



UNITED ARAB EMIRATES
MINISTRY OF EDUCATION



DESIGN AND TECHNOLOGY



TERM 2



GRADE 5

TERM 2

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"Extensive knowledge and modern science must be acquired. The educational process we see today is in an ongoing and escalating challenge which requires hard work. We succeeded in entering the third millennium, while we are more confident in ourselves."

H.H. Sheikh Khalifa Bin Zayed Al Nahyan
President of the United Arab Emirates



The Meaning of the United Arab Emirates Flag Colors

The colors of the United Arab Emirates (UAE) flag are inspired by the famous verse of the poet Safiyyuddin Al-Hilli:



White are our deeds, Green are our pastures,
Black are our Battles, Red are our Swords



Symbolizes goodness, welfare and giving, as well as the State's approach of supporting worldwide peace and security.



Symbolizes growth, prosperity, green environment and cultural revival in the country.



Symbolizes the strength, staunchness and might of the people of the State, as well as the rejection of injustice and extremism.



Symbolizes the sacrifices of the pre-union generation, and of the nation's martyrs who sacrificed their lives to protect the homeland's achievements and gains.

The UAE Vision 2021

United in Responsibility

- Confident and responsible Emiratis
- Cohesive and prosperous families
- Strong and vital social relations
- Rich and vibrant culture

United in Destiny

- Following the example of the Founding Fathers
- Safety and security of the nation
- Enhancement of the UAE's status on the international arena

United in Knowledge

- Harness full potential of national human capital
- Sustainable and diversified economy
- Knowledge-based and highly productive economy

United in Prosperity

- Long and healthy life
- First-class educational system
- Well-rounded lifestyles
- Environmental protection

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Unit 1





Introduction to Animation



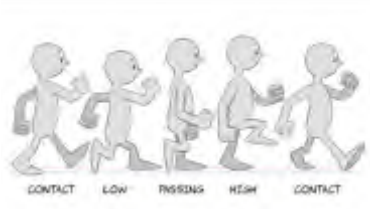




Overview

Students will learn about the different types of animations. This unit will discuss stop frame, key frame, 2D and 3D animations. This unit will also look at how movies and games are created using these animation software.

Keywords

Term	Definition	Image
animation	the process of giving the illusion of movement to drawings, models, or non-living objects	
2D	'two dimensional'. Image is flat and not realistic.	
3D	'three dimensional'. More than one face can be seen and looks realistic.	
Illusion	when a person's eyes, ears, or sense of touch are tricked, in some way.	

Keywords

Term	Definition	Image
Traditional animation	when a picture is drawn lots of times and shown together, an illusion that the picture is moving is created.	
2D vector based animation	same as traditional animation, but done on a computer instead.	
3D computer animation	when a 3D character is made on the computer and is placed in different positions to make a movie.	
motion graphics	used to make text and graphics look fun. It is used for logos and movie openings.	
stop motion	uses a camera to take pictures of objects in different positions, and once shown quickly, it creates an illusion.	

Learning Outcomes

- DT Establish the difference between animation and live action.
- DT Define animation and the different types of animations.
- DT Define different types of animations.
- DT Analyse different types of animation and their purpose.
- DT Look at different animations and their purpose.

What is animation?

Animation is the process of giving the illusion of movement to drawings, models or non-living objects.

Illusions happen when a person's eyes, ears or sense of touch are tricked in some way.



What is the difference?

A penguin animation and a real life penguin.



Activity

List what is different about both pictures?

1.
2.
3.
4.
5.

Include Teacher answers



Did you know the global animation industry is a multi-billion-dirham industry? People all around the world like animations.







Activity 2

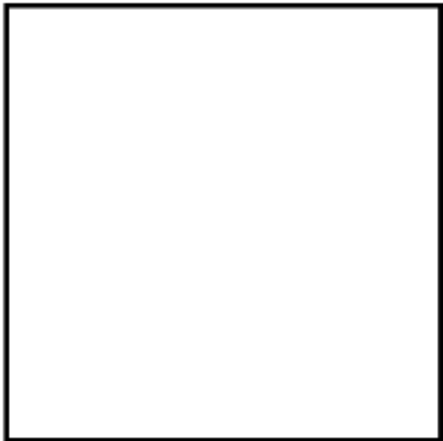
Draw a picture of your favourite animation character and give 3 reasons why you like them.

1.
2.
3.





The differences between 2D and 3D animation

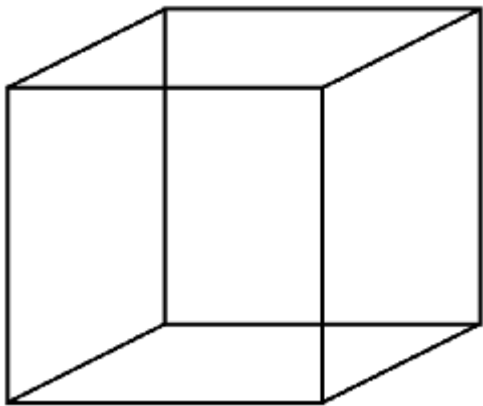
2D

-  2D stands for 'two dimensional'.
-  Only one face of the shape can be seen.
-  Image looks flat.
-  Not that realistic.

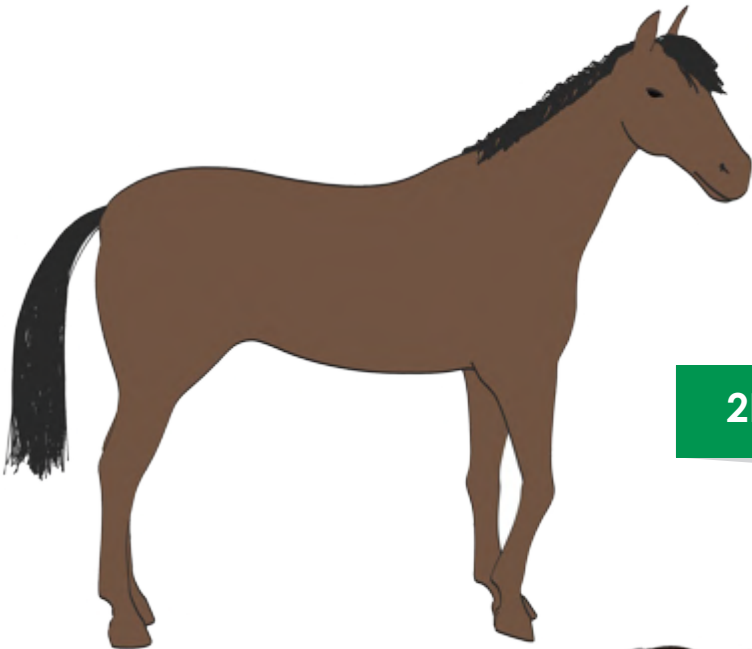


3D

-  3D stands for 'three dimensional'.
-  These shapes have more depth.
-  More than one face can be seen.
-  Images seem more realistic.



Can you see the differences in the images below?



2D horse



3D horse



Discuss the differences you can see with your partner.



Activity 3

Write down whether the animations are 2D or 3D

	Animation	2D or 3D?
1		
2		
3		
4		

Picture 1 – 2D

Picture 2 – 3D

Picture 3 – 3D

Picture 4 – 2D

What are the different types of animations?

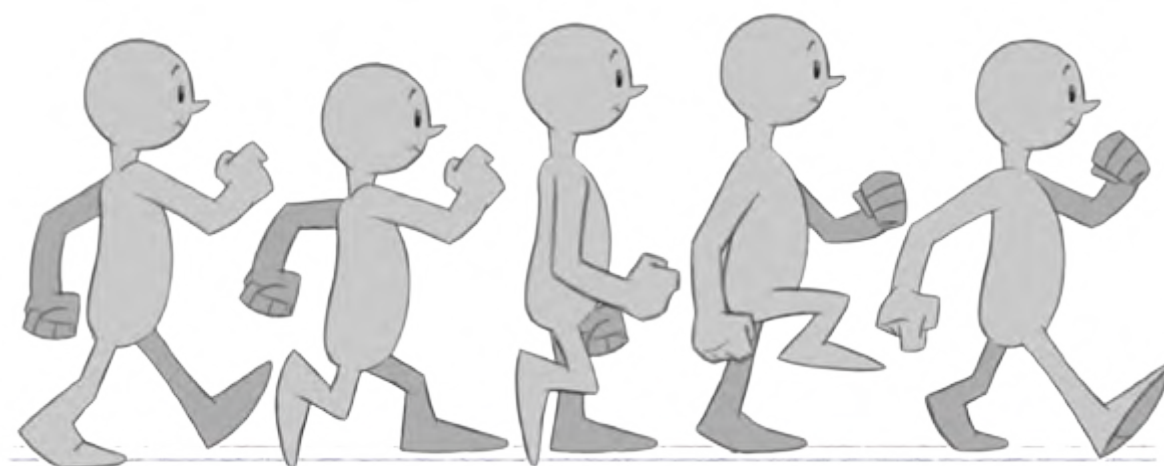
There are 5 types of animations. These are:

- DT Traditional animation
- DT 2D vector-based animation
- DT 3D computer animation
- DT Motion graphics
- DT Stop motion



1. Traditional animation

- DT This is the older form of animation.
- DT Pictures are drawn lots of times, doing different things.
- DT These pictures are shown very quickly, one after the other to create the illusion of movement.
- DT This can take a lot of time.



Notice how each drawing is the same as the previous one, but a slight change has taken place.



Video: Traditional animation demo



Activity 4

We will now make our own flip book animation. Making your flip book animation is easy. All you need is:

- DT 1 A3 Paper
- DT 1 Pencil
- DT Colours



Instructions (Activity 4)

Term	Definition
1. Fold an A3 paper in half and cut at the fold.	
2. Repeat this step until you have 32 small pieces of paper	
3. On the first paper, draw a picture in the left-hand corner of the page.	
4. On the next paper, draw the same person again, but move them very slightly to the right.	
5. Repeat this step until on the last page, the image is in the right-hand corner of the page.	
6. Put your book together and flick the pages to see your animation come to life!	

Teacher should show a ready-made flip book to the students so they understand what it is. It should also be emphasized that each drawing is on a separate page. He/she should also demonstrate how to line up the previous paper with the current paper before drawing to keep the animation consistent.



2. 2D vector based animation

- DT Same as traditional animation, but made on a computer instead of paper.
- DT Don't need to be good at drawing.
- DT Each body part can be moved separately, so a picture doesn't need to be drawn lots of times. Saves a lot of time!
- DT This method is cheap and easy to use.





A short 2D animated film.

3. 3D computer animation (CGI)

- DT This type of animation is used the most from all the animations
- DT Works differently than traditional animation
- DT Don't need to be good at drawing
- DT It is like playing with puppets and making them carry out the movements you want.

How it's done:

- DT A fun and catchy story is made.



- DT A story board is made. (A story board is the story from beginning to end with pictures.)



- DT A 3D model is made of the character.



DT 'Rigs' are made which control the movements of each character.



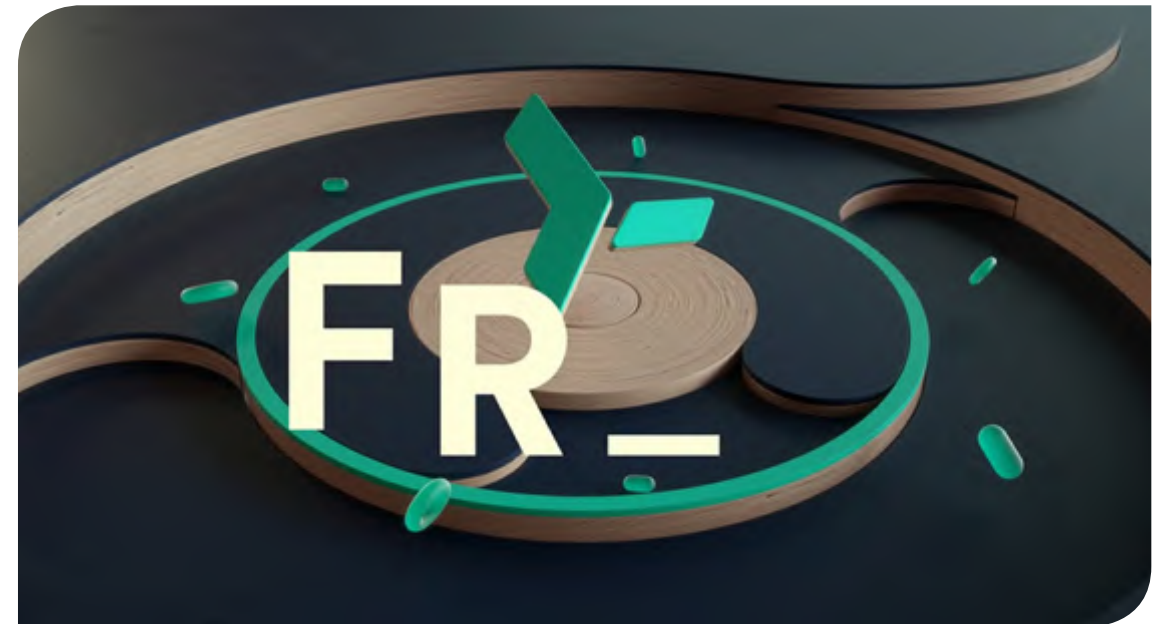
DT The animation is put together and voices are added.



'Rigs' are used to separate the different body parts and these are used to control how much movement each body part has.

4. Motion graphics

- DT** Very different to all other forms of animation.
- DT** Does not have a story or characters.
- DT** It is the art of moving graphics or text in a fun way.
- DT** Used for logos and movie openings.



A video showing motion graphics

5. Stop motion

The same as traditional animation, but using a camera instead of drawing.

How it's done:



DT Take a picture of an object.



DT Move it a little bit and take another picture. Repeat this step.



DT These pictures create the illusion of movement when shown quickly.



A video showing stop motion using clay.



Morph is made using stop motion.

Teacher can use their phone to show the students the 'burst shot' feature to explain this type of animation and to show that the motion picture is simply made of a bunch of photos. Do it with the students and have them jump in the air or something fun to get them engaged.



Unit Summary



- DT Animation is the process of giving the illusion of movement to drawings, models or non-living objects. Illusions happen when a person's eyes, ears or sense of touch are tricked in some way.
- DT The five types of animations are traditional animation, 2D vector-based animation, 3D computer animation, motion graphics and stop motion.
- DT 2D means 'two dimensional'. Image is flat and not realistic.
- DT 3D means 'three dimensional'. More than one face can be seen and looks realistic.
- DT Traditional animation is when a picture is drawn lots of times and then shown together. An illusion that the picture is moving is created.
- DT 2D vector-based animation is the same as traditional animation, but is done on a computer instead to save time.
- DT 3D computer animation is when a 3D character is made on the computer and is placed in different positions to make a movie.
- DT Motion graphics is used to make text and graphic look fun. It is used for logos and movie openings.
- DT Stop motion is using a camera to take pictures of objects in different positions, and once shown quickly, it creates an illusion.

End of Unit Quiz



Activity 5

use words below to fill in gaps.

stop motion	older	camera	five
graphics	three dimensional	most 2D vector based animation	two dimensional
logos	3D computer animation		

There are types of animation. They are
....., and 2D stands for
..... and looks flat and not very realistic. 3D stands for
..... and the image looks more realistic.

Traditional animation is the form of animation.
3D computer animation is used the from all the
types of animation. Motion graphics is different from all the other types
of animation and is mainly used for and movie
openings. Stop motion is the same as traditional animation, but rather than
drawing a is used.

Five, 2D vector based animation, 3D computer animation, motion graphics, stop motion, two dimensional, three dimensional, older, most, logos, camera.

Unit 2




Introduction to
animation Software
pro to motion






Overview

Students will learn to use Stop Motion Studio. Students will look at different tools and options available. Students will create a basic drawing, leading on to an animated image.

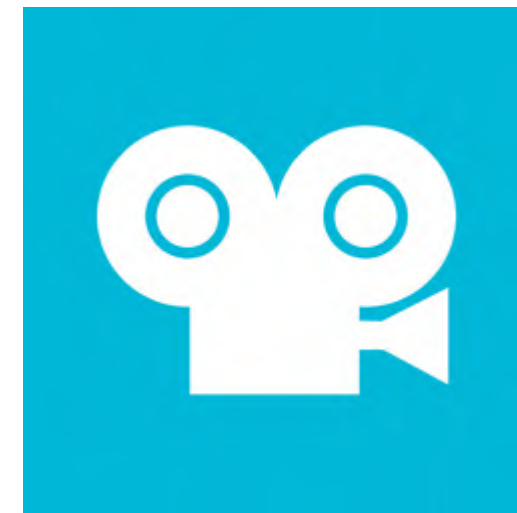
Keywords

Term	Definition	Image
tools	different options available in a software package	
stop motion	software used to make animations.	
theme	Change the design and look of the movie	

Learning Outcomes

-  Explain the software and its features.
-  Identify different tools available in the software package.
-  Demonstrate the understanding by creating a basic drawing.

We are going to use Stop Motion Studio to make our own animations!



Stop motion studio

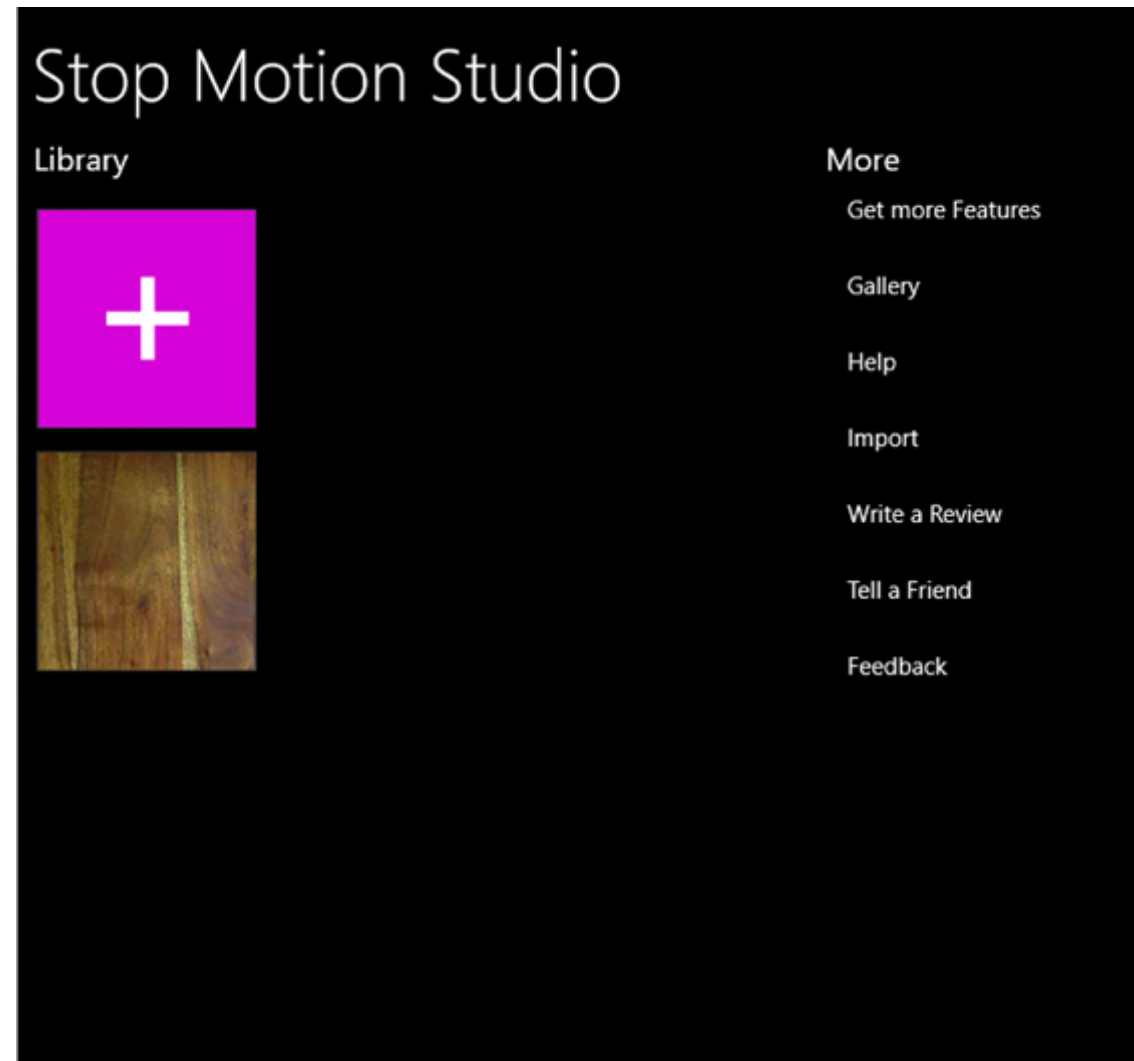
There are many fun animations that you can make on stop motion studio.



