Maker Challenge!
By animator and maker Chloe Rodham

Calling all Little Inventors!
Take the Maker Challenge set by animator and maker Chloe Rodham and try five different activities along to way to get your creativity flowing and help you build up to designing an ingenious invention.

Do try this at home, take care with sharp objects and get some adult help. There are how-to guides included too to help you with your project - happy making!

**Chloe’s invention challenge**

**1. Invent a theatre for an audience that isn’t human!** How would you design a theatre for a different kind of audience? Design what it could look like.

**INVENTION SHEET**

**Drawing time!** Draw your theatre for your non-human audience!

**2. Write a story for your theatre!** Come up with a simple story idea that would work for a puppet theatre.

**3. Build your theatre** Follow the How-to Guide to make your own cardboard theatre.

**4. Make the characters** Think about who your characters will be and what props they need.

**5. Put on your show!**

Give these five activities a go to help guide you through the challenge.
Chloe Rodham is an animator and maker from Northumberland, UK.

Chloe works with lots of different materials and techniques to tell stories. She also makes characters and props for animations.

She makes quite a lot of mess in the studio while exploring her ideas!

Here are some pictures of her work.
Invent a theatre for an audience that isn’t human!

Lots of people love being entertained by stories and plays, whether it is on a big stage or from tiny puppet theatres. Theatres bring people together and can take us to different places, they stretch our imaginations and show us different ways of thinking.

How would you design a theatre for a different kind of audience? Draw what it could look like.

To get you started, you could think about:

- Where is the theatre? Think of strange places where there wouldn’t normally be a theatre. (Maybe it is in a cupboard or underground)

- Who would the audience be in the place you have chosen and where would they sit and watch? (Perhaps it is for plants or for a flock of birds)

- How can you make the theatre design reflect where it is and who it is for? (This could be in the size, shape, colours or decorations)

Use this sheet to do some doodles of your theatre invention and then draw your favourite one on the invention sheet on the next page.
My theatre invention

First name
Age
School
Town/city

**Tell us more!**
(who your invention is for, what it does, how it works!)

**Draw your invention here!**
Use a black pen, add colours and labels

Upload your idea at littleinventors.org to get feedback and who knows, it could be chosen to be made real!
Write a story for your theatre!

What kind of performance do you think would be popular for your chosen audience?

Come up with a simple story idea that would work for a puppet theatre.

Where the story set and who are the characters?

What happens at the start? How do we get to know your characters?

What happens in the middle? Is there a problem that the characters need to solve?

What happens at the end? Do the characters find a solution to the problem?

Draw some of the key moments from the story in the boxes.
Build your theatre!

This template makes a basic theatre shape, but you can adapt yours to fit with your theatre own design and your story idea.

Materials

Corrugated cardboard (a large packaging box)

PVA Glue

Paint and materials to decorate your theatre

Tools

Ruler

A craft knife or scissors

Pencil

Paintbrush or sponge for painting

Cutting mat (or spare piece of card)

An adult to help!
If you want to be really accurate you can measure out the sizes using this guide to create your pieces or you could print out a copy of the template guide. Make sure all the slots are the right sized gap for your cardboard thickness.

How-to guide

Cardboard Theatre

Stage: Cut 1

Front & back:
(only cut centre out of the front)
Cut 2

Scenery:
(The grey area is where you design your set)
Cut up to 5

Sides: Cut 2
1. Measure out the pieces on your cardboard using a ruler and a pencil, or draw around a printed template.

2. Cut out the pieces using scissors or a craft knife. In the guide, the dashed lines show where the card bends. Gently score the card along these lines with the knife/scissors so it bends more easily. **Ask for help for this step!**

3. Assemble the stage, front, back and side pieces, folding the side pieces back so that they are not sticking out.

4. Glue the front and back to the stage and glue the side flaps to the front and back. Use a clothes peg or clip to keep these in place while they dry.

For this part, you should have:
- The front
- The back
- 2 sides
- Stage
5. Cut out the scenery layers and design the landscape you need for your story. Draw out the shapes on the card. The furthest forward layers should not hide too much of the stage.

6. Cut out the pieces using scissors. Repeat this for all the layers that you want for your theatre set design.

7. You can add textures to the card by peeling off some of the layers and cutting into the surface.

8. Push the scenery pieces into the slots on the sides and stage.

9. Add designs to your theatre that relate to your design from Activity 1. What about adding a roof or gluing on extra decoration?

10. Once you have tried out your scenery pieces, take them back out of the slots so that you can paint them.

11. Decorate and paint the theatre too.

12. Once all the paint is dry, reassemble! Now your theatre is ready to add some characters!
Make the characters!

Look back at your story. Who are your characters and what do they look like? What are they wearing? Do the characters need any objects (props) to help tell the story?

Draw the characters with their props.

Something to think about:

Do the characters need to move any of their body parts? These parts would need to be separate so that you can move them.

Label your drawings to explain which pieces need to move.
Follow this How-to guide to make your own characters for your theatre show.

**Materials**

- Thin cardboard
- Thread
- Blu-tac
- Kebab sticks
- PVA Glue
- Materials to decorate

**Tools**

- Scissors
- Paperclip/Needle
- Pencil
- An adult to help!

1. Work out which pieces you want as separate body parts, or if you want it simple just make the body one part.
2. Transfer your designs onto thin cardboard and cut them out.
3. Decorate the pieces by colouring them in.
4. Make some holes in the pieces using a paperclip and poke thread through the holes so the body parts are loosely attached to each other. You could use a needle if you have one but ask for help.
2. Pull the threads tighter so and secure them in place using blu-tac. Add longer threads to pieces you want to manipulate - I’ve added one to the watering can so that I can move the arm of the puppet.
3. Glue on the kebab stick too - this is what you will use to move the puppet about on the stage.

**CHARACTERS**

Follow this How-to guide to make your own characters for your theatre show.

**Materials**

- Thin cardboard
- Thread
- Blu-tac
- Kebab sticks
- PVA Glue
- Materials to decorate

**Tools**

- Scissors
- Paperclip/Needle
- Pencil
- An adult to help!

1. Work out which pieces you want as separate body parts, or if you want it simple just make the body one part.
2. Transfer your designs onto thin cardboard and cut them out.
3. Decorate the pieces by colouring them in.
4. Make some holes in the pieces using a paperclip and poke thread through the holes so the body parts are loosely attached to each other. You could use a needle if you have one but ask for help.
2. Pull the threads tighter so and secure them in place using blu-tac. Add longer threads to pieces you want to manipulate - I’ve added one to the watering can so that I can move the arm of the puppet.
3. Glue on the kebab stick too - this is what you will use to move the puppet about on the stage.
Put on your show!

Gather your audience and arrange them so that they can see all the action on the stage. Perhaps you could make a minature audience using cardboard. You could also make seats from them to sit on.

Now you get to turn into a performer - tell your story by acting out the action through the characters you have made.

Why not film the performance on a phone or camera so that you can watch it back too.

**Tips on the performance:**

- Rehearse what you are going to do so that the performance runs smoothly. You might need to set a few things up before you start like the threads for the puppets or hidden trapdoors in the set!

- Try out using a torch to change the lighting of the theatre.

- Could you play music in your performance to set the mood.