

Year 2

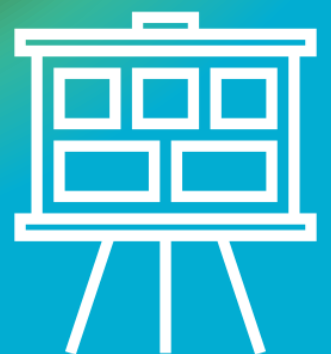


iCompute

No

iAnimate

Introduction
to
Stop Frame
Animation





iCompute for Primary Schools





iCompute

iAnimate

Year 2



Overview

In this unit, the children explore stop frame animation through story telling.

The children will explore creating narratives and combining them with images to make their own short animated scenes.



National Curriculum

- * understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- * create and debug simple programs
- * use logical reasoning to predict the behaviour of simple programs
- * use technology purposefully to create, organise, store, manipulate and retrieve digital content
- * recognise common uses of information technology beyond school
- * use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Hardware

Computers or tablets with built in cameras

Software/Tools

Suggested software & apps (see Preparation)

Curriculum Links

- * English
- * Art/Design
- * History
- * Mathematics
- * Science

Assessment

P15 contains assessment guidance

Preparation

- * Read the lesson plans
- * Spend an hour or so familiarising yourself with the software you will be using

Resources

- * Book out any computers you may need, if necessary
 - * Ensure that any links to websites are not blocked
 - * Ensure that the software used is installed on all devices
 - * Worksheets for each lesson – entitled: Worksheet<year.unit.lesson> (Eg. Worksheet2.6.1)
 - * Support materials for each lesson – entitled: Resource <year.unit.lesson> (eg. Resource2.6.1)
-

Links

iMovie (iOS)

<http://icomp.site/imovie>

Stop Motion Animator (Chrome)

<https://icomp.site/stop-motion-chrome>

Stop Motion Studio (Windows)

<https://icomp.site/stop-motion-studio>

I Can Animate app (iPad):

<http://icomp.site/i-can-animate>

Animate It (Android):

<http://icomp.site/animate-it-android>

Animate It (iPad):

<http://icomp.site/animate-it-ipad>

2Animate by 2Simple (Windows):

<http://icomp.site/2animate>

Tutorial for Doink Animation:

<http://icomp.site/animate-with-doink>

Make a Thaumatrope:

<http://icomp.site/thaumatrope>

Videos

<http://icomp.site/stop-motion-explained>

<http://icomp.site/shaun-the-sheep>

<http://icomp.site/chicken-run>

Updates

If any links are not working, obtain the latest version of this plan using your iCompute login.

Objectives

Lesson	Title	National Curriculum Links	Objectives	Success Criteria
2.6.1	iFlip	<ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<ul style="list-style-type: none"> To understand what an animation is To understand the premise of a stop-frame animation 	<ul style="list-style-type: none"> The children create a flipping book animation
2.6.2	iDesign	<ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<ul style="list-style-type: none"> To understand that an animation consists of characters, a stage, props, sound, text and a story 	<ul style="list-style-type: none"> The children create character descriptions for a fairy tale
2.6.3	iStoryboard	<ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<ul style="list-style-type: none"> To understand the importance of a storyboard in the story planning process To create their own storyboard 	<ul style="list-style-type: none"> The children create a storyboard for a short stop-frame animated sequence
2.6.4	iScript	<ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	<ul style="list-style-type: none"> To understand that animations need to be scripted 	<ul style="list-style-type: none"> The children create a script to retell a short animated scene of a fairytale
2.6.5	iCreate	<ul style="list-style-type: none"> use technology purposefully to create 	<ul style="list-style-type: none"> To understand that stop-frame animations involve physical characters, settings and props To work collaboratively in a group to achieve a common goal 	<ul style="list-style-type: none"> The children create the backgrounds and characters for their animation
2.6.6	iFilm	<ul style="list-style-type: none"> use technology purposefully to create 	<ul style="list-style-type: none"> To create a stop-frame animation 	<ul style="list-style-type: none"> The children use a storyboard and script to support the creation of a stop frame animation



