How to make... a stop motion animation puppet

By Alicia Britt
Suitable for ages 8+

You will need:

- Good quality paper (110-140gsm that you could use from a sketchbook)
- Pencil
- Scissors
- Any colouring pens, pencils and markers
- Blue tack
- Split pins/needle and thread for joints (optional)
- Tracing paper/baking paper
- A smartphone with the Onion Cam2 app (available for both Apple and Android)
- A smartphone tripod
- Template or your own puppet design

Instructions

Step 1:
If you are working with a template and not creating your own character, skip ahead to Step 3.

Sketch some ideas. Look at your favourite cartoon characters. Try to draw your character in profile, sideways or in a 3/4 pose which is halfway between facing forward and sideways.
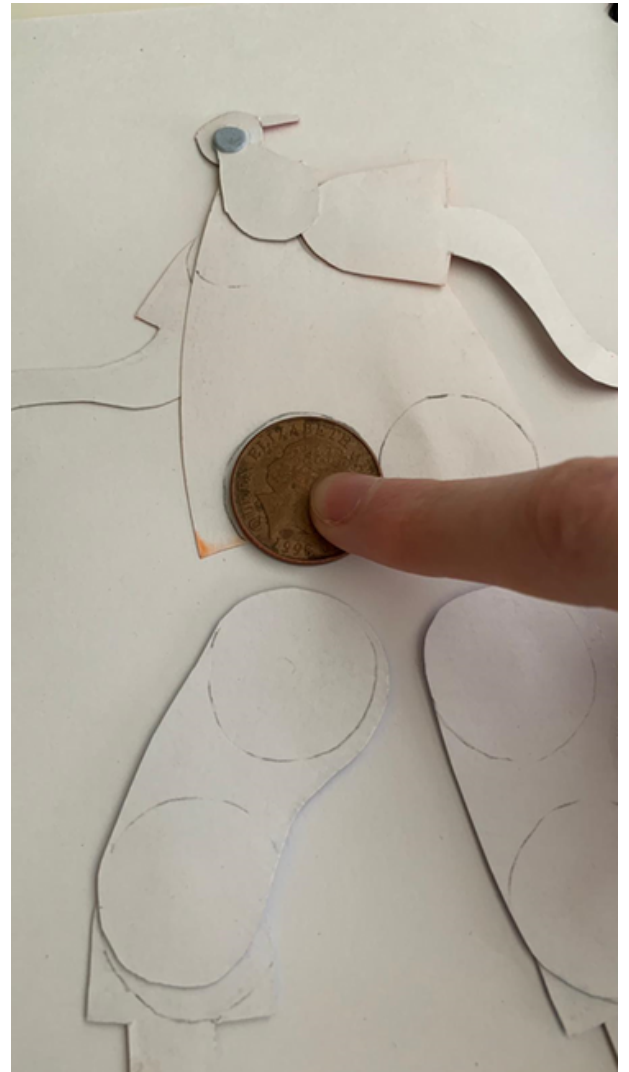
How to make... a stop motion animation puppet

Step 2:

When you have a drawing you like, make sure it fills most of an A4 page so your puppet doesn't get too small. (Smaller puppets are harder to animate!) Use tracing paper or baking paper to trace off the different limbs separately. These separate parts will be how we make the puppet move. For example, the skateboarder puppet has eight joints: head, neck, shoulders, hip/leg, knees. The more joints you have, the more accurate you can make your movements, but it will be far more complicated. Remember sometimes less is more, especially for your first design. A good base is: head, shoulders, 2x hips/legs and 2x knees.

Step 3:

Trace out your drawing or template's separate parts on a new piece of high quality paper. Use coins such 5ps and 2ps to draw circles where your puppet joints will overlap. Remember to draw the circles on both sides, such as the shoulder and body, to tell us where we should join them together.

Step 4:

Colour in your puppet your favourite colours! Don't worry about staying in the lines as we'll cut these off in the next step.

