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ACMI & ZART EDUCATION PRESENT  
ONLINE PROFESSIONAL LEARNING

## THE ART OF ANIMATION

WITH DEE ZABEL

YEAR LEVELS: 2 - 10

### OVERVIEW

In this activity, you will explore how to create a character and set for a 3D stop motion animation as part of The Art of Animation Workshop.

Design and create a simple set to film your stop motion animation using a cardboard box, Zart Colour Slix (very user friendly, quick covering and drying paint sticks) and permanent marker.

You will plan a character and model it in Plasticine. You will be shown how to make simple armatures from wire and aluminium foil that will form the skeleton of your character and allow you to use a thinner layer of Plasticine over the top.

Plasticine is a fabulous, student friendly, low mess and low-cost material. It can provide a different and more accessible way for students to express their ideas visually – those that are not confident drawing and painting might enjoy using this medium instead!

*\*There are several steps in this activity, and it would be best completed as a series of shorter lessons to allow for tuning in, planning, and making time.*

## DISCUSS

Canadian Artist and illustrator, Barbara Reid has developed her own style and techniques to create illustrations for her books using Plasticine to create relief sculptures. She is a multi-award-winning author and illustrator, and her books are loved by people of all ages. This unit was informed by Barbara's Plasticine techniques and enhanced by her very instructive website. She has created a series of videos demonstrating her working process that can be helpful to watch to complement these more basic instructions. It's like having a visiting artist/expert visit the classroom and students enjoy watching Barbara at work.

The "puppets" from Aardman Animation Studio have been created with a range of materials and techniques. Links to videos explaining how their puppets have been created have been included to enhance your understanding of armatures and the process of 3D stop motion animation.

## ART ELEMENTS & PRINCIPLES

Colour, Shape, Line, Form, Pattern, Texture & Balance

## CROSS-CURRICULUM / CAPABILITIES LINKS

Media, English, and Technologies

## LEARNING OBJECTIVES

Students will:

### Explore:

- Watch a selection of 3D stop motion animations and observe the characters and set design. Short films, clips or trailers for full length movies would be great.

- Pre watch videos about Aardman Studio's Character Creation – select segments to show students:
- The Clay in Stop-Motion Animation at Aardman Studios  
[https://www.youtube.com/watch?v=E5t\\_DXgZmFM](https://www.youtube.com/watch?v=E5t_DXgZmFM)
- Adam Savage Meets Aardman Animations' Puppets!  
<https://www.youtube.com/watch?v=I3pPfq6hjLA>
- The Stop-Motion Puppets of Aardman Animations!  
<https://www.youtube.com/watch?v=stSYs7a2UHE>
- Watch Barbara Reid in action. Scroll down to “Make Nib the Mouse” to see how to use Plasticine:  
<https://barbarareid.ca/students-and-teachers/videos/>
- Learn about Plasticine: <https://barbarareid.ca/students-and-teachers/about-Plasticine/>
- Look a more of Barbara's artworks:  
<https://barbarareid.ca/portfolio/>

**Discuss:**

- What do you notice about the characters in 3D stop motion animations?
- What do you notice about the sets in 3D stop motion animations?
- How do you think the characters and sets have been created?
- What did you learn about how the characters in Aardman Studio's animations are made? Did you think they were all Plasticine?
- Describe what you notice about Barbara Reid's techniques and characters?

**Consider:**

- How will you create an armature that can move to be animated?
- How will you create a simple background for your set?

**Make:**

- Sketch a drawing your character.
- Make an armature.
- Add Plasticine to your character.

**Extend:**

- Use a range of media and techniques during the character design and story boarding stages?
- Create additional elements for your set.
- Photograph your character on set to have still prints.

**MAKE**

**PART ONE: Tuning In**

**Step 1:** Watch a selection of 3D stop motion animations (appropriate to the year level you are working with) and observe the characters and set design. Short films, clips or trailers for full length movies would be great.