Resources

Resource2.6.1; Selection of animated clips; Sticky-note pads or notebooks; coloured pens; tracing paper

Objectives

- * To understand what an animation is
- * To understand the premise of a stop-frame animation

Success Criteria

- * The children create a flipping book animation

Vocabulary

stop motion, image, animation; movie; character; flip book

1

- * Share a clip of popular animated film or TV show (Resources)
- * Ask the children what their favourite animated films/TV shows are
- * Why do the children like them?
- * Thought-shower as many animated movies and note them on the board (E.g. Trolls, Madagascar, Shrek etc.)
- * Explain that computer animations are created by displaying a series of still images very quickly which then makes the images look like they are moving
- * Reinforce understanding by showing the children Resource2.6.1 (animation images) and scrolling through the images really quickly
- * What do the children notice?
- * Establish that it looks like the sheep is running
- * Explain that this is a trick of the eye (an optical illusion) where our brain reads a quick series of movement as being smooth
- * This is how animated films work: each frame of an animated film is a separate still picture. Drawings or props are moved a little bit between frames, creating an illusion of movement when the film is played



2

- * Model how to create a simple flip book
- * Draw a simple image (e.g. stick man) on a sticky-note (Resources)
- * Then another, posed slightly differently on the next and so on
- * Pass the book around for the children to flick
- * Does the image look like it's moving? If not, why not? – This could be because the movement is too subtle, not enough pages etc,
- * Tell the children that they will be making their own flipping books today about anything they like
- * Emphasise the importance of drawing the same image as accurately across the pages as possible with slight differences in position and/or pose
- * Explain that the smaller the differences between each page, the smoother the movement will look when the notepad is 'flicked'

3

Core



- * The children work independently using sticky-note pads or notepads to create a flip book animation
- * They draw at a series of images on different pages with variations in position and/or pose in the same place in the same corner of their pad/notebook
- * With each new image, they start with the last image and 'trace' over it before making changes – this is known as the 'onion skin' method
- * They then test their animations by flicking the pages of the book and watch the pictures they have drawn move

Harder

- 🔓 Encourage some children to draw images that will result in a wider range of movement
- 🔓 Some children could also add backgrounds

4

Plenary

- * Gather back and share some of the children's flip book animations
- * Which of the flipping books creates smoother movement?
- * Why is that?
- * Draw attention to good examples of small changes in movement
- * Import an animated clip (Resources) to video editing software (Links) and show the children each frame (individual image) of the animation



Extension/Enrichment

- * Make a thaumatrope (Links)
- * Add backgrounds or other objects to each scene
- * Share flipping books with a wider audience (E.g. other classes, parents etc.)
- * Share a number of animated movies and critically appraise



Resources

Selection of animated film clips; Fairytale story of your choice for re-telling; Stop Motion Explained - Video (Links); Worksheet2.6.2

Objectives

- * To understand that an animation consists of characters, a stage, props, sound, text and a story

Success Criteria

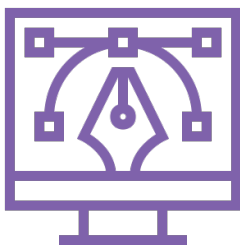
- * The children create character descriptions for a fairy tale

Vocabulary

Animate; stop-motion; character; stage; background; sound; audio; text

1

- * Remind the children about the previous session and cover the key points of animation being a series of images displayed quickly creating an optical illusion of movement
- * Share some example animation clips
- * Ask the children what they notice about the clip(s)
- * What was the story about?
- * How are the characters moving?
- * How do the children think the characters are made to look like they are moving?
- * Are they bendy/have joints?
- * How many characters did they see?
- * What other things helped to tell the story in the clip(s)?
- * Tell the children that the clip(s) they saw is a stop motion animation which has the characters they saw/described; a background (stage), sound (audio) and a story – sometimes text
- * Explain that the children will be working to design characters for a stop motion story