Step 5:

Cut out your puppet parts using scissors.

How to make... a stop motion animation puppet

Step 6:
Using split pins, a needle and thread or blue tack, connect your puppet parts at the middle of the circle joints. Split pins or thread lets us join the pieces securely, helping us when it comes to puppeteering later. Blue tack is an invisible alternative which helps hold the joins in place when puppeteering, but also has a tendency to fall off! Experiment and see what works best for you.

Now we're ready to start the stop motion!

Step 7:
Find a space with a large clear flat surface in a neutral colour background.

Step 8:
Make sure your phone is charged up or plugged in. Download the Onion Cam2 app and turn off your phone's autolock.

Step 9:
Set up your tripod and phone facing down to the flat surface. Make sure not to knock or move the tripod accidentally or that could affect your film! Place your puppet into the shot and make sure you have enough room in your frame for your action plans.

Step 10:
Make sure the lighting is good. If filming with natural light, be aware it could get dark before you finish! Put on some light but be aware of any shadows you might cast on your puppet.

Now puppeteer away!
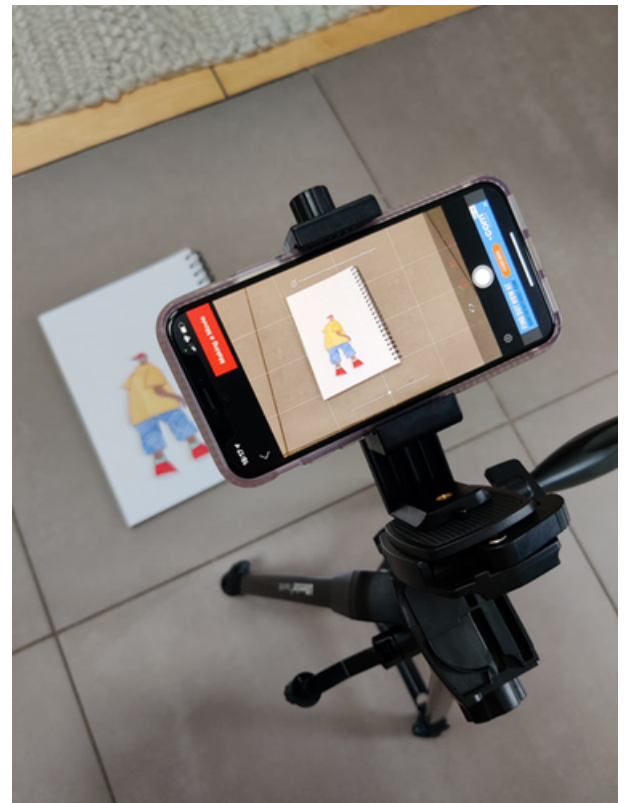
Step 11:
For each movement I find it's best to take three photos using Onion Cam2. There can be 12 or 24 frames in a single second so remember one movement such as lifting a hand has to happen over multiple frames. Onion Cam2 will help us see what we did in the last movement by providing a translucent copy over the active camera, like an onion skin! So keep looking at the screen to check you're in the right place.

Step 12:
You can use blue tack to secure your puppet to the surface to stop it slipping accidentally.

Step 13:
Do a couple of short experiences to see how it works and remember you can click "Making a Movie" and then "Preview" to see how it's going. Experiment with the frame rate from 24 or 12 as industry standard to see what works best.

