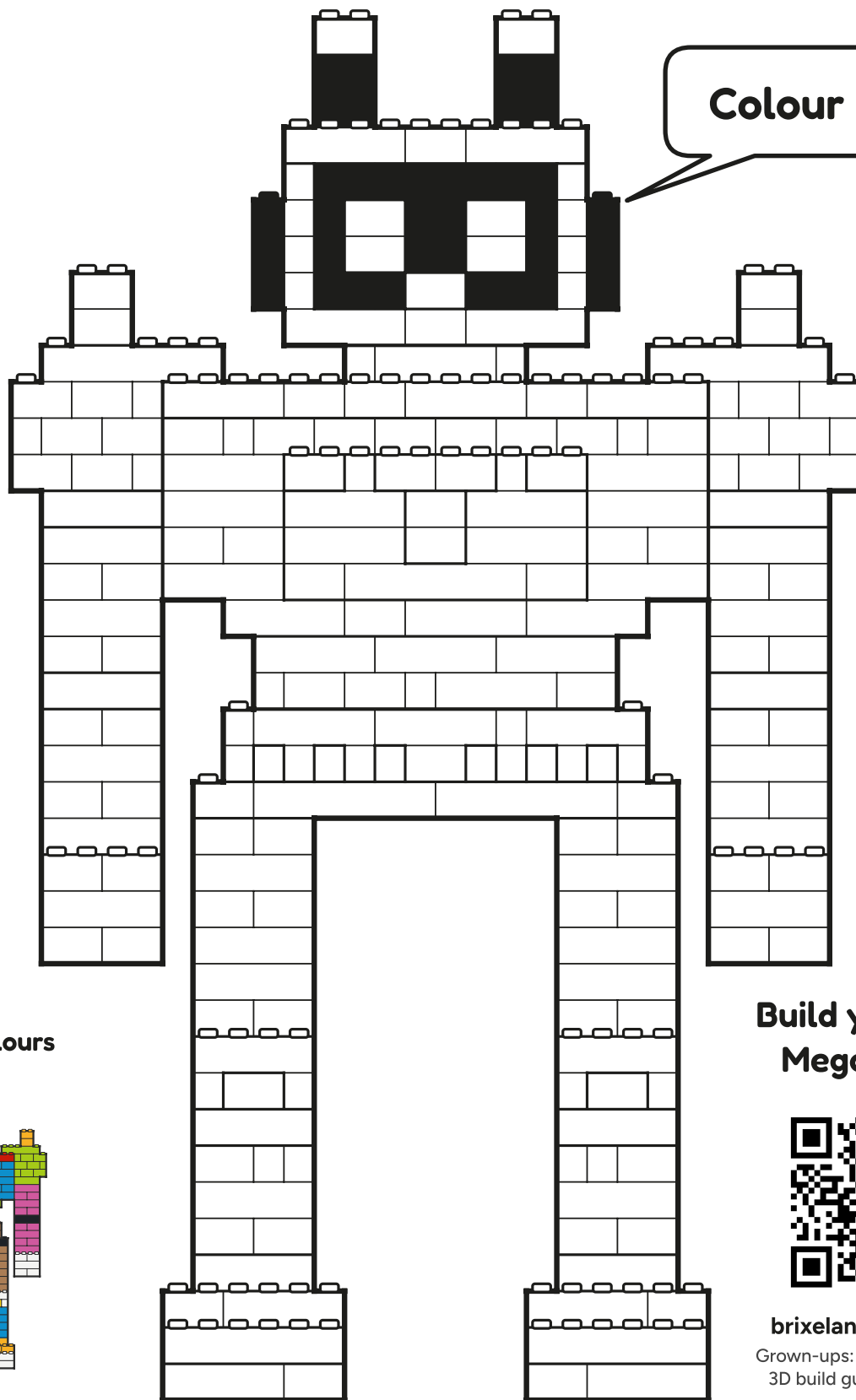
Voxel's four helper buttons

For making a new friend, from the end of the story

- Green** Green. Stop and breathe. In... and out.
- Yellow** Yellow. Say hello, and say your name. 'Hello, I'm Voxel.'
- Blue** Blue. Ask a question. 'What are you making? Can I play?'
- Pink** Pink. If they say not now, that is all right. Find somebody else to ask, or ask your teacher to help.

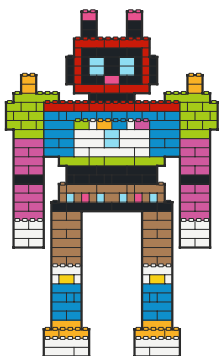
- Practise Voxel's hello in pairs, with their own names: 'Hello, I'm ... What are you making?'
- Aim for one new friend, not the whole class. A child with one safe friend often finds it easier to add a second.
- 'Not now' is not 'no for ever'. Voxel hears it too, and tries somebody else.
- Building in pairs is an easy way to start a friendship.

MEGA VOXEL



Colour me in!

The real colours



Build your own
Mega Voxel!