2

- * Share the Fairy Tale you have chosen
- * Throughout the story telling, draw attention to the distinct parts of it - E.g. for Goldilocks, finding the bear's house; eating the porridge, sitting on chairs, trying beds etc.,
- * Encourage the children to describe the characters of the story in detail
- * What do they look like?
- * How do the children think they would move at key parts in the story (e.g. quickly for the Big Bad Wolf, slowly for the 3 Bears)
- * Read the story again and have the children role play various characters in groups
- * Then share the stop motion explained video (Resources)
- * Discuss key points raised – in particular materials and scale of characters

3

Core

- * Chn work independently to create character descriptions for a retelling of your chosen fairy tale
- * They must decide on how many characters are needed
- * What their characters will be made from (e.g. LEGO, modelling clay, paper cut-outs, other small world figures etc.,
- * They use Worksheet2.6.2 character design template to write/draw their ideas



Easier

- * Some children could be given fewer characters to design

Harder

- * Encourage some children to include text, speech bubbles, titles

4

Plenary

- * Gather back and share some of the children's character design
- * Relate back to the story and draw attention to good characterisation
- * Discuss the children's ideas for how the characters will be made
- * Which would be good for stop-motion, posing etc.,



Extension/Enrichment

- * Children could watch a selection of animations made with stop-motion techniques
- * Choose a favourite character and create a detailed character design for them

 Resources

Fairytale story; Worksheet2.6.2; Worksheet2.6.3

Objectives

- ★ To understand the importance of a storyboard in the story planning process
- ★ To create their own storyboard

Success Criteria

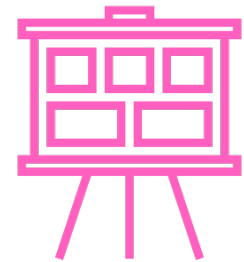
- ★ The children create a storyboard for a short stop-frame animated sequence

Vocabulary

Animation; stop-motion; character; storyboard

1

- ★ Remind the children about their previous work
- ★ Review the Fairytale and discuss the key points and characters in the story
- ★ Discuss how the story can be divided into sections
- ★ How are the sections marked (E.g. new characters introduced, scene changes etc)?



2

- ★ Explain that film makers always plan their story before starting to animate it
- ★ They use something called a storyboard
- ★ A storyboard is a simple plan of a story but includes important information and detail
- ★ The storyboard doesn't include what the characters will say, or how they will be positioned
- ★ It contains drawings, labels and arrows
- ★ Explain that, today, the children will be creating their own storyboard for a scene from the fairytale



3

Core



- * The children work independently using Worksheet2.6.2 and Worksheet2.6.3 to create a storyboard for a short animated scene from the fairytale
- * Encourage the pupils to keep it simple as their final animation will be very short
- * They must use one or more of characters they designed in the previous session
- * Remind the children to think about whether their plans are achievable given what they have designed their characters to be made from
- * Also to think about, when storyboarding, how their character will be supported when posed (e.g. on the ground or how they will be supported in the air)

Easier

- * Some children may need support with their storyboards

Harder

- * Encourage some children to add titles and speech bubbles
- * They could also note sound effects to be used
- * Include stage direction (e.g. enter/exit points)

4

Plenary

- * Gallery walk the classroom, looking at each other's storyboards
- * Encourage the children to pick out similarities with their own work
- * What is different?
- * How could they improve their work?
- * Allow the children some time to make improvements



Extension/Enrichment

- * The children could create a short video or play of the fairytale, using sound effects
- * They could record reading the story aloud, encouraging using a story teller's voice and using appropriate voices for different characters
- * The children could record music, or use a digital tools to compose music for the fairytale animation