Step 14:
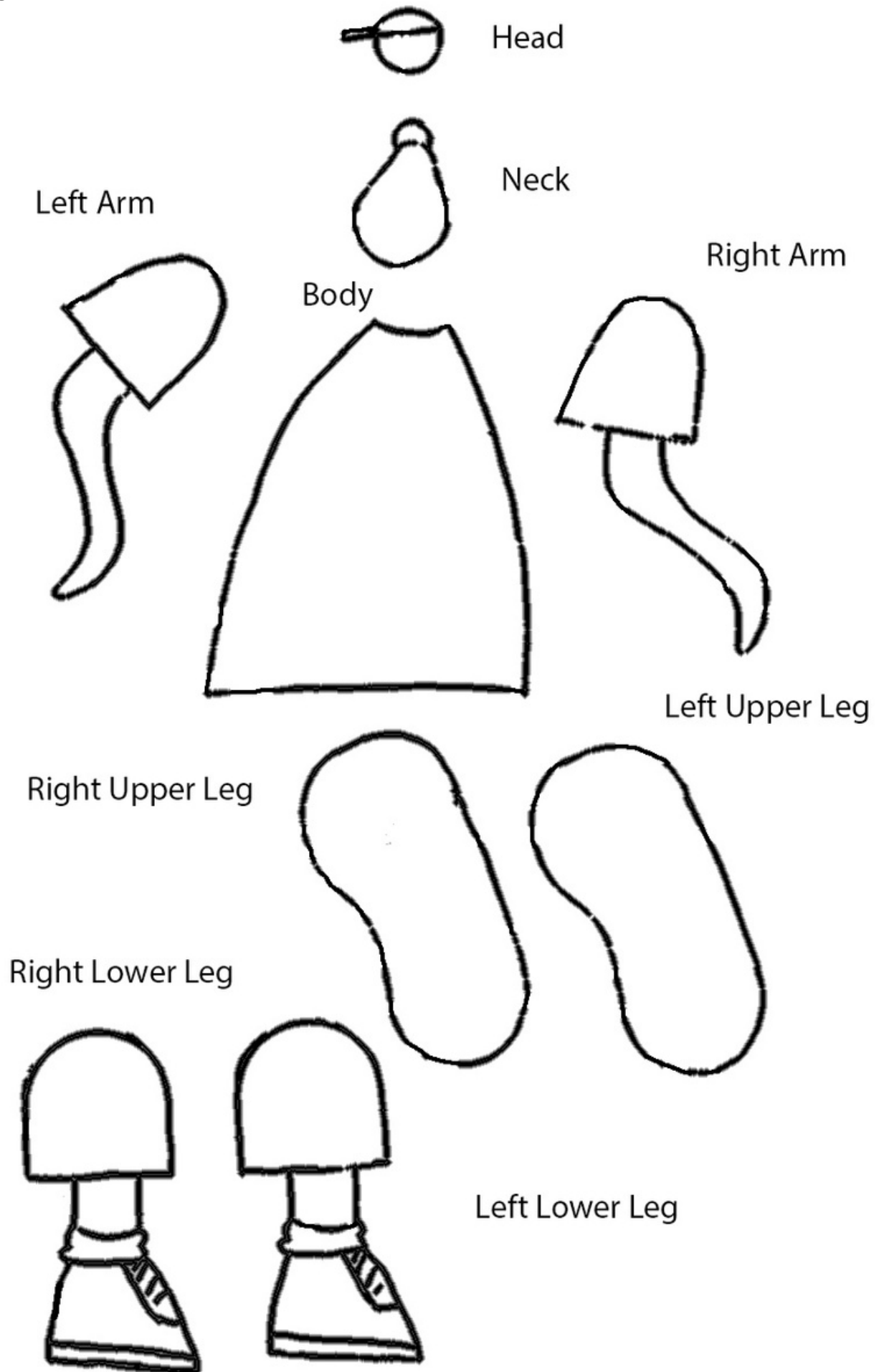Remember for more about stop motion theory and advice there are many amazing tutorials on YouTube!

Step 15:
Have fun!

How to make... a stop motion animation puppet

Templates:

Head

Neck

Left Arm

Right Arm

Body

Left Upper Leg

Right Upper Leg

Right Lower Leg

Left Lower Leg

Side of Skateboard

Bottom of Skateboard

Top of Skateboard