A fun animation about magic water!

Stop Motion Studio

Let's take a look at the software.



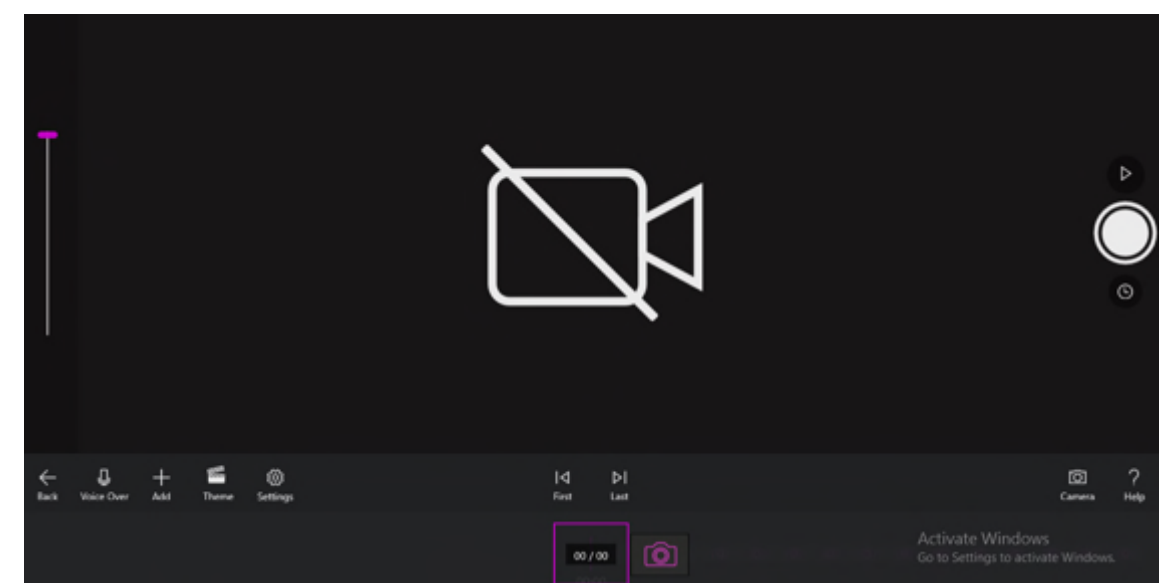
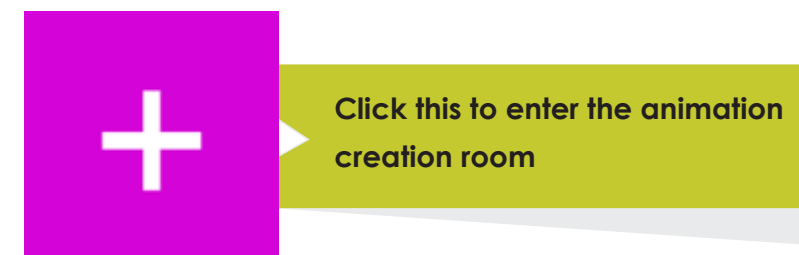
This is what you see when you first open Stop Motion Studio.


Take a look at the two boxes on the left-hand side.

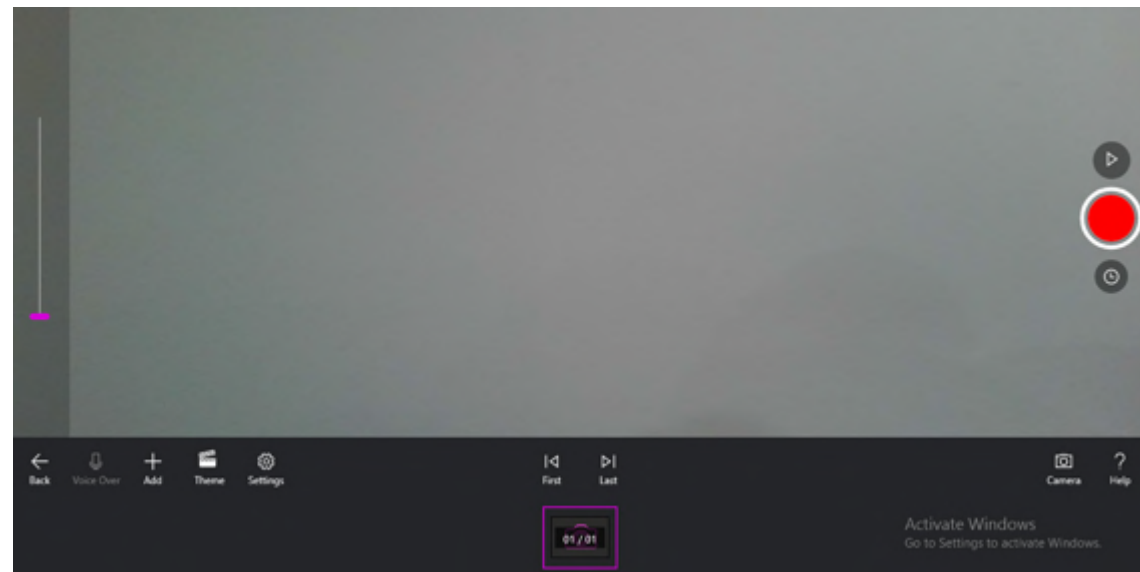


A simple animation for you to watch.

You will be using this to make your own name into an animation.

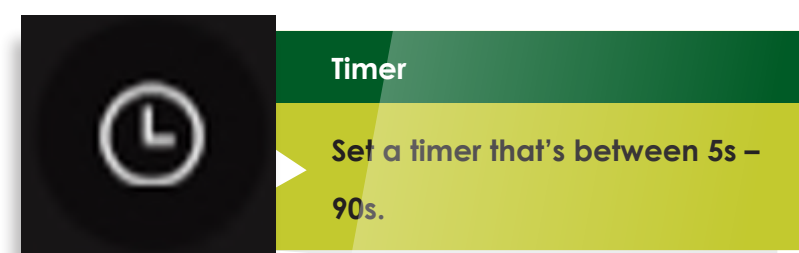
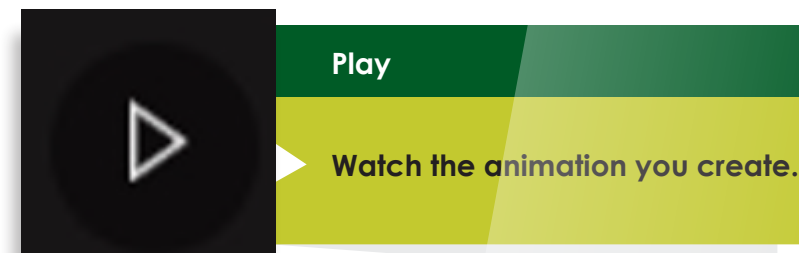
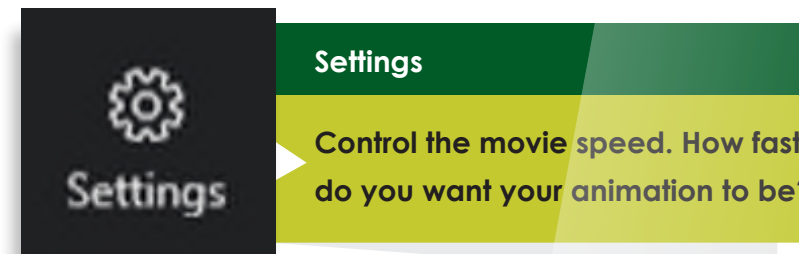
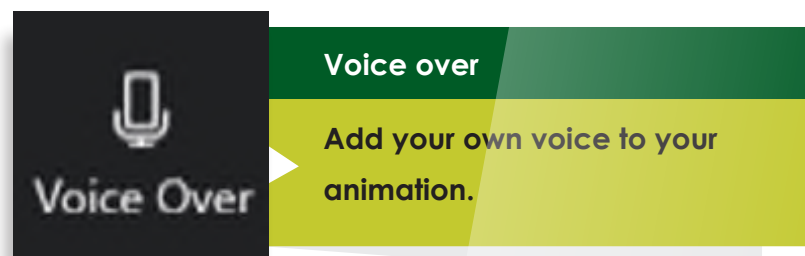


 Switch on your camera.



Tools

Tools help us make our animations. They are also there to make our animations different.



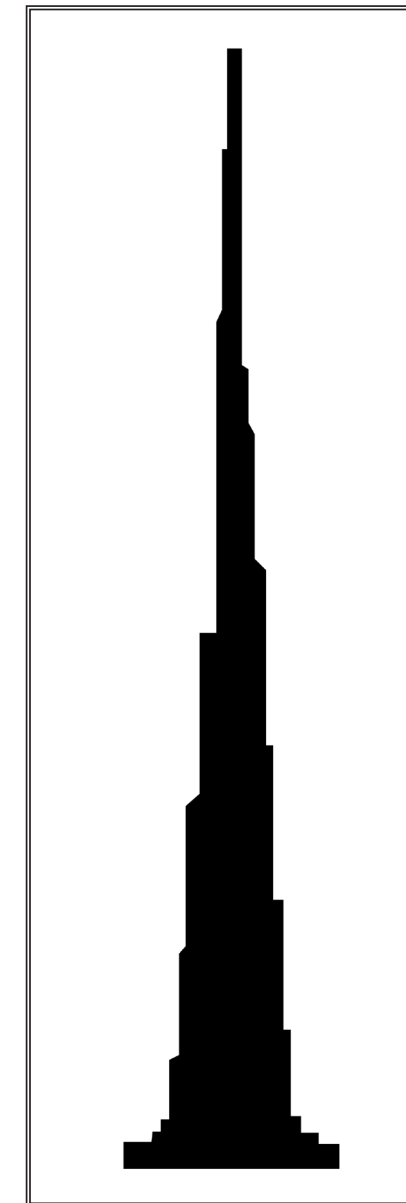


Activity 1

(Students to explore the software to get familiar with the features.)

Step 1:

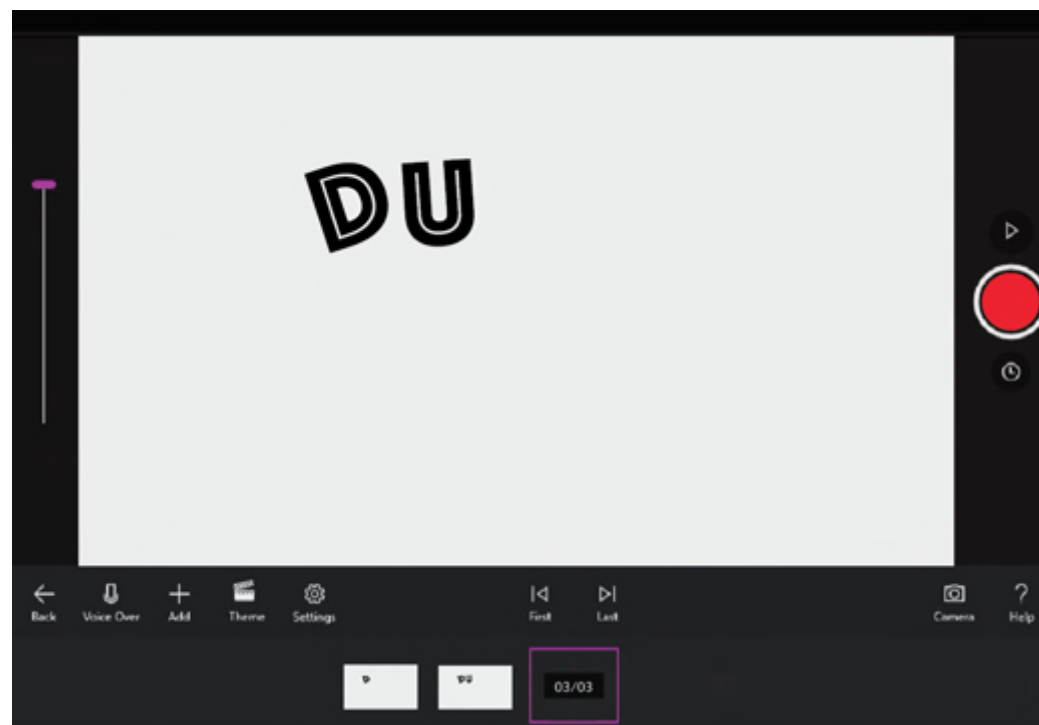
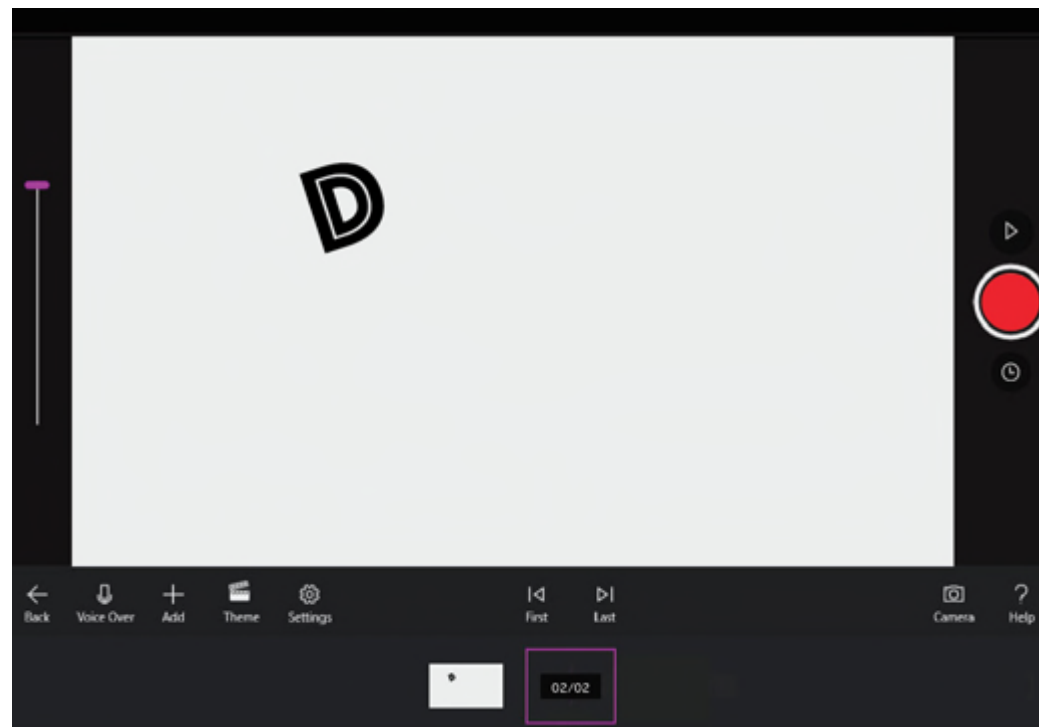
Create a drawing and cut out each part so they are separate.



Your drawing is now ready to be made into an animation using Stop Motion Studio.

Step 2:

Place the first letter in Stop Motion Studio and press the camera button to take the first picture. Repeat

**Step 3:**

Continue doing this until you have all the pictures on the screen.

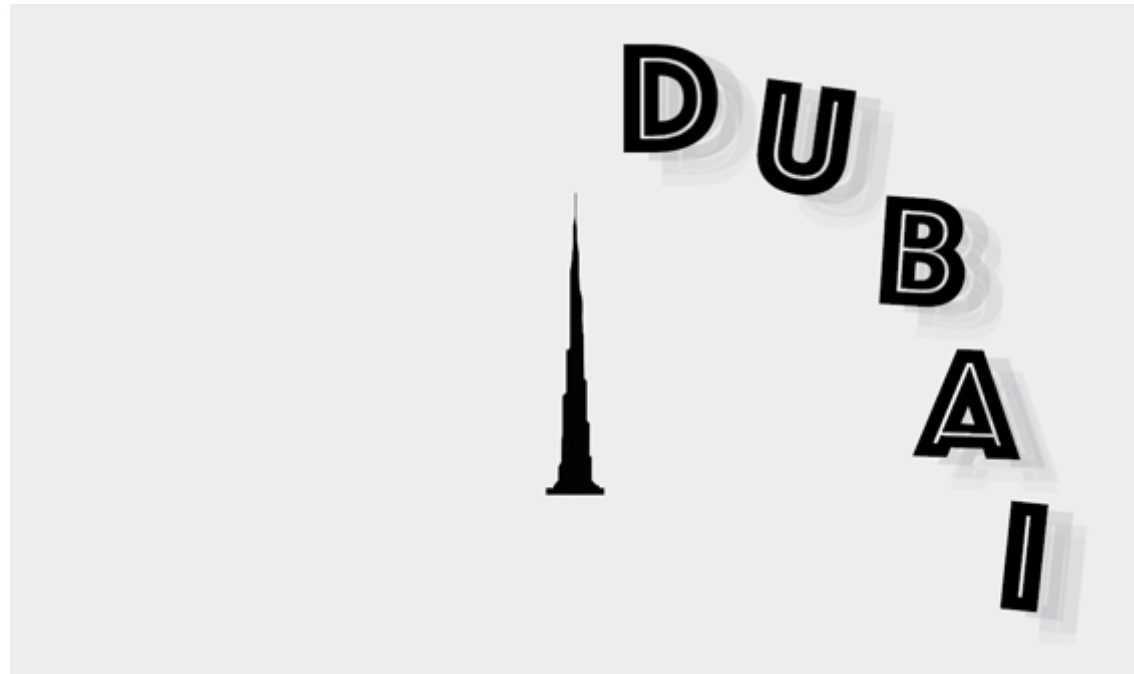


Remember: Don't forget to take a picture after every movement!