Resources

Fairytale; Animated clip; Worksheet2.6.3 (previous session); Worksheet2.6.4

Objectives

- * To understand that animations need to be scripted

Success Criteria

- * The children create a script to retell a short animated scene of a fairytale

Vocabulary

Animation; character; scene; background; stop motion; storyboard; script

1

- * Recap on the previous sessions
- * Explain that the storyboard the children have already produced is a simple outline of a scene from the fairytale they are retelling
- * To provide more detail, we need a script
- * Explain that a script gives the exact words that will be spoken (or displayed as text) in their animation
- * They are written, in order, in the script for each character
- * Model how to write which character is speaking, where the name of the character speaking is given in the column before the text (E.g. Goldilocks: *dialog*)
- * Model how to write direction in the script

Baby Bear: Look at my bed! There is still someone in it!

Goldilocks wakes up and looks around. She sees the bears

Goldilocks: *Oh no!*



2

- * Review with the children an animated clip
- * Talk about the story and the clip
- * Ask the children to help you script a section of dialogue from it
- * Draw attention to how you are writing the name of the character first followed by what they are saying
- * Ask the children to help you script stage direction
- * Explain that the pupils will be working in groups to create a script from a storyboard of their choosing



3

Core

- * The children use Worksheet2.6.3 (storyboard) as a basis for creating a short script Worksheet2.6.4
- * They annotate their storyboard and either add speech bubbles or recording audio
- * They also decide on any background music and/or sound effects they will use in parts of the story and make a note of those on the storyboard
- * They then write/draw a script to accompany the storyboard

Easier

- * Some groups could record audio of their scripts instead of writing them down

Harder

- * Encourage some groups to use speech marks and punctuation



4

Plenary

- * Organise the children into groups
- * The children decide as a group which of their individual storyboards (Worksheet2.6.3) they will use for their group animation
- * They also decide, as a group, which script they will use in the next session



Extension/Enrichment

- * The children could write a script for a part of their favourite story
- * They could work in groups to produce and record their own dramatisation of it
- * What music and sound effects would be appropriate to convey character, setting and mood?



Resources

Worksheet2.6.3; Worksheet2.6.4; shoe boxes and/or cardboard boxes or large pieces of paper for backdrops; modelling clay; plastercine; paint; pens; glue; tissue paper; craft materials; mini figures

Objectives

- * To understand that stop-frame animations involve physical characters, settings and props
- * To work collaboratively in a group to achieve a common goal

Success Criteria

- * The children create the backgrounds and characters for their animation

Vocabulary

Animation; character; scene; background; stop motion; storyboard; script; background; setting; props

This lesson may span more than one session

1

Characters

- * Recap on the previous sessions
- * Tell the children that, today, they will be working in their groups to create the characters, backdrops and (if appropriate) props for their short animated scene
- * The children create their characters using their chosen material(s)

2

Backdrop/props

- * The children work in groups to create the backdrops for their animated scene
- * Groups should draw or paint the background setting they designed
- * They could also, or alternatively, use a cardboard box or shoe box that could be themed and used as the setting
- * Groups could cut out the back of the box and characters/props moved slowly (frame-by-frame) as part of the animation



Extension/Enrichment

- * Invite the children to bring in things from home that may benefit the scene
- * Challenge the children to find out about how sound effects are created in film – E.g. Fire: crunching paper, Rain: sprinkling rice onto a baking sheet, Walking through leaves: crunching crisps together with your hands
- * Can children think of any other imaginative ways to create a range of sound effects?



Resources

Worksheet2.6.3; Worksheet2.6.4; characters; backdrops and props; tablets or computers with in-built cameras; Animation software of your choice (Links)

Objectives

- * To create a stop-motion animation

Success Criteria

- * The children use a storyboard and script to support the creation of a stop frame animation

Vocabulary

Animation; character; scene; background; stop motion; storyboard; script; background; setting; props; shot

1

- * Explain that, in this session, the children will bring their animations to life!
- * Model how to set up a filming area including the backdrop and props
- * Show how to set the device with the camera in a stable (fixed) position, making sure that the whole screen and everything you want to animate fits in the shot
- * Draw attention to light and shadow, use an angle-poised lamp if desired
- * How does the changing light affect the images captured?
- * How does it affect atmosphere and mood?
- * Talk about the characters and props, where should they be?
- * How do they relate to the scene?