Ask your student/s:

- What do you notice?
  - This is anything they see!
  - Encourage her/him to talk about Art Elements and Principles and describe what she/he sees in detail.
  - There are no wrong answers – this is just what you see!
- What questions do you have?
  - This can be anything! It could lead to further investigation as an extension activity.
  - How do you think the characters and sets have been created?

**Step 2:** Watch videos about Aardman Studio's Character Creation – select segments to show students:

- The Clay in Stop-Motion Animation at Aardman Studios  
[https://www.youtube.com/watch?v=E5t\\_DXgZmFM](https://www.youtube.com/watch?v=E5t_DXgZmFM)
- Adam Savage Meets Aardman Animations' Puppets!  
<https://www.youtube.com/watch?v=l3pPfq6hjLA>
- The Stop-Motion Puppets of Aardman Animations!  
<https://www.youtube.com/watch?v=stSYs7a2UHE>
- What did you learn about how the characters in Aardman Studio's animations are made? Did you think they were all Plasticine?
  - The characters are made from a combination of silicone, foam latex moulds, hard resins, and malleable clay (Plasticine)
  - It's important for all these components to colour match! There is some who mixes the clay to match.
  - The armatures are designed using classic armature techniques and need to be long lasting as well as function smoothly mechanically. There are ball and socket joints as well as hard resin sections to avoid using too much clay and making the puppet too heavy.
  - The puppets have face plates that can be interchanged to make animating easier. The mouths are often made from clay so that they can be animated by a sculptor through a filming sequence.
  - Real fur was used for sheep. Hair and other fabrics are used for other components of puppet depending on requirements of the animation.
  - Multiple puppets are made for a movie. All the puppets need to be exactly the same.

Plasticine can be used to create an entire character using similar techniques to Aardman puppets.

**Step 3:** Have your students used Plasticine before? How do they describe it? What do they think it is used for?

#### **Plasticine Facts:**

Plasticine was invented over 100 years ago by an art teacher, William Harbutt from England. It took many attempts, but it has come to be known as “The clay that never dries out”. He didn’t originally intend to sell it but worked with his family to package and invent a name! Today it is used by artists, engineers, architects, scientist, military people, children, etc. There are many types of clay available - but Plasticine is oil based, squishable, and never gets permanently hard!

#### **Tips Using Plasticine:**

- Have clean hands and a clean working surface
- Plasticine will easily pick up debris that can contaminate the clay
- When changing colours, you will need to clean your hands in between. Use a paper towel to twist the clay off your hands.
- Soap and water are not necessary.
- You can mix colours easily. Therefore, if you wanted to buy larger blocks of the primary colours, white and black, you would still be able to make a rainbow!
  - It is important to start with the lighter colour first and add small amounts of the darker colour.
  - Only small amount of the darker colour is needed to change a light colour. Whereas if you start with the dark colour you will waste a lot of the lighter colour trying to change it.
- You can add textures to plasticine using a range of tools. You don’t need anything fancy! A plastic fork, toothpick, marker caps, satay sticks, an old toothbrush or grey lead pencils will all do the job.
- Remember to use your modelling skills – Plasticine can be: Rolled into balls & coils, formed into shapes, cut, textured, spread and joined.

For more info on Plasticine, Barbara has put together a page with some more information:

<https://barbarareid.ca/students-and-teachers/about-plasticine/>

Barbara Reid has created a series of videos demonstrating her working process that can be helpful to watch to complement these instructions. It’s like having a visiting artist/expert in the classroom and students enjoy watching Barbara at work.

**Video 1:** <https://youtu.be/F4a0MVZLEpw>

This video demonstrates:

- Her planning processes
- Mixing Colours
- Laying down the background
- Adding different elements to the background

**Video 2:** <https://youtu.be/f1wy44NqNOo>

This video demonstrates:

- Barbara's technique for transferring her character on to her plasticine background.
- How Barbara assembles her characters.