Step 4:

Now make your animation move across the screen. Be creative! Use the example below to help.

**Activity 2**

Plan and create your own simple animation.

Basic animation

Now let's make a basic animation.

Remember the flip book we made of the stick man?

Teacher to show flip book animation to students and remind them of how it works. Now we will do the same thing, but on Stop Motion studio.

Step 1:

Make 5 drawings of an animation to show walking.



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5



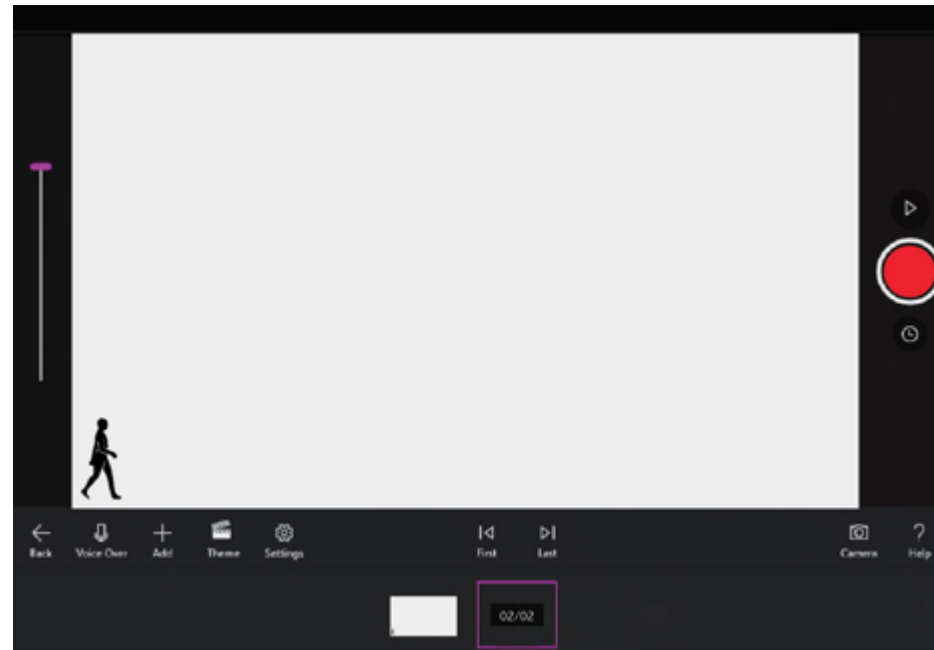
Notice that each drawing is different.

Can you see a difference in the arms and legs of each picture?



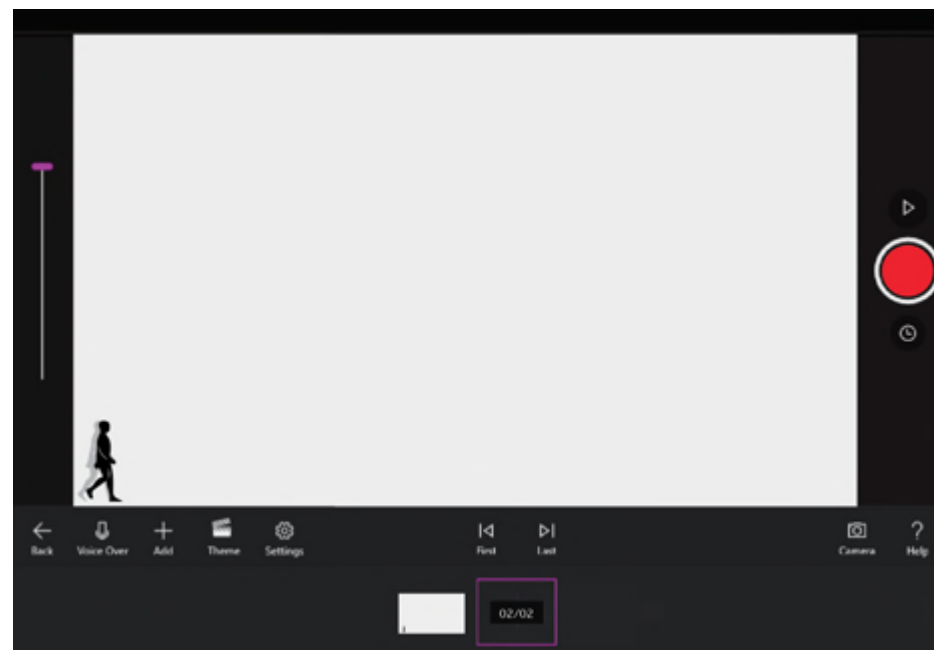
Step 2:

Place picture 1 in the bottom, left corner of the screen and take a photo.



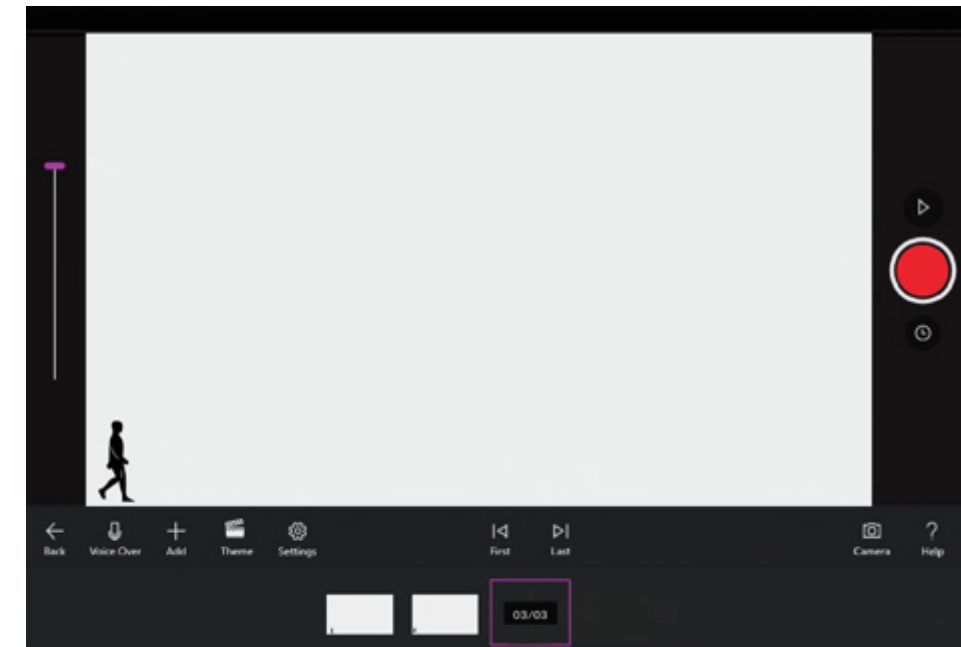
Step 3:

Place picture 2 so that it is overlapping picture 1 slightly.



Step 4:

Remove picture 1 and take a photo of picture 2 alone.



Remind student that putting the pictures next to each other is just for measurement. They should only take a photo with one picture on the screen at a time.



Only take a photo when there is only one picture on the screen.

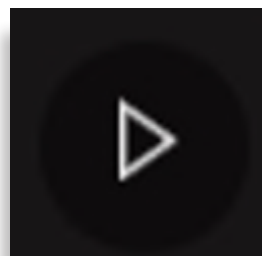


Step 5:

Continue this process along the page, keeping the animations close together.



Step 6:



Play back your animation to see your man walk from one side of the screen to the other.



Unit Summary

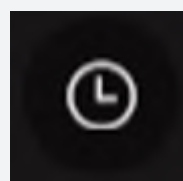
Below are step by step instructions on how to use the software:

1. Start your animation by drawing picture on a separate piece of paper
2. Place your first image on the screen and take a picture overlapping slightly
3. Place the next picture close to the first picture
4. Remove the first picture and take a photo of the second picture
5. Keep repeating this process, taking photos each time

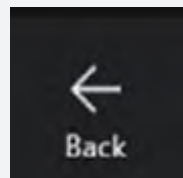
End of Unit Quiz



Match the picture/text to the text



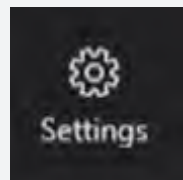
back arrow



include your voice



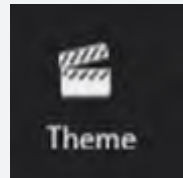
add pictures and videos



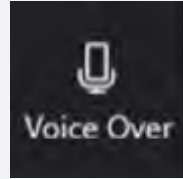
theme



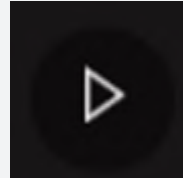
settings



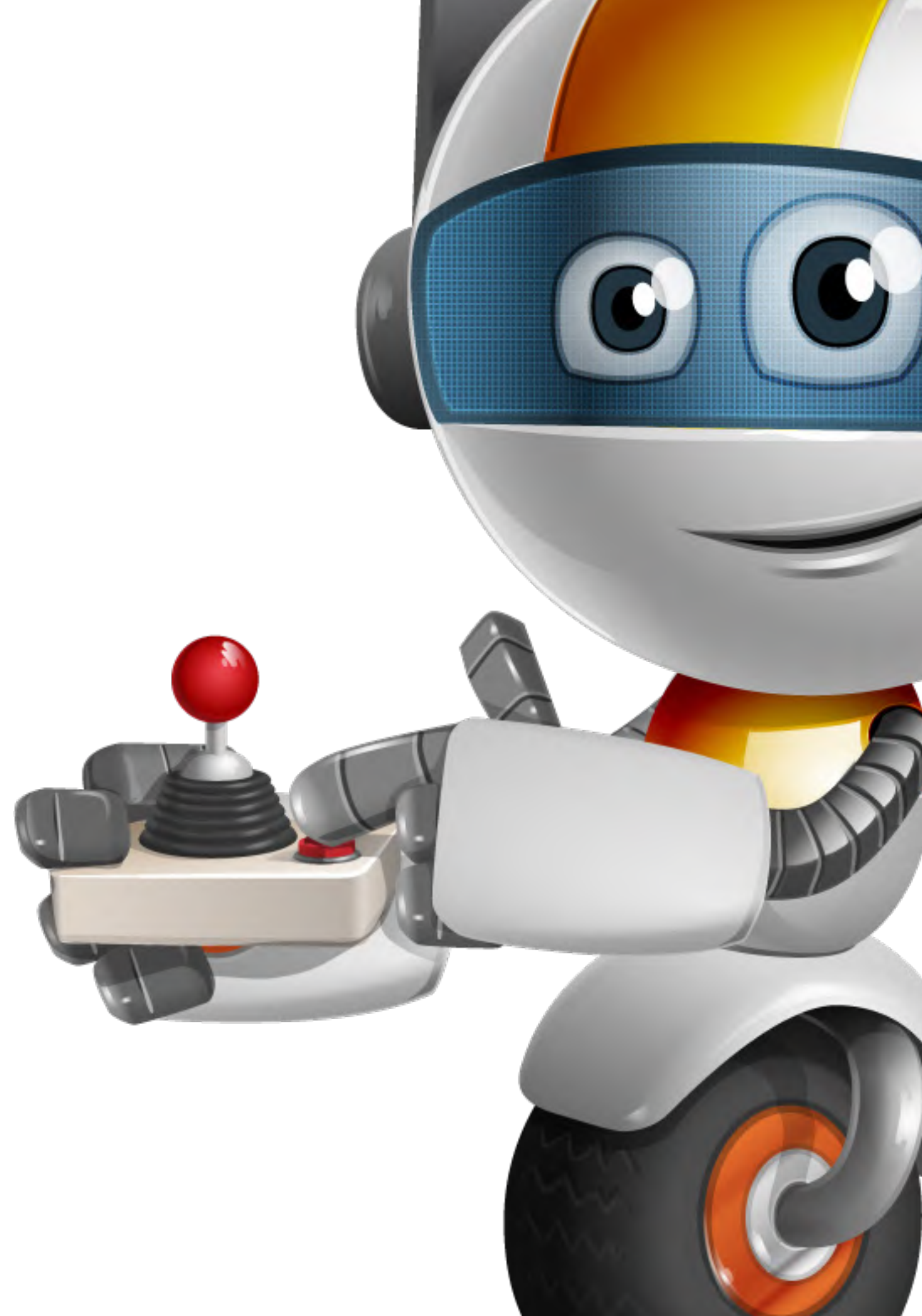
play your animation



take a picture



set a timer



Unit 3

| More of frames





Overview




Students will learn about frames and how they are used in creating videos and games. Students will be able to practice frames by creating a small video clip using picture gallery.



Keywords

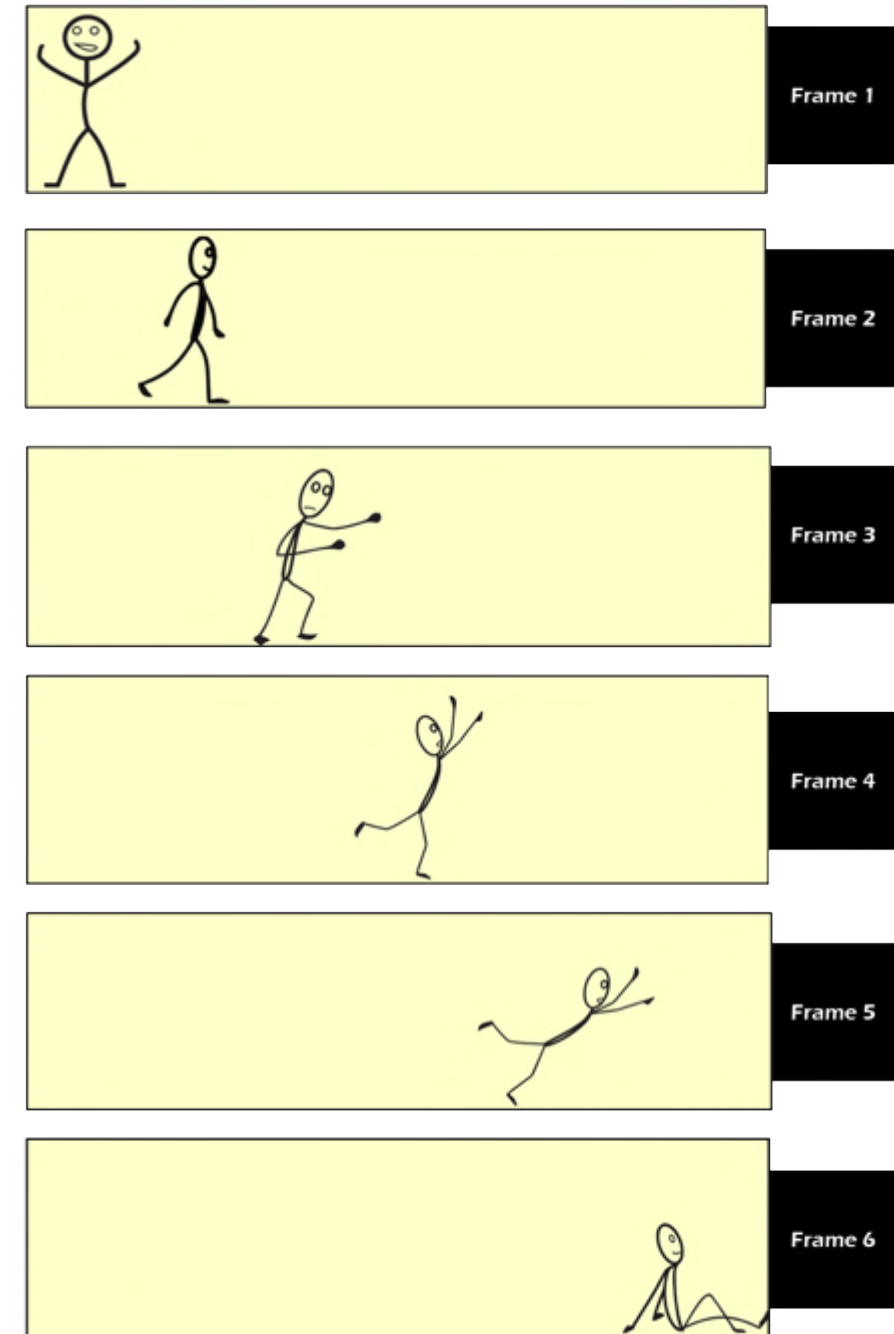
Term	Definition	Image
frame	a single picture on a film strip	
picture gallery	a place where you store your pictures on your device	

Learning Outcomes

-  Define what frames are, and their purpose
-  Apply the skills learnt by creating a video using picture gallery
-  Discuss how frames are useful in creating videos

Frames

All animations are made of up of lots of pictures put together. These are called frames.





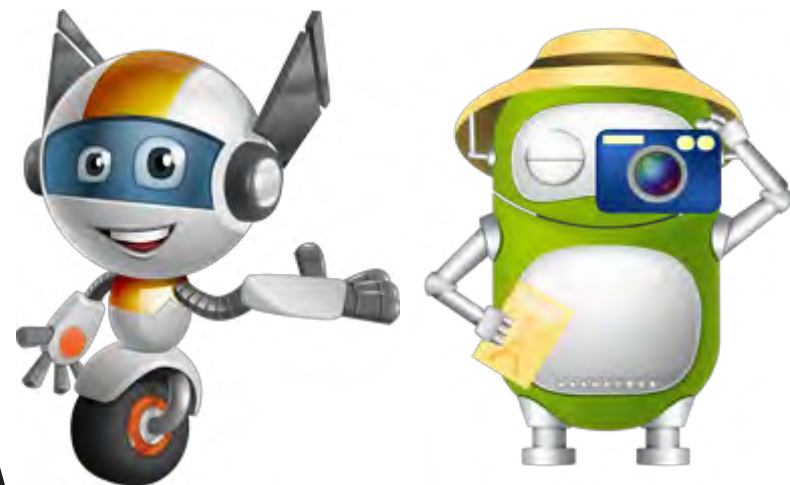
Remember the flip book you made in unit 1? Every single page was a frame.

Most movies you see in the cinema use 24 frames per second. This means that 24 pictures are shown very quickly in 1 second.

Let's look at this short animation video.



Dark woods animation



Let's break this video down into its frames. Pause the video if you need to.