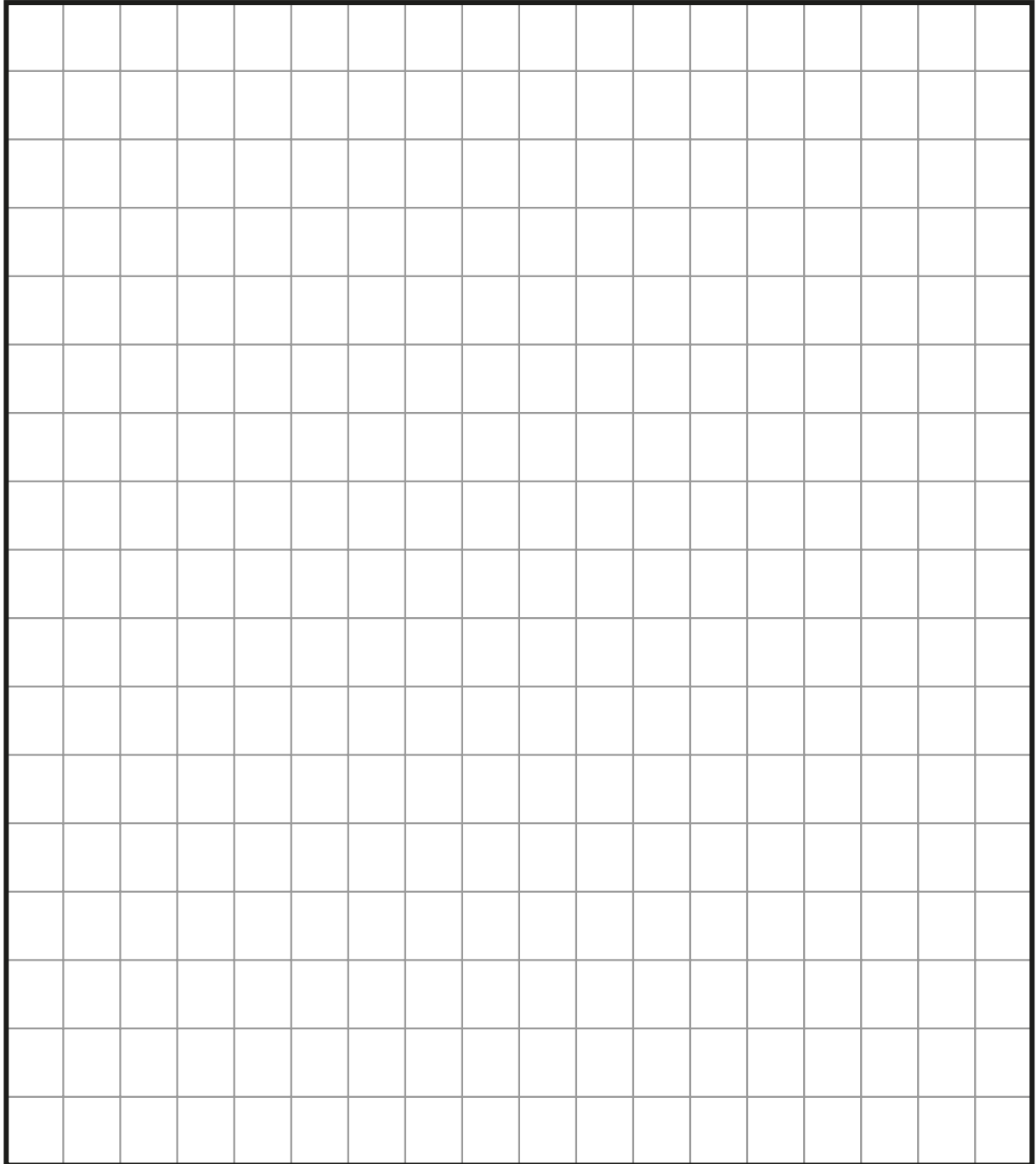


brixelandvoxel.com

Grown-ups: scan for the free
3D build guide and stories

DRAW YOUR OWN ROBOT

Colour in the bricks to build a robot, then give it a name.



My robot is called _____

It can _____

More robots to build at brixelandvoxel.com

LEGO® is a trademark of the LEGO Group of companies which does not sponsor, authorize or endorse this site.

Find it all online

Point a phone or tablet camera at a code, or type the address.



The story: Best Bit, Tricky Bit

The read-along, with narration. Press Read to me and it reads itself aloud, turning the pages as it goes. Voxel's helper buttons and antenna time are at the end.

brixelandvoxel.com/stories/best-bit-tricky-bit/



The robots

3D build guides for Dot and the other robot friends. Tap a robot in the row at the top, then press Start.

brixelandvoxel.com/robots/friends/



Colouring sheets

Print more copies of the colouring sheet: Mega Voxel to colour, and a page to draw your own robot.

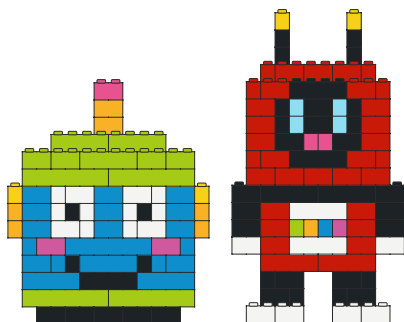
brixelandvoxel.com/colour/

More on the website

Two more read-along stories: **Not the Baddie Again!** (playing fair) and **Room for One More** (making room for someone new). Build guides for Brixel, Voxel and Mega Voxel, and a little game. All free.

Need the bricks?

Every robot builds from one box: **LEGO® Classic 11045 Creative Colourful Bricks**, 820 pieces, from most toy shops. You don't need it for the story, antenna time or the free build.



Brixel and Voxel is a free, fan-made site, made at home by a dad and his son. No adverts, cookies, accounts or tracking. Privacy: brixelandvoxel.com/privacy