This lesson may span more than one session



2

- * Model how to use the tablet or device with the camera to capture a shot
- * Then move the character or prop slightly
- * Emphasise to the children that the camera should not be moved – only the characters and (if appropriate) the props should move
- * Capture another image with your device
- * Remind the children that they should continually refer to their storyboard and scripts throughout the process
- * Finally, model how to import the images you have captured into the software you are using
- * Play the series of images back so the children can see that motion is simulated



3**Core**

- * The children work in groups using Worksheet2.6.3 and Worksheet6.2.4 to set out their background, characters and props
- * They set up, and fix, the camera position and mark out any props they are using
- * Assign roles to each group member (E.g. animator, photographer, sound/lighting engineer, director etc) and instruct the children to continue to swap roles after each few frames
- * Once groups have set up their first frame, they should capture their first image - taking care not to move the position of the camera
- * The group member currently animating should then move characters and/or settings a very small amount
- * The photographer then captures the second frame – encourage groups to move more than one item between frames
- * Make sure that the children continually refer to their storyboards to keep their animation sequencing as planned
- * Once filming is complete (which may take more than one session), the children import their images into the movie making or animation software you are using (Links)
- * The children then put their stop-motion animation together using the software and edit where appropriate and/or necessary
- * If appropriate they could add music, sound effects, recorded dialogue and/or narration to their animations

Easier

- * Some groups may benefit from adult support

Harder

- * Some children could add live sound effects during filming
- * Encourage some groups to explore the various editing options once imported into the movie making or animation software



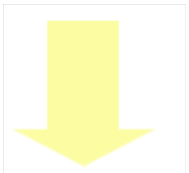
4**Plenary**

- * Share each group's animations
- * Peer assess using three stars and a wish
- * Why was it important to work to the storyboard and script?
- * What was difficult?
- * Why was it important to keep the camera static?
- * Review work and discuss what went well and improvements that could be made

**Extension/Enrichment**

- * The children can put together advertising materials for a special screening for parents/carers
- * They could design and make flyers and posters to promote the screening
- * Make an animation that showcases learning on a current topic (E.g. History)
- * Create an eBook about how to make a stop motion animation using multimedia

Assessment

<h2>Record of progress</h2> <p>Write names in the appropriate box, with jottings on children on children whose attainment differs markedly from their group.</p>	<h2>Expectations</h2> <p>What children know, understand and can do</p>
<p>Some children will have not made as much progress and will:</p> 	<ul style="list-style-type: none"> ✓ understand showing pictures quickly can look like movement ✓ plan a simple stop-motion scene with support ✓ create a simple script with support ✓ produce a short stop-motion animated scene using digital tools with support ✓ talk about what they like/dislike about an animation
<p>Most children will:</p> 	<ul style="list-style-type: none"> ✓ Know that that stop-motion animations are created by capturing images with small movements in between each image ✓ Understand that showing images rapidly with small changes in between simulates motion ✓ plan a short animated scene using a basic storyboard ✓ create a simple script based on a storyboard ✓ create an short stop-motion animated scene using digital tools
<p>A few children will have progressed further and will:</p> 	<ul style="list-style-type: none"> ✓ know that animations consist of a number of different images that are played rapidly ✓ plan an animated scene for an audience using a detailed storyboard ✓ Use a storyboard to created a detailed script for an animated scene ✓ produce a simple stop-motion animated scene using animation software ✓ add effects to enhance a simple stop-motion animation ✓ edit own work to make improvements
<p>Computing Guide – Working towards Yellow</p>	