Frame 3



Frame 4

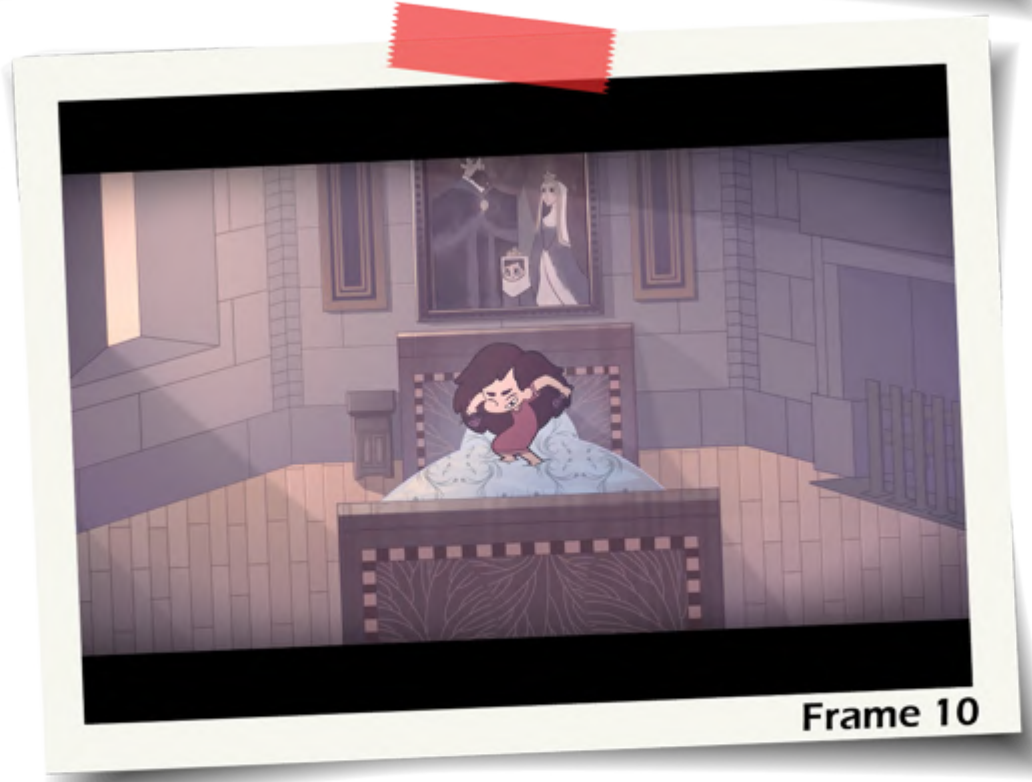
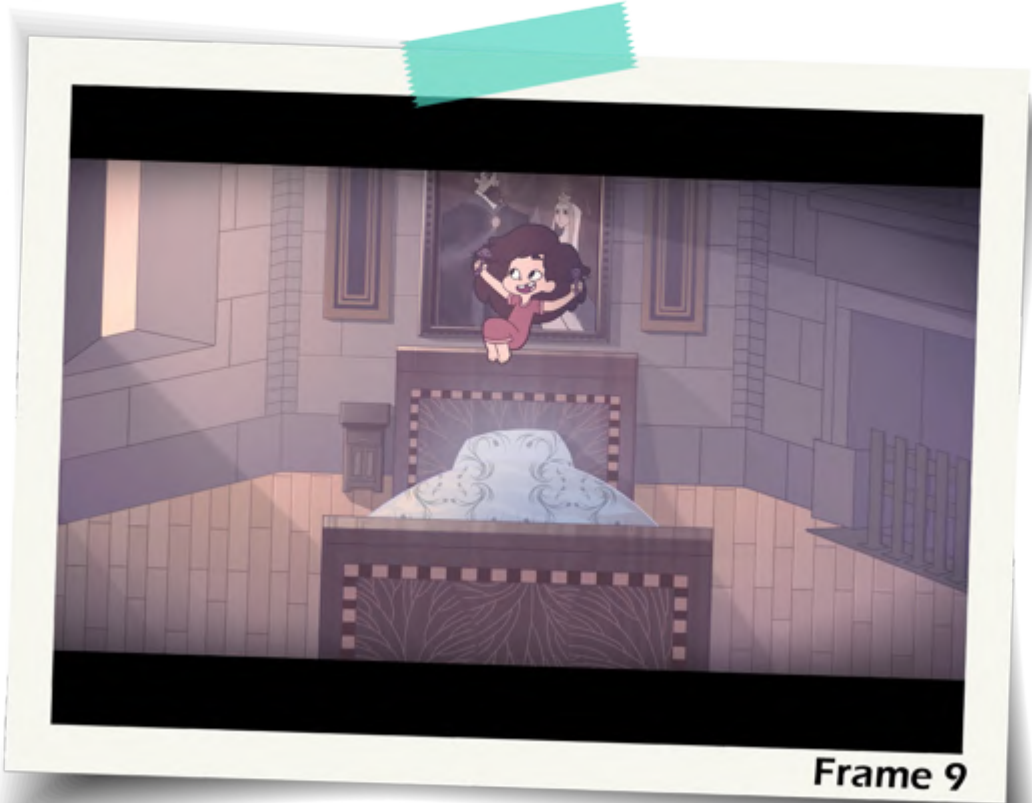
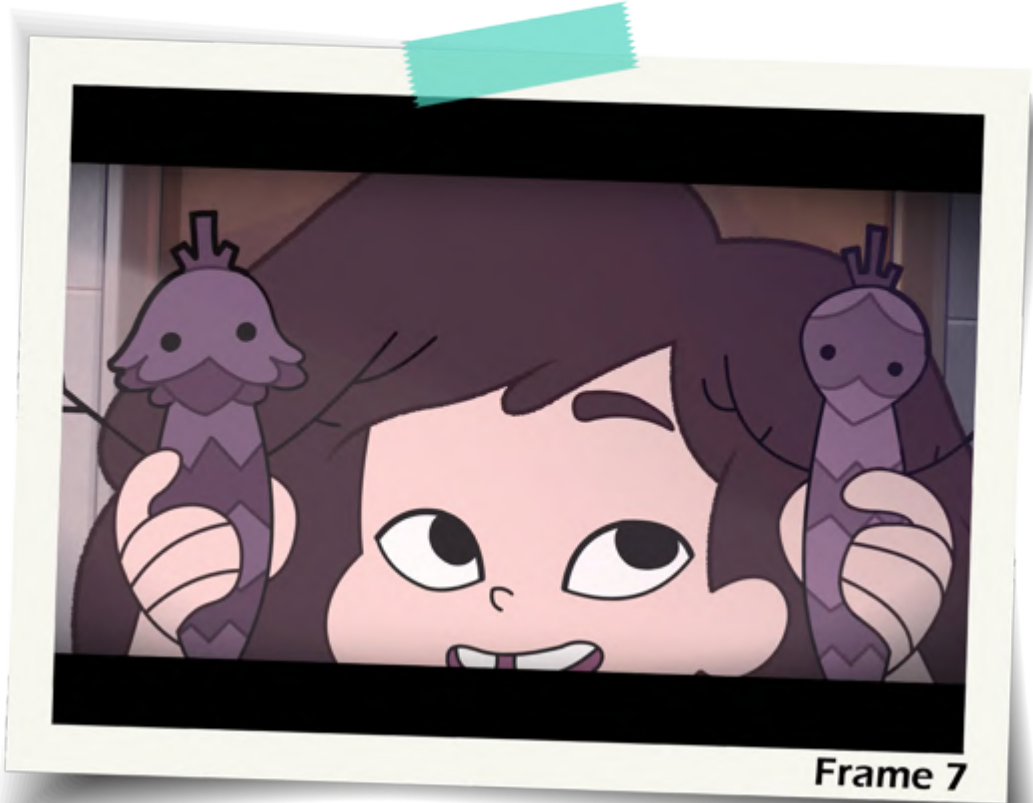


Frame 5



Frame 6



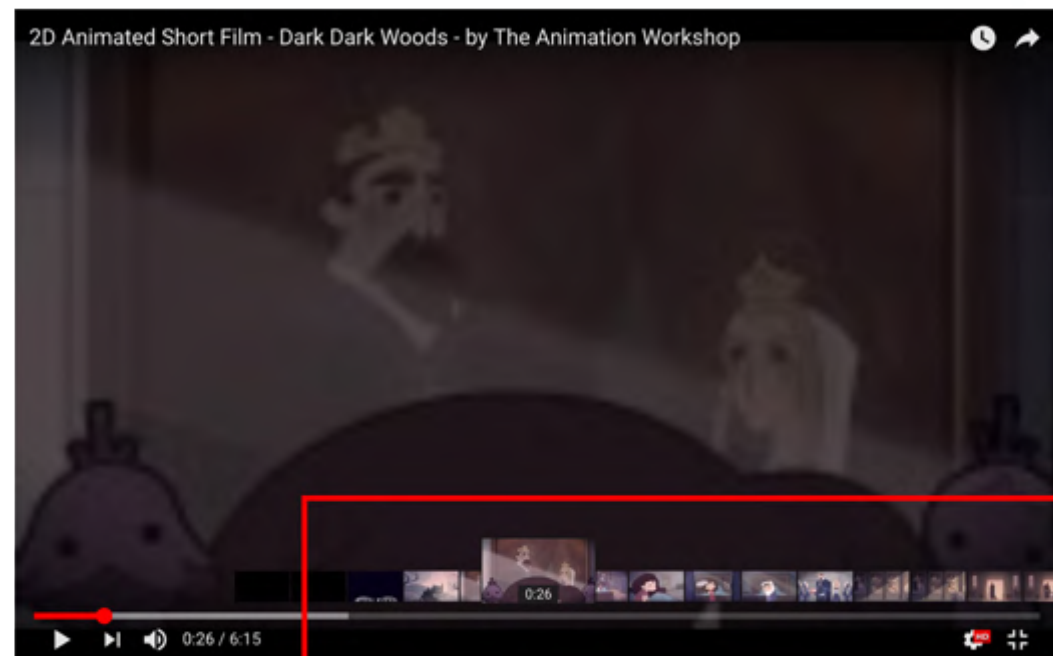




Activity 1

Spot and circle the differences





Have you seen the boxes that appear when you forward a video on YouTube?

These are frames.

Demonstrate to students how to make the frames show up. (Click and hold the red circle on the timeline.)

Using picture gallery to make a video

To do a video, you will need:



laptop

camera

Toy

For this video, you will need an object that you can use to make a video from. For example, a doll, a teddy or other object or toy. We will be using a toy car as an example below.

Step 1:

Attach your camera to your laptop. Put your camera on a table and leave it in that position. Do not move the camera again!

Step 2:

Place the car in the far back right of the camera view. Take a photograph.



Step 3:

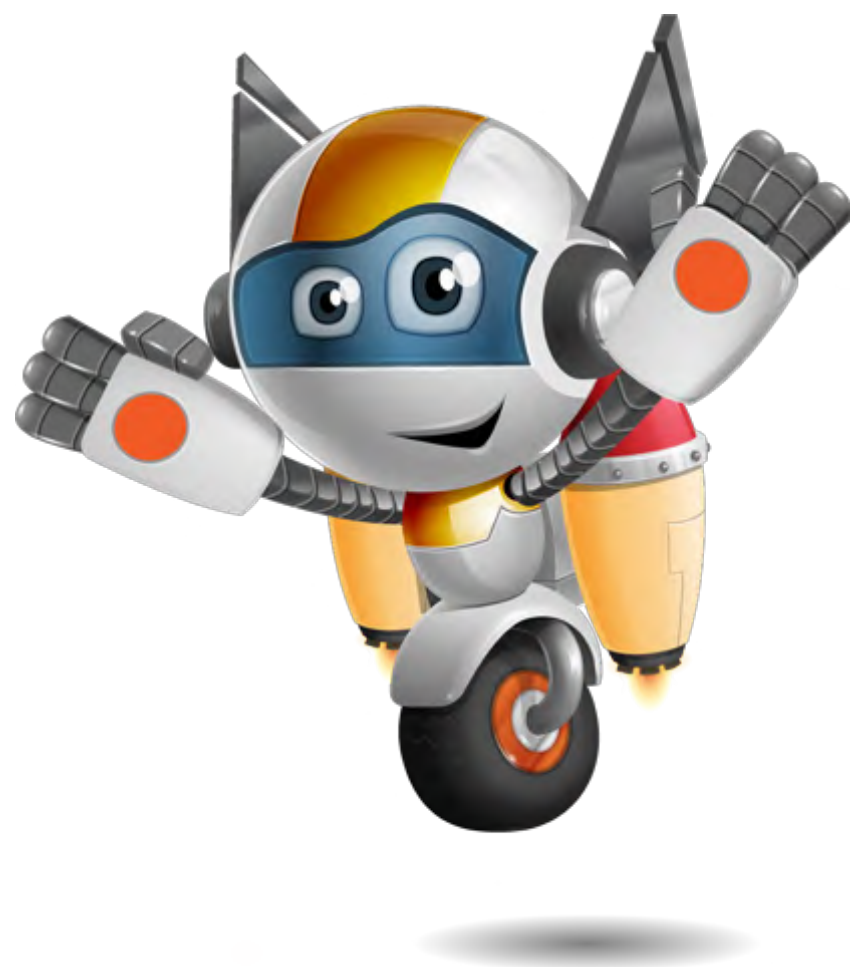
Move the car forward a little bit. Take another photo. Continue repeating this.



Each picture is now a frame. Each frame can be used to make a video using picture gallery. Show each picture in the slideshow for 0 seconds. You will see your car drive towards you.



Remind students that when they move the object, only perform tiny movements as the final video will look unrealistic if there are big jumps during the video.

**Activity 2**

Make your own video using picture gallery. Use the example above for help.





Student reflection

What did you learn during this unit?

1.

2.

3.

What did you find challenging?

1.

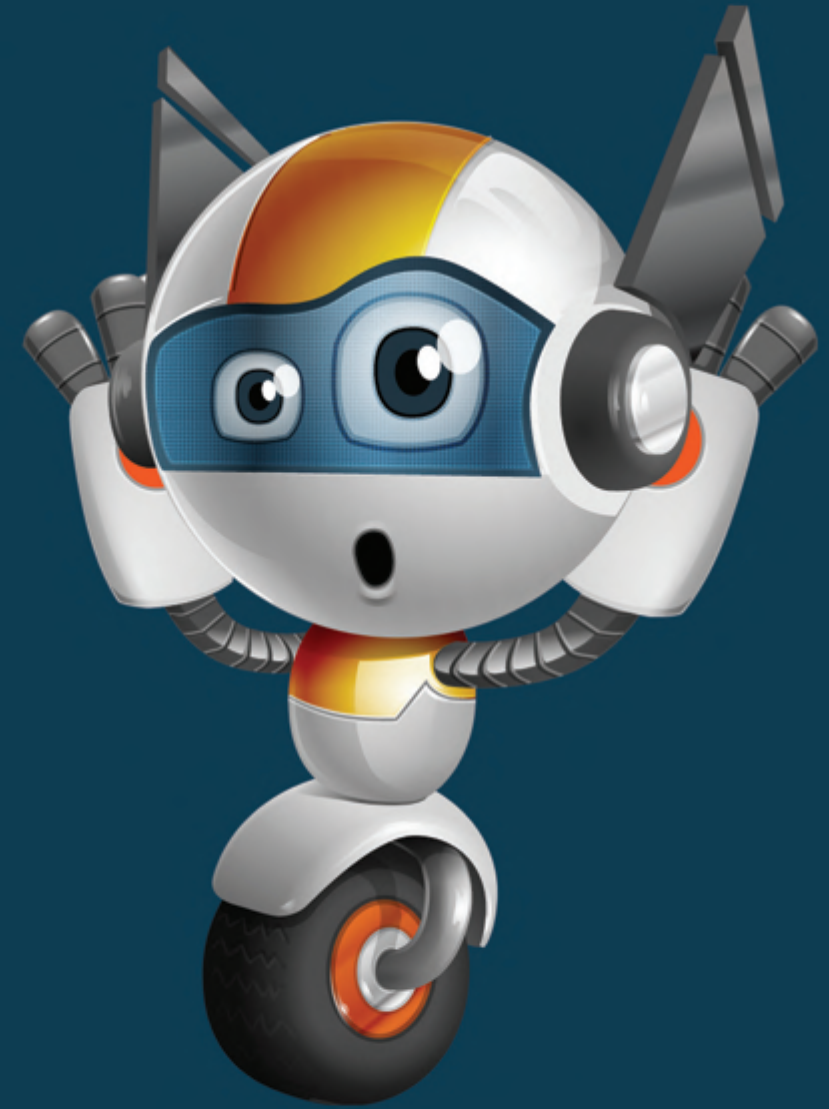
2.

3.



Unit 4


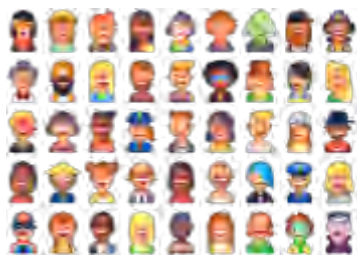
| More of frames






Overview

Students will look at working with frames in more detail. Student will be able to create an animation using their own images. This unit will encourage students to draw their own images and possibly use some images from the web. Students will also add text to their animations making it look professional.

Keywords

Term	Definition	Image
Animation	The process of making the illusion of motion and the illusion of change by means of the rapid succession of sequential images that minimally differ from each other	
Characters	A person in an animation, book or film.	

Learning Outcomes

-  Demonstrate the skills learnt and apply them
-  Draw images to be animated
-  Create an animation using more images and adding text on frames

Making our own animations

Now that we have learnt all about frames, we can write our own stories and begin our own animations.

Watch the short video below to get an idea of what you will be making.



Video of a duck and dog

Making characters

Every animation we watch is made up of characters.

Let's take a look at some well-known characters.



Can you name some characters? Who is your favourite character?

Drawing

It is important to know how to draw and colour when making an animation.

Drawing is a skill and with practice, it gets easier.

Let's start animating!

You will need:



Paper



Pencils



Scissors



A laptop



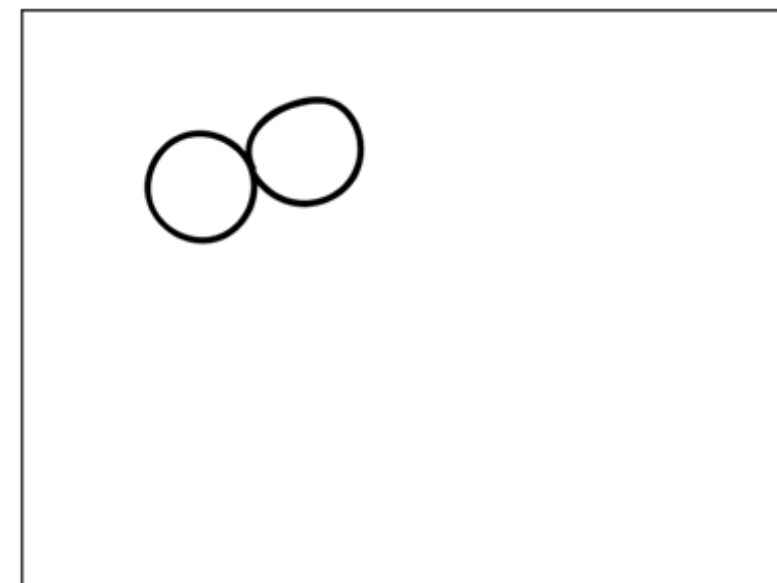
Laptop camera

Animation 1 – A fish

Easy – We will make an animation with one drawing of a fish.