**Video 3:** <https://youtu.be/dtZmc2fZt7E>

This video demonstrates:

- Ways to add texture
- Adding additional elements to your relief.

#### **Step 4: Have a play with Plasticine:**

Now that you know a little about Plasticine, it's important to have a play with it so you know how it works. You don't need to use a lot, but enough to get a feel for it!

#### **Have a go at...**

- Warming the clay up
- Mixing a colour – try yellow with a little red to make orange.
- Rolling a ball
- Rolling a coil, cut off a piece and roll it even thinner. How thin can you make your coil?
- Make a shape: circle, square, triangle, etc.
- Find some tools around the house and add some texture to your shape

### **PART TWO: Planning**

#### **Step 5: Character Design:**

Sketch out several options for characters to include in your animation. (Paper/visual diaries and grey lead)

When you have settled on a character, make any further refinements to your sketch, and consider if you will need extra sets of facial features to use during the animation process.

**EXTEND:**

Create a final artwork of your character by incorporating other drawing media such as:

- Watercolour pencils
- Liquid Crayons
- Fineliner
- Posca
- Gel Pen
- Ink Brush Pens
- Lyra Water Soluble graphite

**Step 6: Set Design:**

Sketch out a few options for background drawings for your set.

**EXTEND:**

Consider what “extra props” you might need. Sketch designs and consider what your materials you will create them from.

Magicalay can be used over an armature to create non-moving elements of your set. Use white Magicalay (and acrylic paint, Zart Poster Colours, or watercolours to add colour. You can also use coloured Magicalay that doesn't require any further colouring steps after modelling.

Wire and paper constructions are also options for making additional props.

**PART 3: Making**

Step 7: Create your set from a cardboard box. (Approximately 44cm x 31cm x 24cm - a sheet of A3 paper should fit in the bottom snugly). Lay the box on its side. Cut away the top and secure the side flaps to the bottom flap using masking tape.

Use Zart Paint Slix on A3 200gsm Cartridge Paper to draw the shapes of the main elements of your background. You will use four sheets to create a background, sides, and ground.

TIP: The background and sides will need to line up if you have drawn a horizon line! Think about the type of shots you will be using in your animation to decide how much of the sides/ground you need.

Outline and add textures to the shapes using a Zart EverZart Board Marker.

Attach the drawings to the cardboard box using DisplayTac.

### **Step 8: Armatures:**

What is an armature?

Armatures are structures that are inside sculptures to give them support. Think a skeleton to hold up soft materials before they harden as well as a way of padding out a sculpture, so you need to use less of your outer (usually more expensive materials). Armatures can be made from wood, wire, cardboard, aluminium foil, newspaper, Poly balls, etc. depending on the weight of the outer material.

When making an armature to animate, you want some parts to be movable, so your armature needs to be flexible – thin armature wire with aluminium foil will do the trick. The wire forms the skeleton and the aluminium pads out larger areas of the character so that you don't need large quantities of plasticine.

Important Tips:

- Try to have as few attached pieces of wire as possible. Twist pieces together securely.
- Cover with aluminium foil. Tightly pack for larger areas such as bodies, heads
- Cut wire using the backs of your scissors if you don't have wire cutters.
- 1.5mm wire is best to use and ok to cut with scissors. It is easy to manipulate and sculpt with.

Refer to this handy guide:

Zart 2020 Catalogue Page 212

[https://issuu.com/zartart/docs/zart\\_school\\_catalogue2020\\_lowres](https://issuu.com/zartart/docs/zart_school_catalogue2020_lowres)

Demonstrate to your students how you would create an armature inside a character to be animated.

Ask them to sketch out how they will make their armature before creating it.

**Step 9: Apply plasticine to the armature. Add appropriate textures.**

Remember to apply enough to cover the armature but not to apply too thickly.