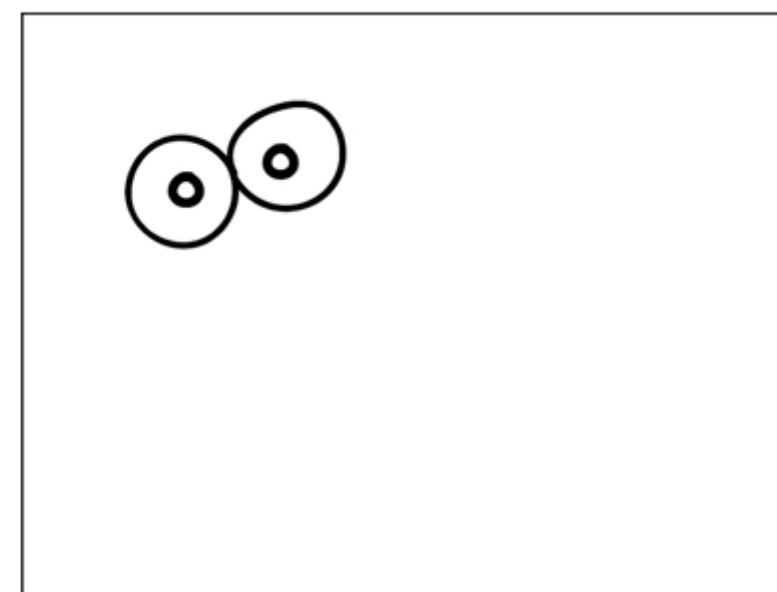
Step 1:

On a piece of paper, draw the outline of the eyes.



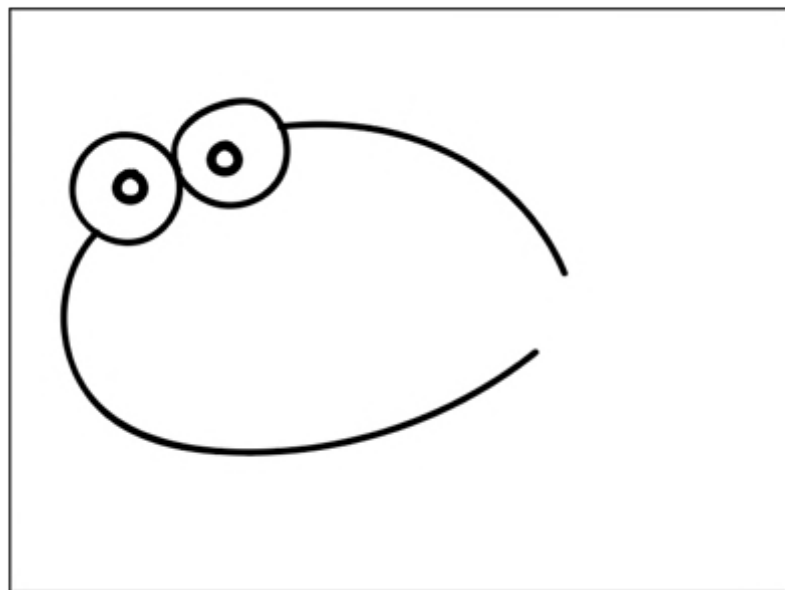
Step 2:

Now draw the pupils inside the eyes.

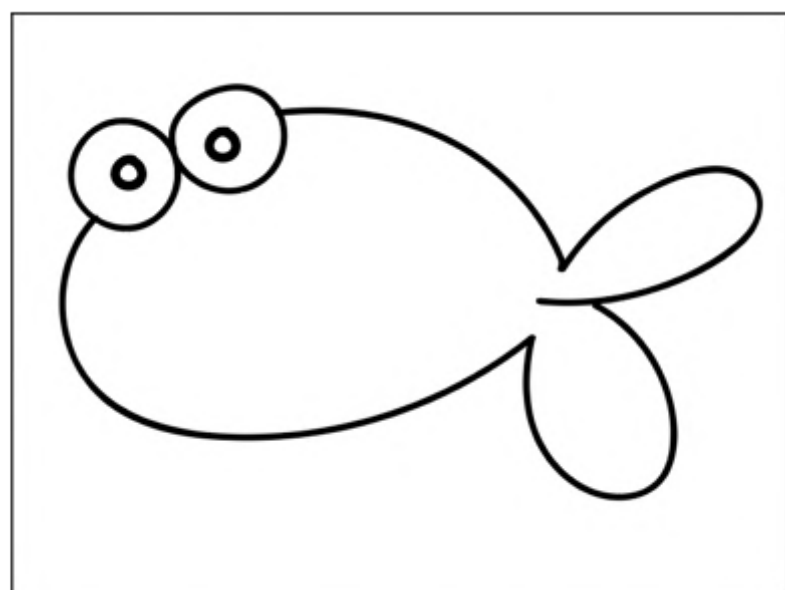


Step 3:

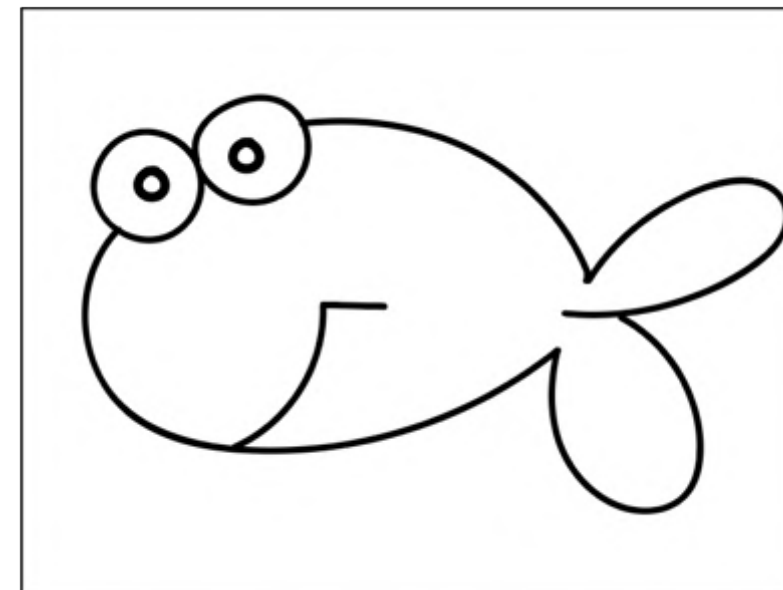
Draw the body of of the fish.

**Step 4:**

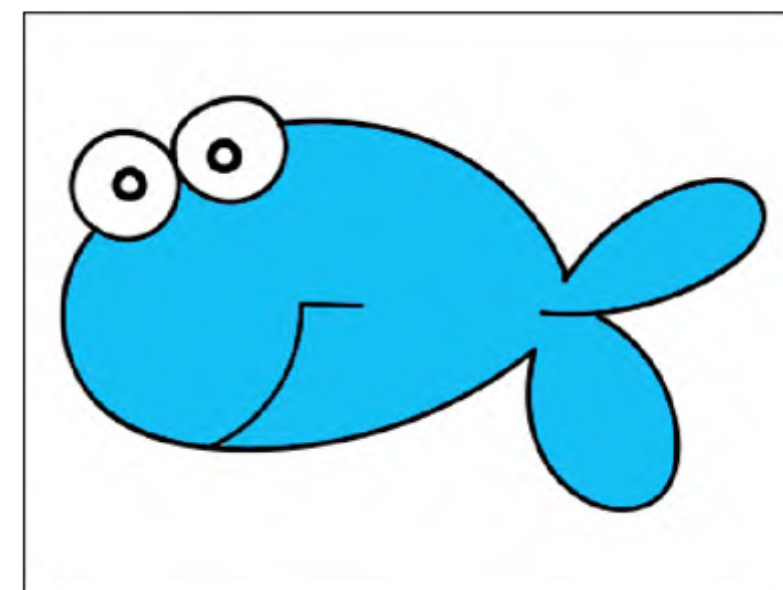
Now draw the tail.

**Step 5:**

Now add a smile.

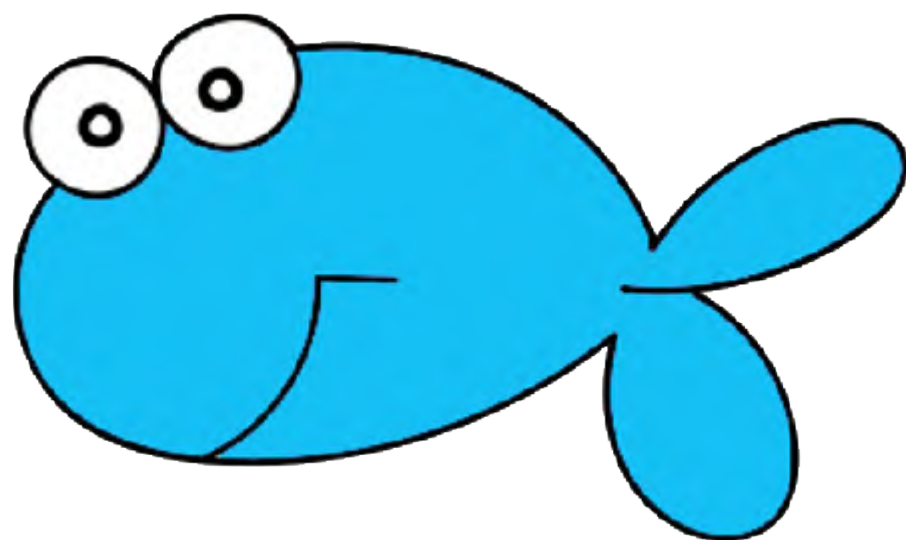
**Step 6:**

Now add some color to your fish. Be creative!



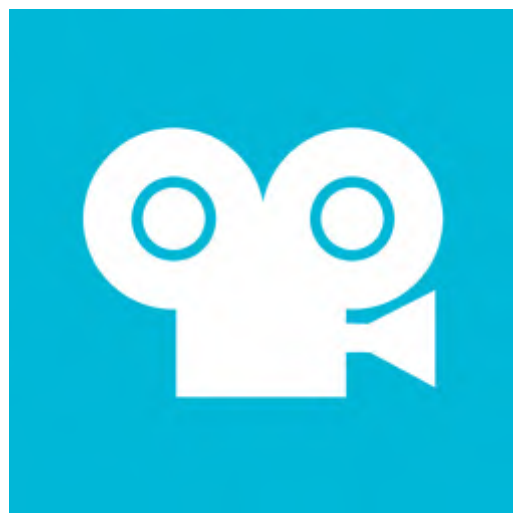
Step 7:

Take your scissors and cut around the fish ready to use for your animation.



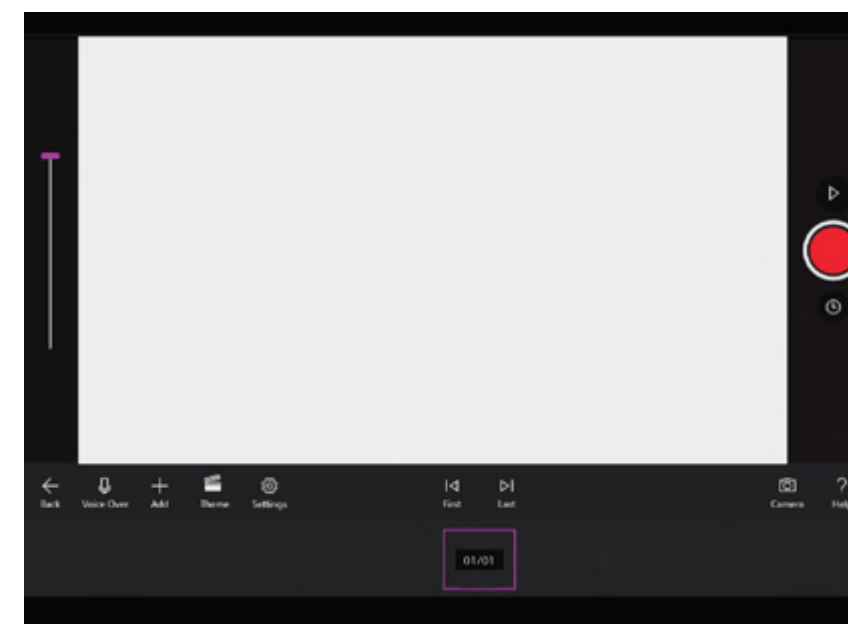
Stop motion studio

Let's bring the fish to life in stop motion studio.



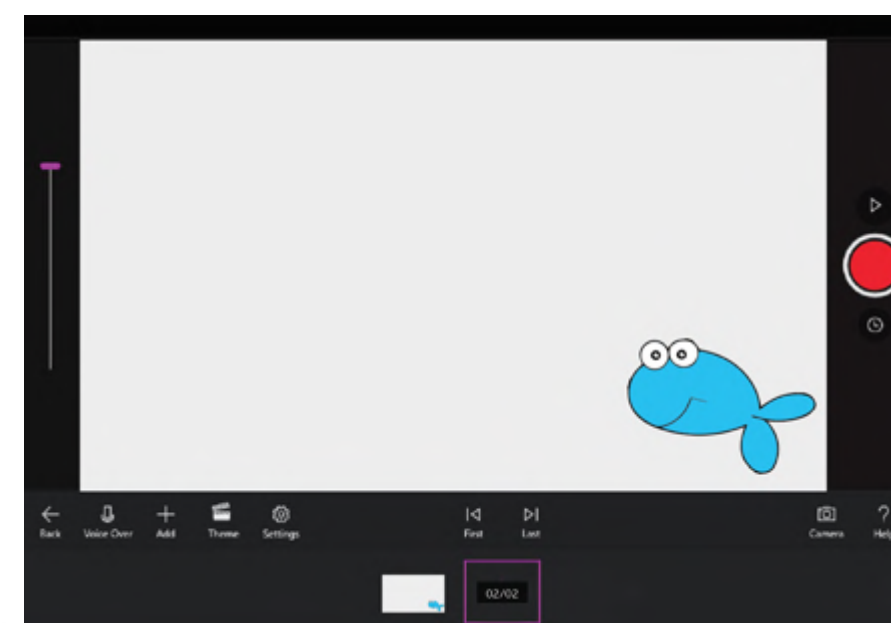
Step 1:

Open stop motion studio and check if the camera is connected and ready and the button is red.



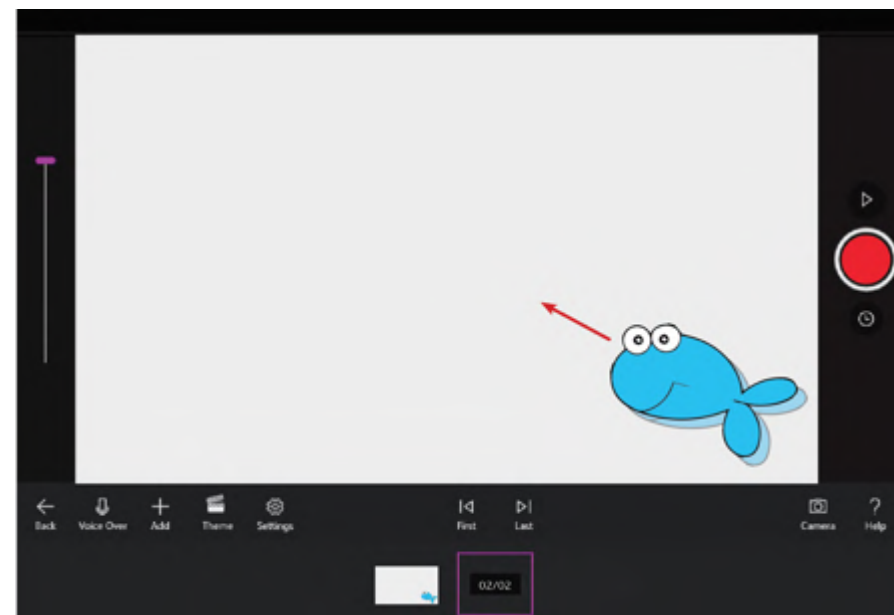
Step 2:

Place the fish in front of the camera so that it is in the corner of the screen. Take a picture.

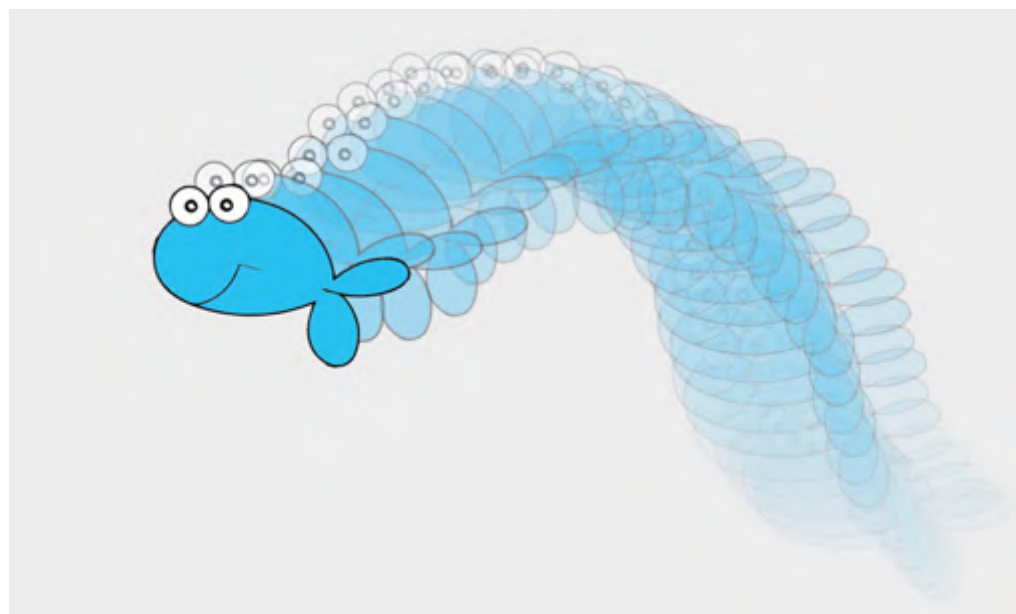


Step 3:

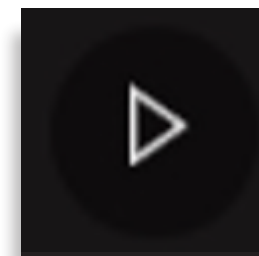
Move the fish forward and up to make it swim.

**Step 4:**

Continue repeating this process, moving the fish across the screen.



Remember to take a picture for each movement of the fish.

Step 6:

Play back your animation to see your fish swim across the screen.



Remember to save your work!

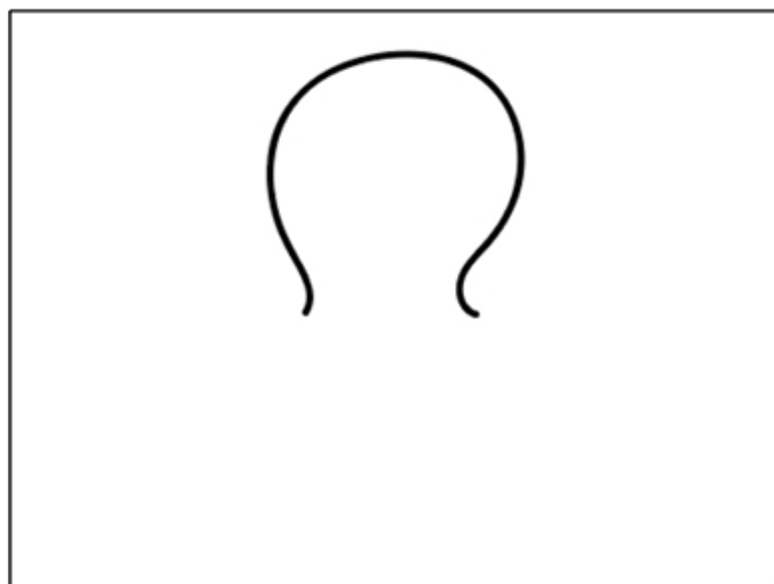


Animation 2 – Octopus

Medium – We will make an animation with two drawing of an octopus.

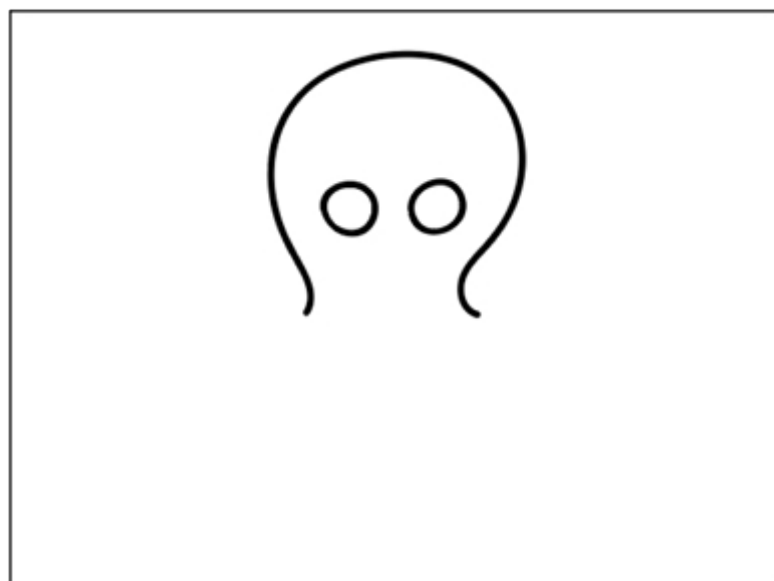
Step 1:

Draw the head of the octopus.



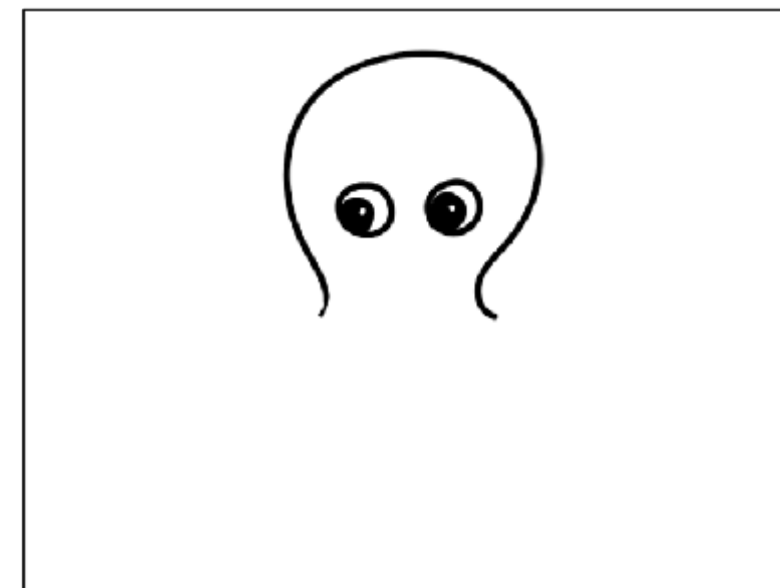
Step 2:

Draw the eyes.



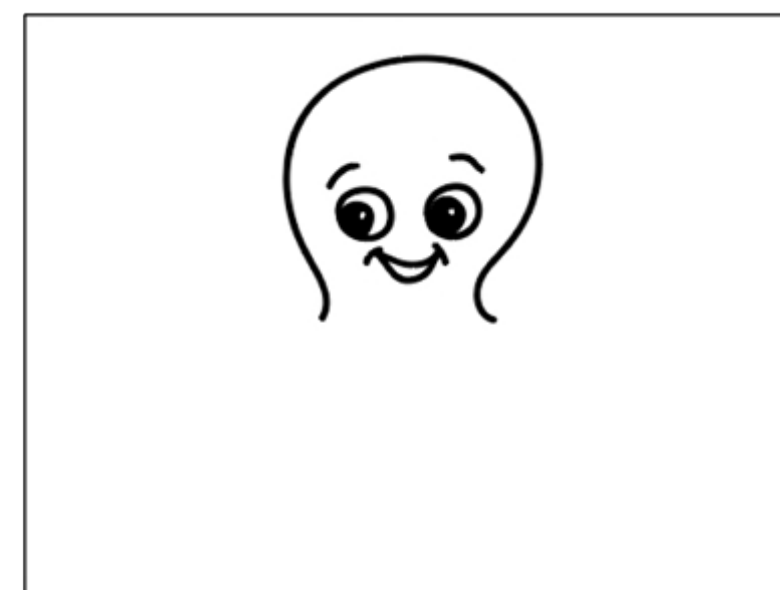
Step 3:

Add the pupils to the eyes.



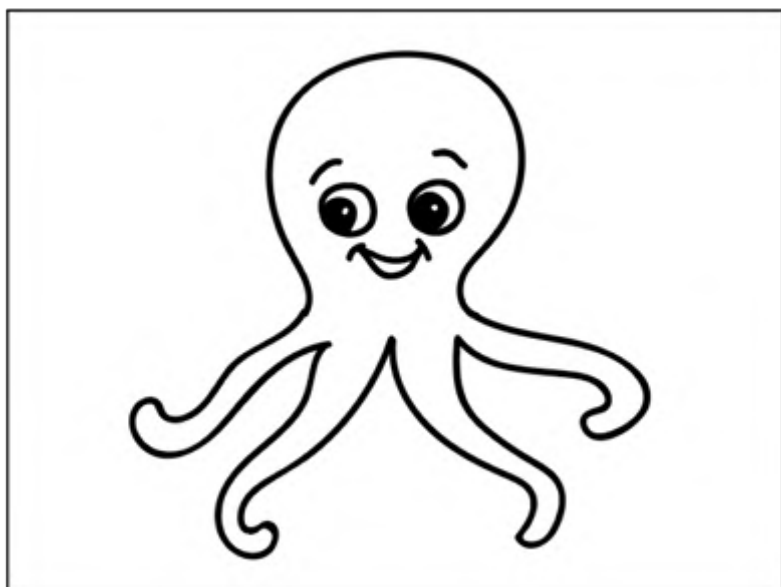
Step 4:

Now add eye brows and a mouth.



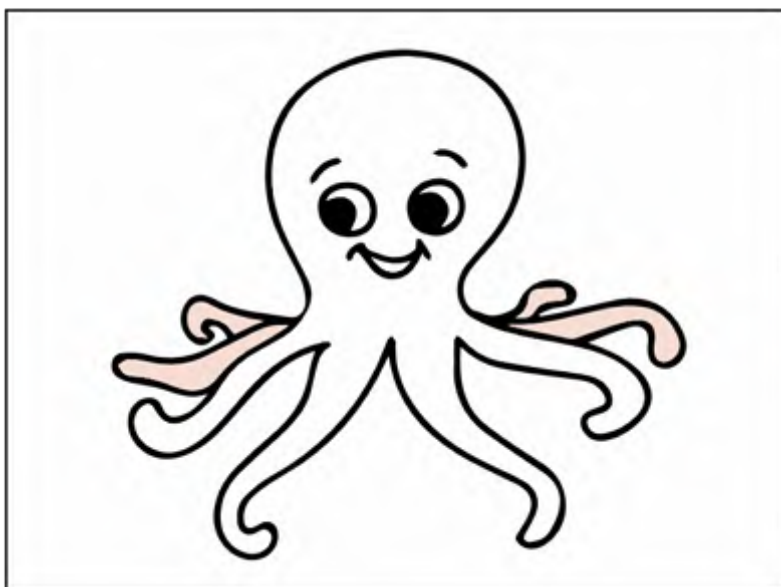
Step 5:

Give the octopus 4 legs. Make sure to **spread the legs out**.

**Step 6:**

Give the octopus another 4 legs – 2 on each side.

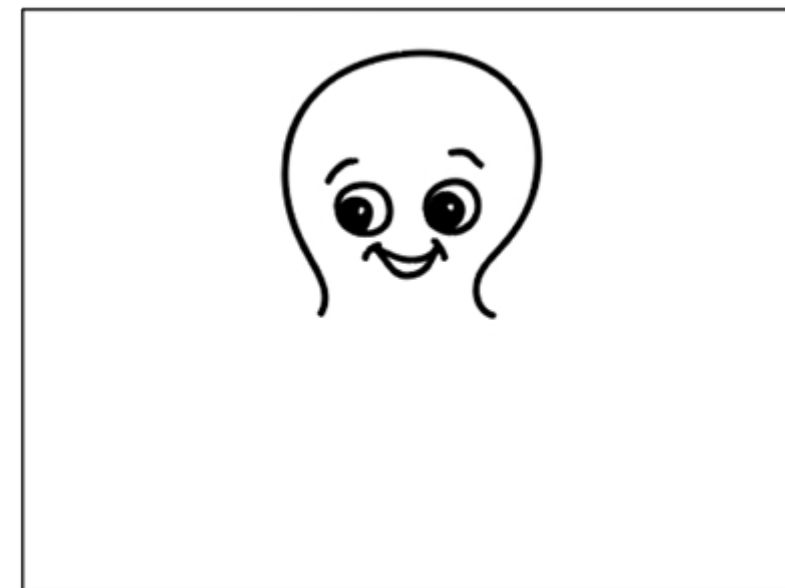
This will be octopus 1.



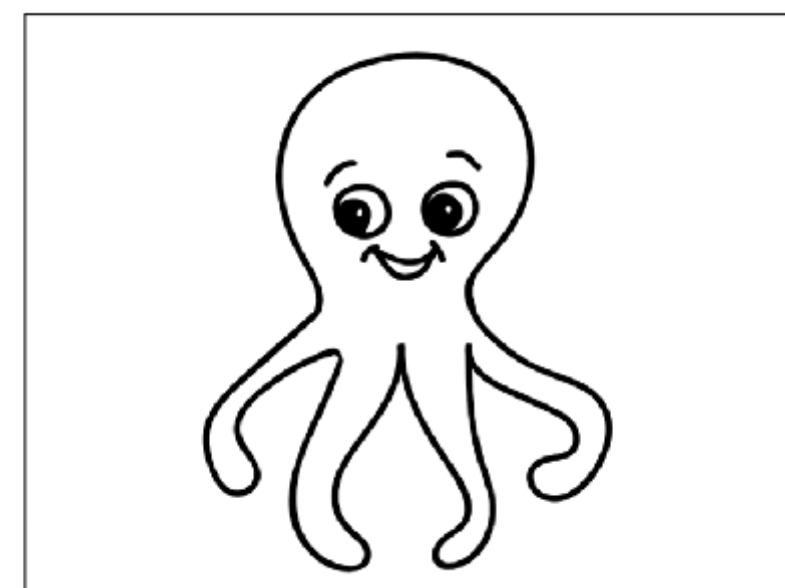
We need to change the octopus's legs to show movement, so we will now make octopus 2.

Step 7:

Redraw the face of the octopus. Use octopus 1 to trace over.

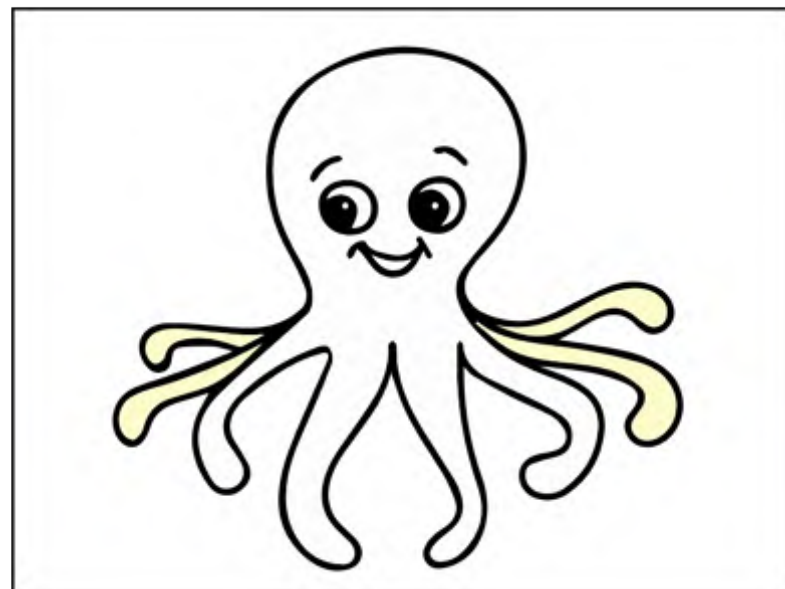
**Step 8:**

Redraw the legs but bring them closer together. Use octopus 1 as a guide.

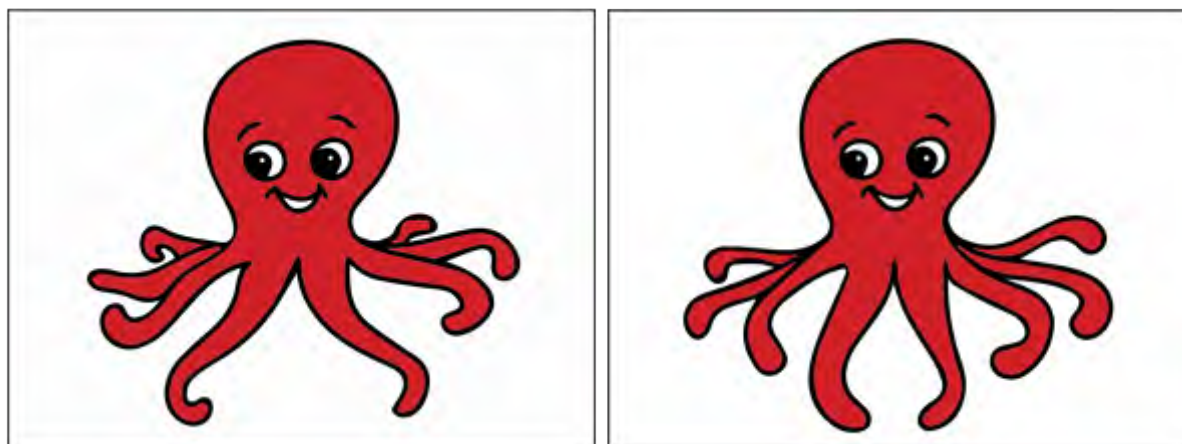


Step 9:

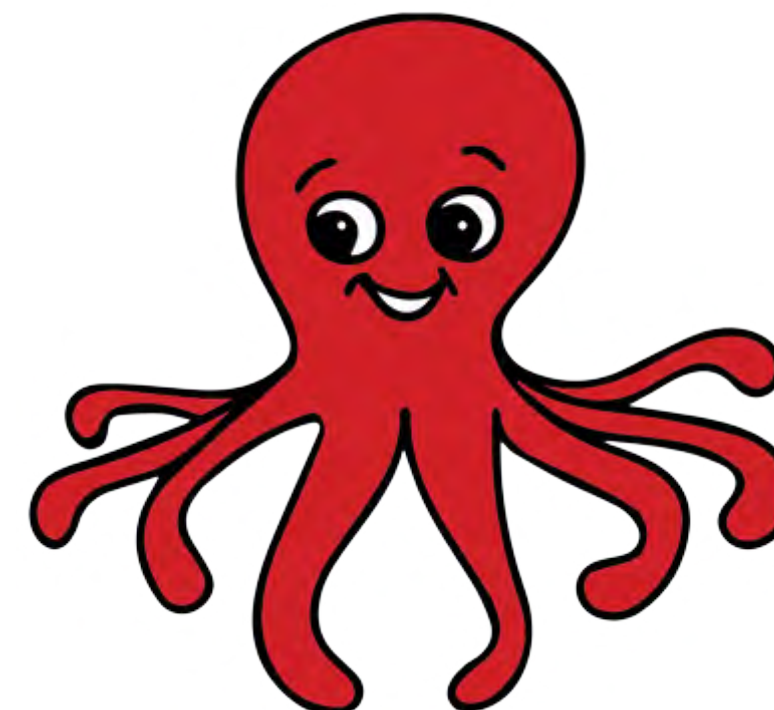
Draw the other 4 legs – 2 on each side.

**Step 10:**

Add color to both octopus 1 and octopus 2.

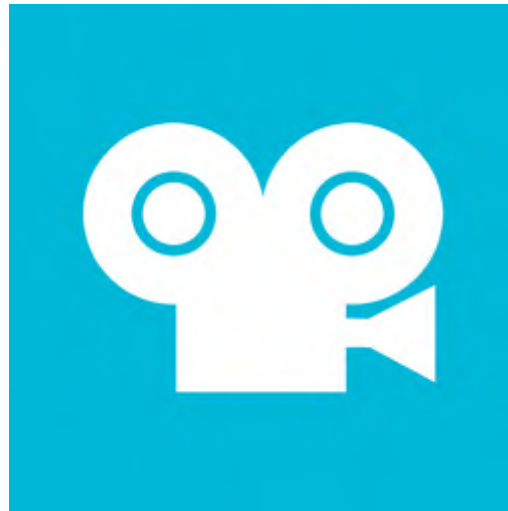
**Step 11:**

Cut around both octopus's ready for to animate them in stop motion studio



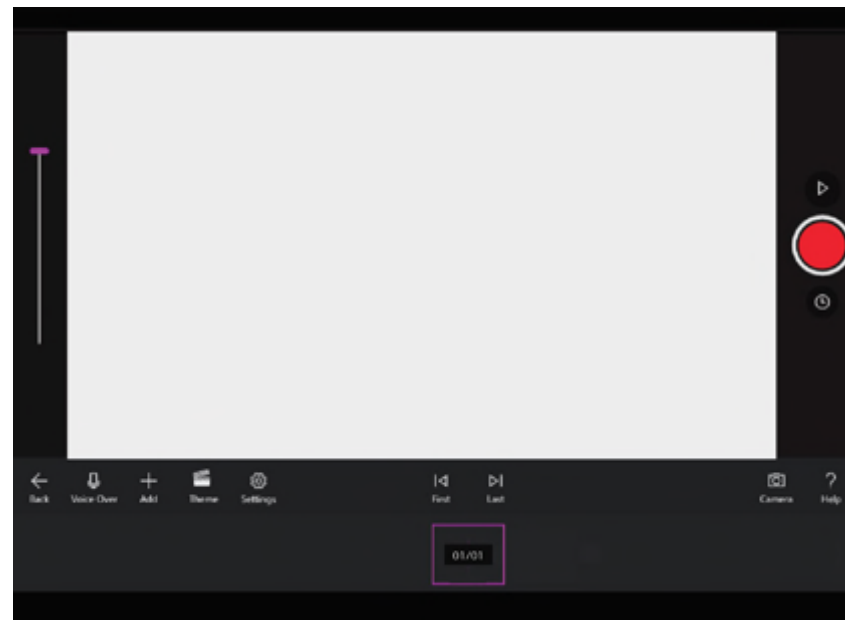
Stop motion studio

Let's bring the octopus to life in stop motion studio.