Create additional facial features (eyes, mouths, eyebrows, etc) required for animation.

## EXTENSION

### EXTENSION 1:

Character Design and Story Boarding:

You may like to extend the planning process during character design and story boarding so that you can create additional artworks using a variety of media and techniques. The materials listed below will provide interesting creative opportunities for your students.

PN085	Basics Watercolour Pencils 24
BR464	Aqua Brush Set Asst 8's
CR420	Lyra Graphite Crayon Water Soluble
PN145	EverZart Pen
PM060-**	Colour Brush Pen
PN018-WH	Uni-ball Signo Broad Gel Ink Pens White
PM760-BK	White Fine Posca
PM760-WH	Black Fine Posca
PM805	Liquid Crayons
PD827	Draw & Wash Pads – Smooth A5
PD830	Draw & Wash Pads – Textured A5

### EXTENSION 2:

Create additional props for your set using a variety of materials.

Magicalay can be used over an armature to create non-moving elements of your set. Use white Magicalay (and acrylic paint, Zart Poster Colours, or watercolours to add colour. You can also use coloured Magicalay that doesn't require any further colouring steps after modelling.

How to use Magicalay:

<https://www.zartart.com.au/zartstatic/page/magicalay-techniques>

ML280	Paper Magicalay 200g White – Flat Pack
ML297	Paper Magicalay 240g Neon Colours
ML285	Paper Magicalay 240g White – Canister
ML296	Paper Magicalay 240g Earth Colours
ML300	Paper Magicalay 240g Coloured – Canister
ML295	Paper Magicalay 240g Candy Colours

### EXTENSION 3:

While shooting your animation, capture still images using a digital camera. Print and frame your favourite one.

This could also be used to create promotional flyers about your animation.

## DISCUSSION / REFLECTION

- What was great about using Plasticine? What was challenging?
- Did your Plasticine character turn out as you planned in your drawing? What did you change/improve/modify during your working process?
- What are you proud of in your artwork?
- What would you change if you could do your artwork again?
- What was easy/challenging about using Zart Colour Slicks to create a background?

## MATERIALS & EQUIPMENT

	<b>Character Design:</b>
PA150	Cartridge 200gsm A3 100's
PN180	Basics Blacklead Pencils Thick 2B
	<b>Armature Building:</b>
AT340	Display Tac
AT512	Masking Tape 50m x 12mm
CB603	Cardboard white 250gsm A4 100s (Pasteboard)
PA901	Aluminium Foil 150m
SC013	Basics Zart Scissors 170mm
WG901	Armature Wire 1.5mm
	<b>Character Modelling:</b>
	Paper Towel
CN503	Icy Pole sticks
MB002	Satay Sticks
ML020-BE	Plasticine 500g Blue
ML020-RE	Plasticine 500g Red
ML020-WH	Plasticine 500g White
ML020-YE	Plasticine 500g Yellow
ML023	PlastiPlay Assorted 24's
ML720	Silicone Mat 30 x 40cm
PM439-BU	EverZart Broad Marker 20s Black
PT121	Animal Pattern Rocker Stamper 4's
PT135	Paint Effect Stampers
TQ209	Modelling Tools – Plastic
	<b>Set Design:</b>
CR255	Metallic Slicks by Zart 12's
CR256	Colour Slicks by Zart 12's
PA150	Cartridge 200gsm A3 100's
	and
	The cardboard box the Zart materials were packed into

## INSPIRATION RELATED ARTWORK, LINKS & SOURCES

This unit was inspired by Barbara Reid's artwork and techniques with Plasticine. She has a fabulous website that is full of handy resources for teachers/students/parents. I have designed this unit based on her techniques and how I have scaffolded my students in my art room during a project like this!

<https://barbareid.ca/>

<https://barbareid.ca/students-and-teachers/about-Plasticine/>

<https://barbareid.ca/students-and-teachers/videos/>

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