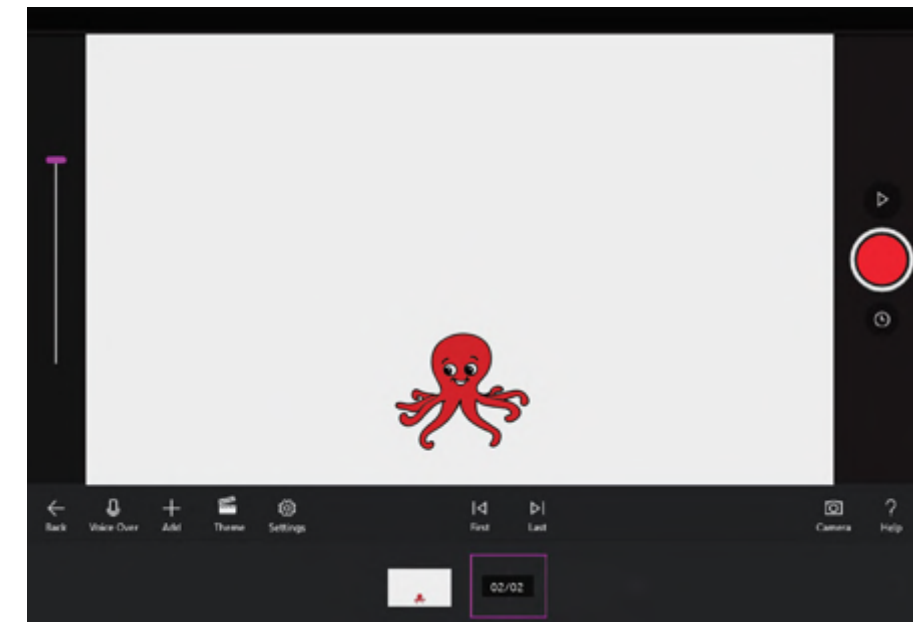
Step 1:

Open stop motion studio and check if the camera is connected and ready and the button is red.



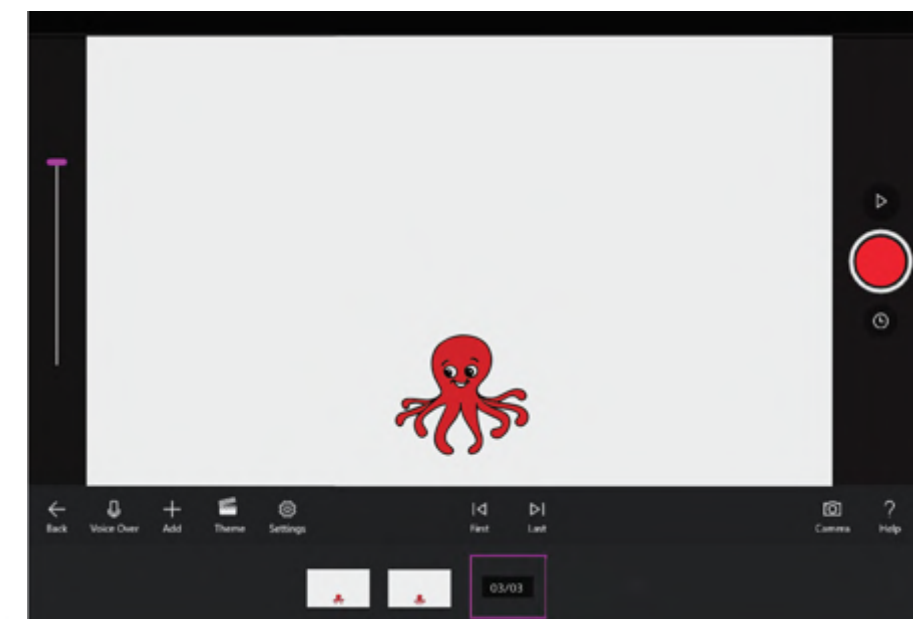
Step 2:

Place octopus 1 in middle of the camera screen. Take a picture.



Step 3:

Place octopus 2 on top of octopus 1, remove octopus 1 and take another picture.

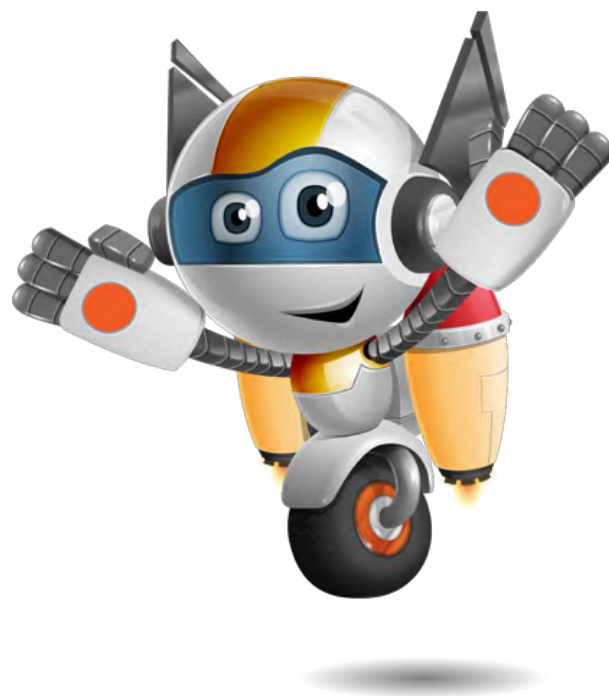


Step 4:

Continue repeating this process to make your octopus swim up the screen.



Remember to save your work!

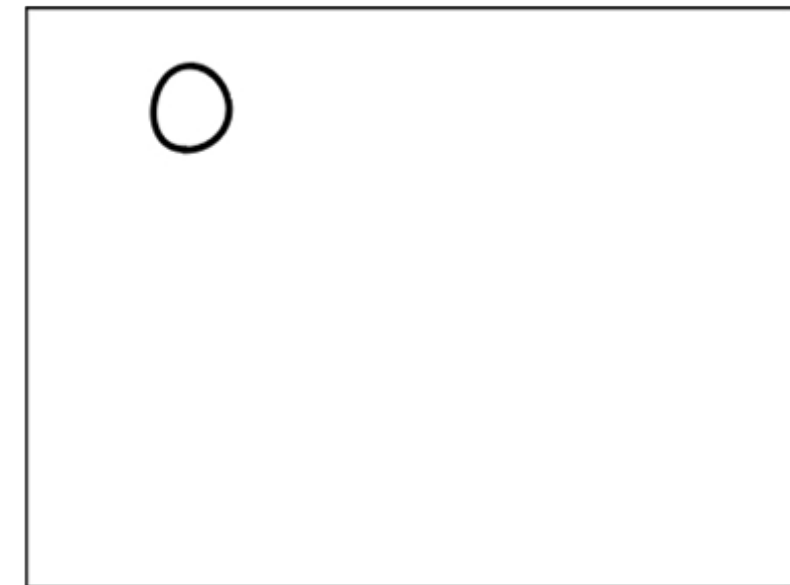
**Animation 3 – Turtle**

A turtle is a little bit more difficult than an octopus.

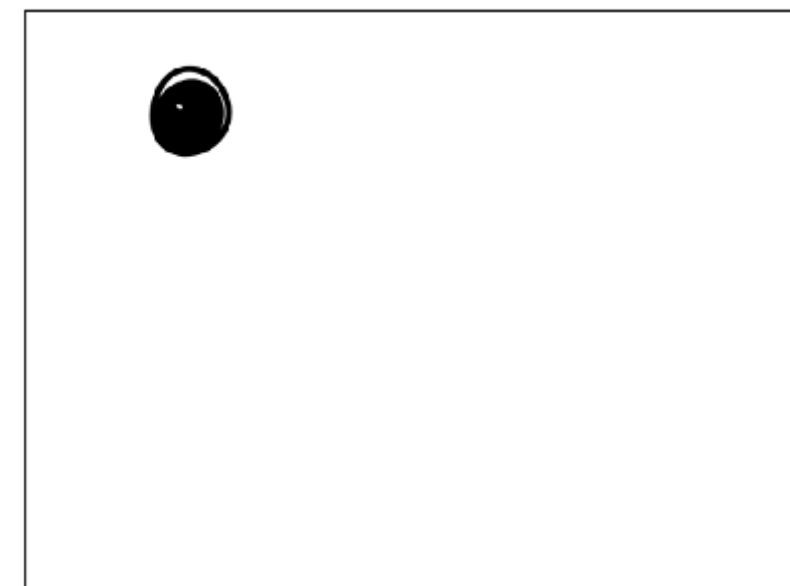
We will make 3 different turtles to show movement.

Step 1:

Draw the eye of the turtle

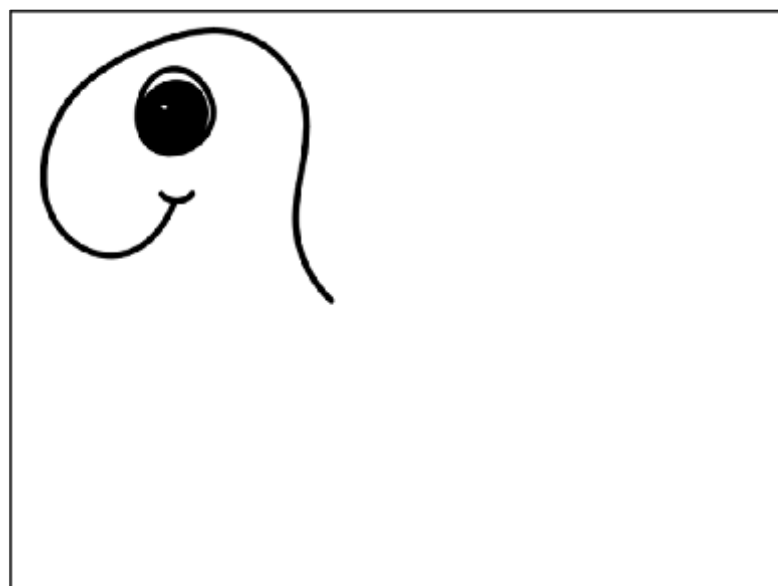
**Step 2:**

Now add the pupil.

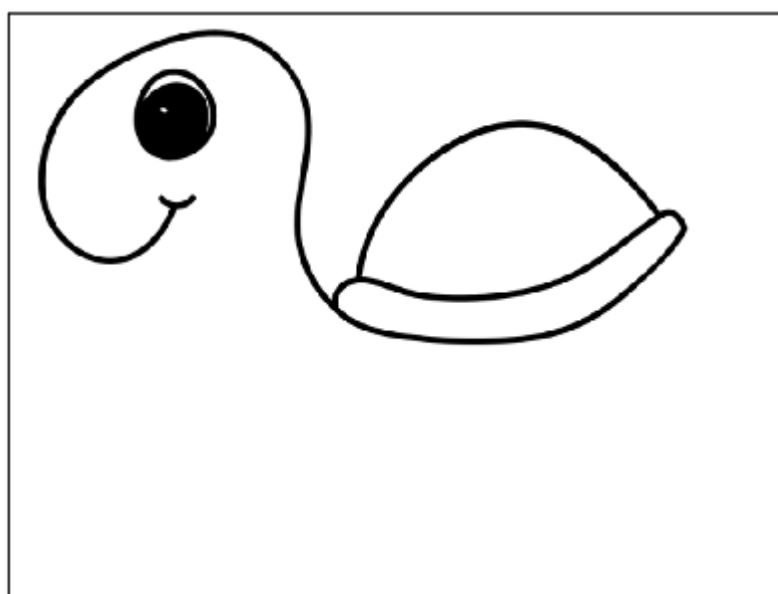


Step 3:

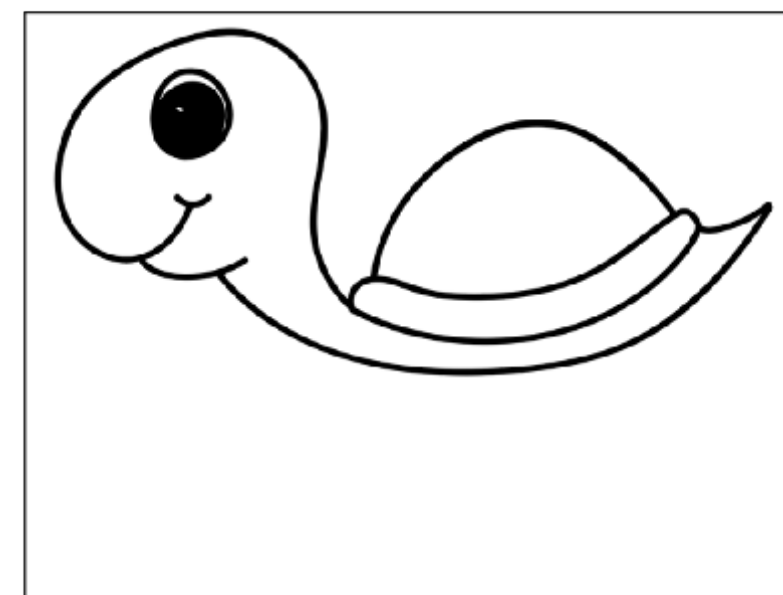
Draw the head.

**Step 4:**

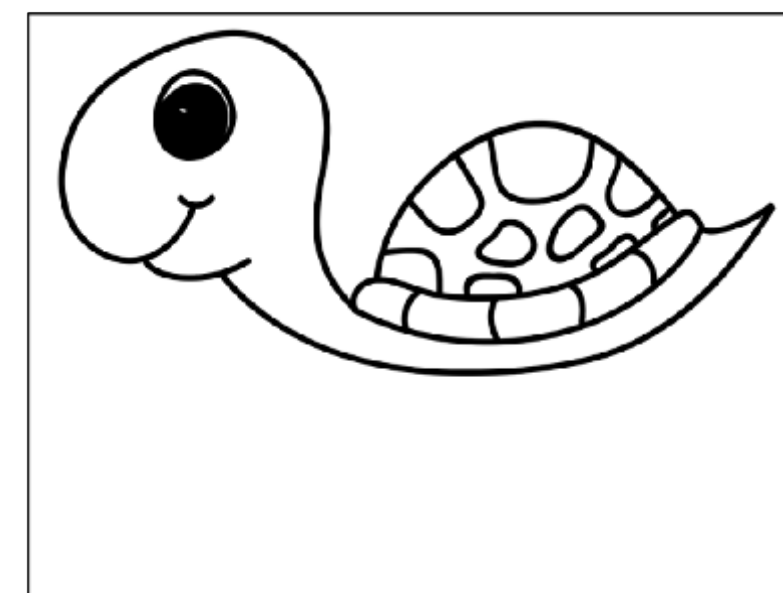
Now draw the shell.

**Step 5:**

Draw the mouth and body.

**Step 6:**

Add details to the shell:

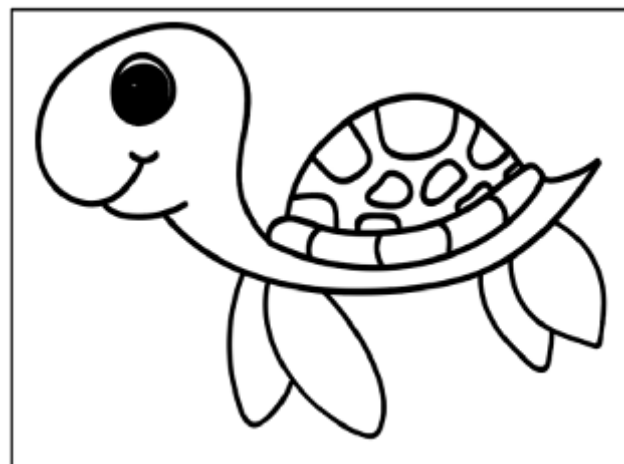
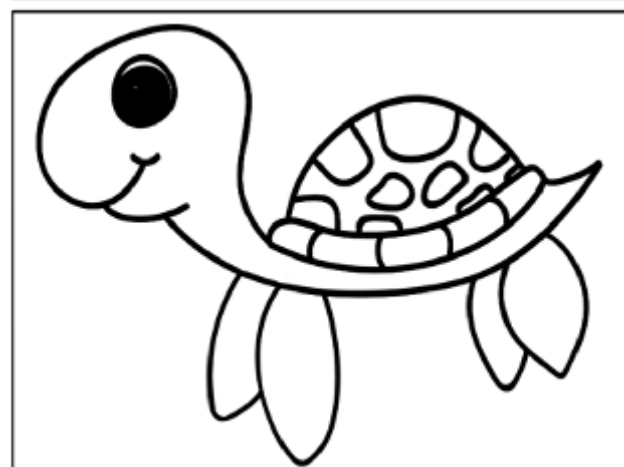
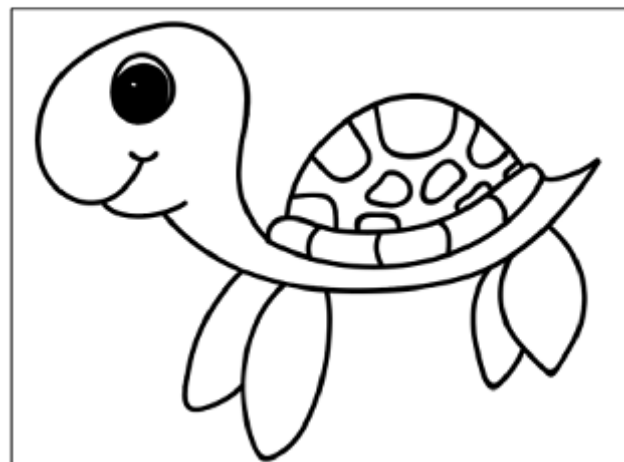


Step 7:

The body and head of the turtle will stay the same for the animation.

The only things that will change are the legs.

To show movement, we need to draw the legs in 3 different positions.

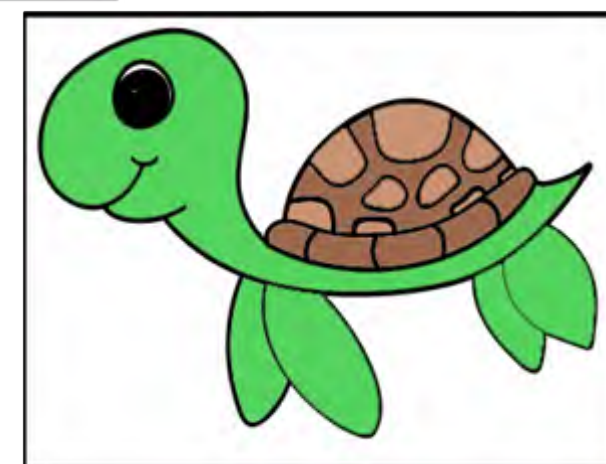
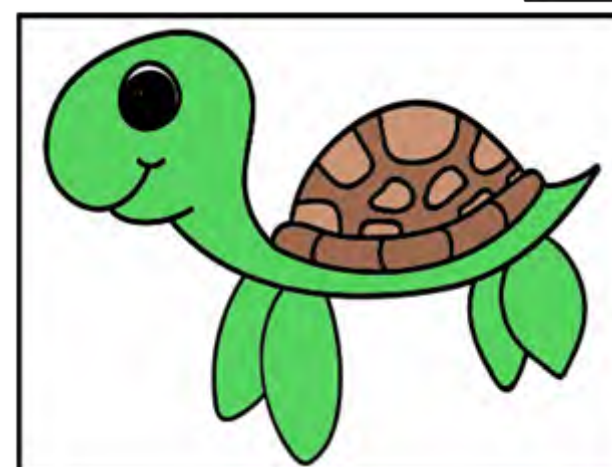
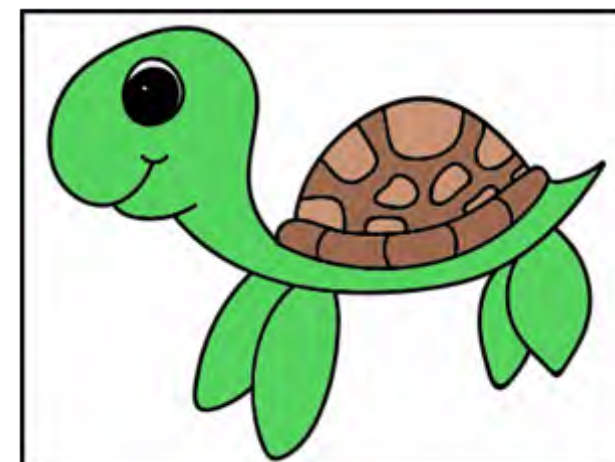


Notice how the legs are changing in each image.

You should now have 3 turtles.

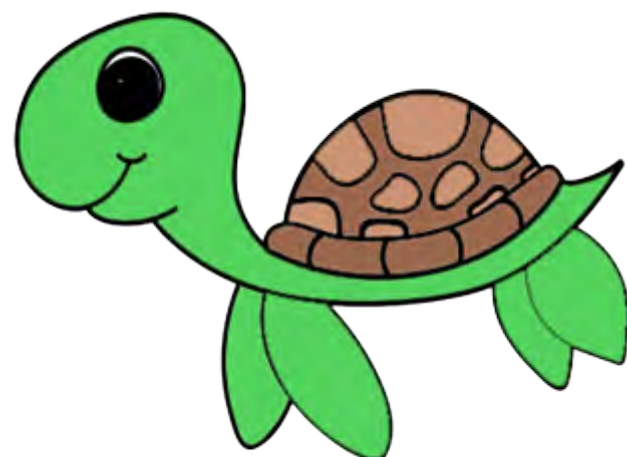
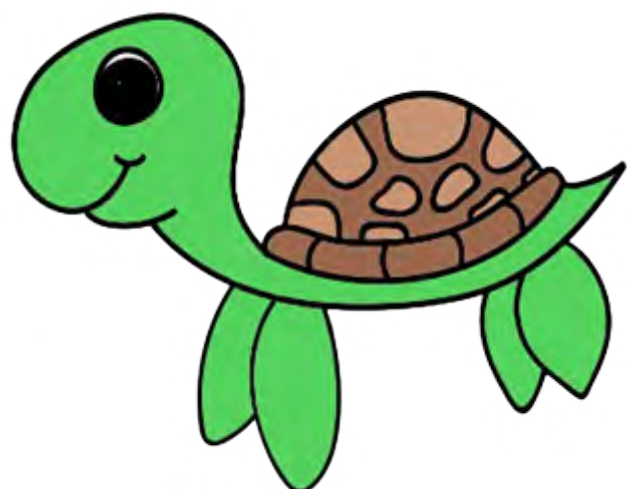
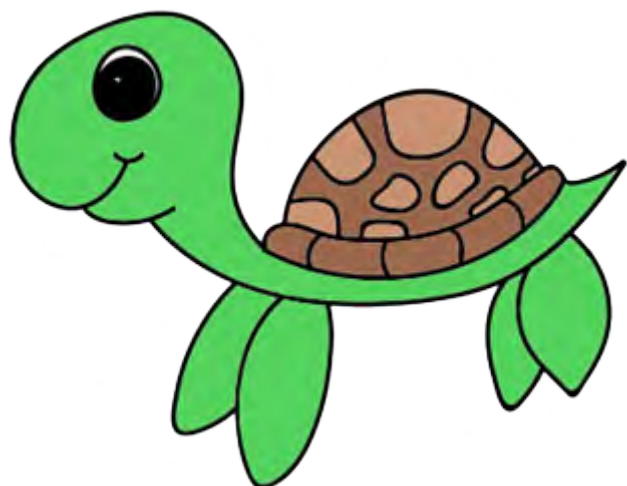
Step 8:

Add color to the turtle.



Step 9:

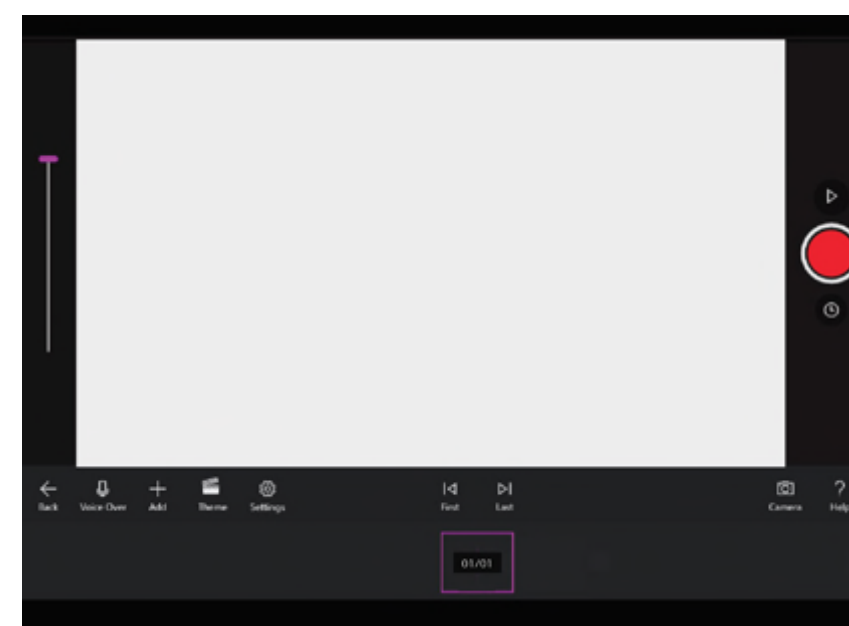
Take your scissors and cut around each turtle ready to use for your animation.

**Stop motion studio**

Let's bring the turtle to life in stop motion studio.

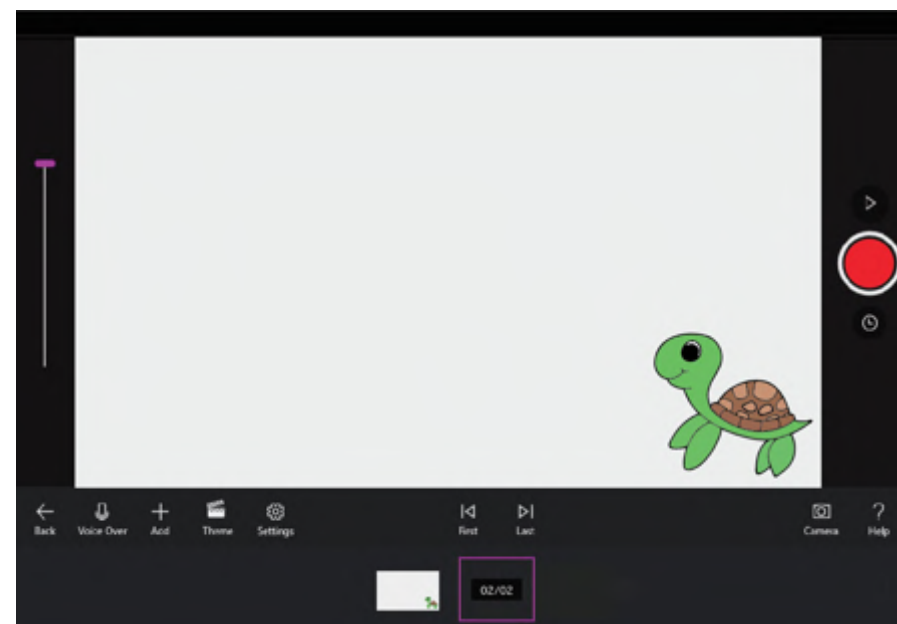
**Step 1:**

Open stop motion studio and check if the camera is connected and ready and the button is red.

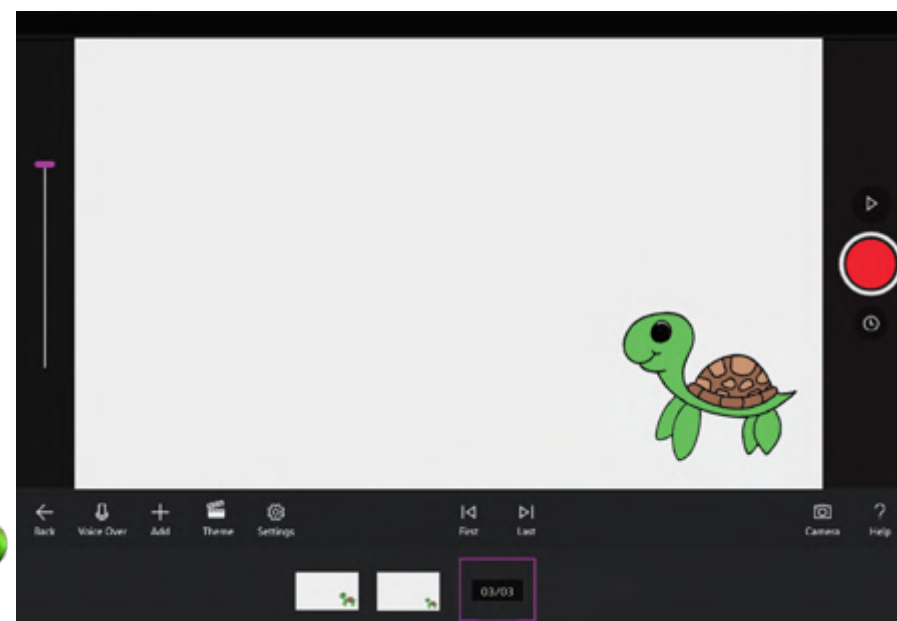


Step 2:

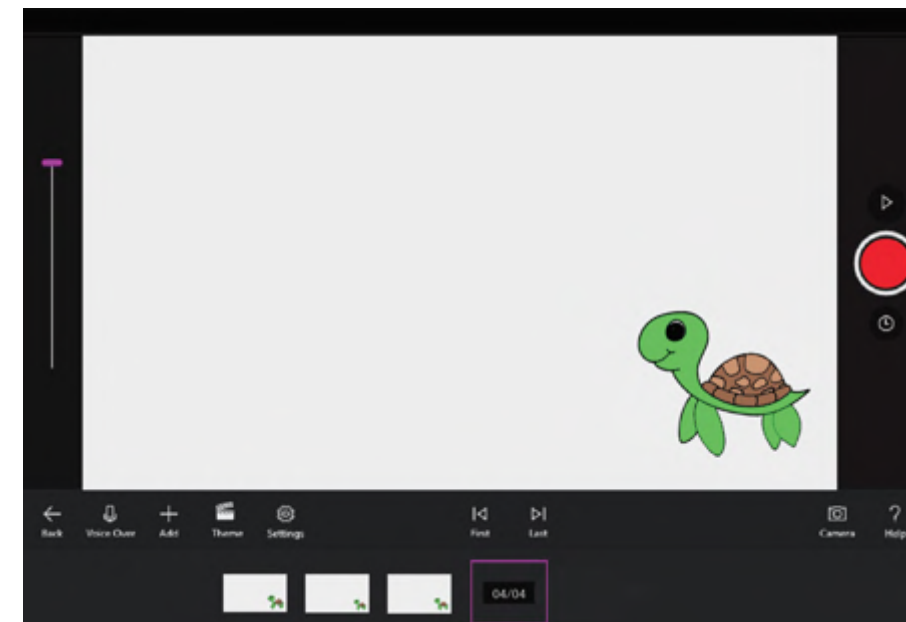
Place the turtle 1 in front of the camera and take a picture.

**Step 3:**

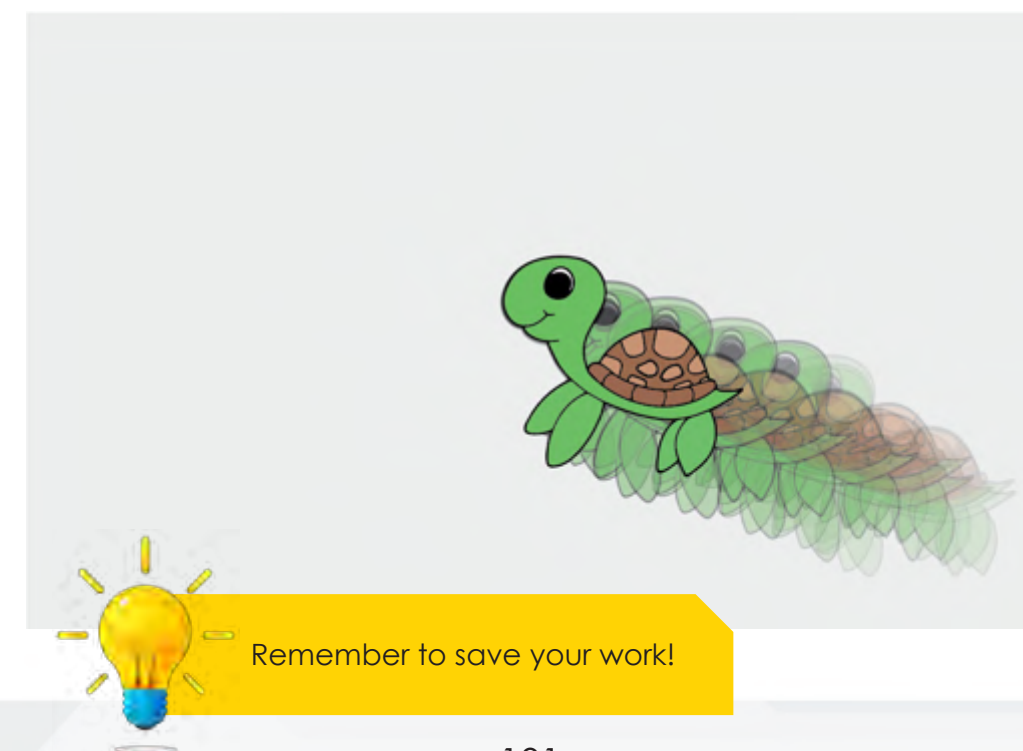
Place turtle 2 slightly to the left of turtle 1 and take a picture.

**Step 4:**

Place turtle 3 slightly to the left of turtle 2 and take a picture.

**Step 5:**

Continue repeating the process and make your turtle swim up the screen.



Adding text

Now that we know how to draw our animations and make them move, we can now add.



Remember the name animations we made in unit 2?

D
U
B
A
I

Step 1:

Let's draw a speech bubble to put our text inside of.



Step 2:

Write something you want your animation to say.

Hello! My name is Mr Turtle
↓

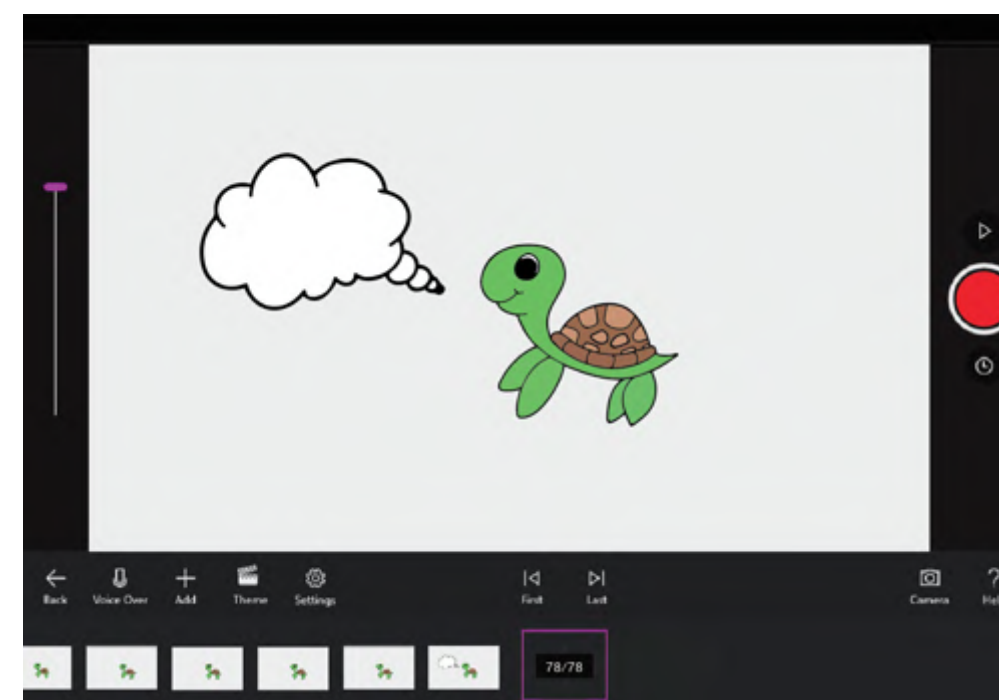
Step 3:

Use your scissors to cut the sentence to separate each word.

Hello! My name is Mr Turtle ↓

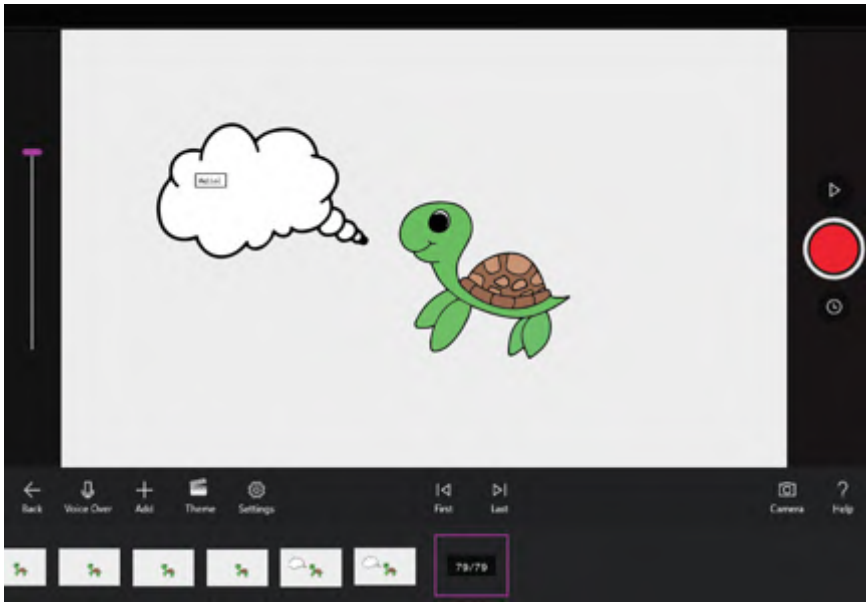
Step 4:

Add the speech bubble to your animation



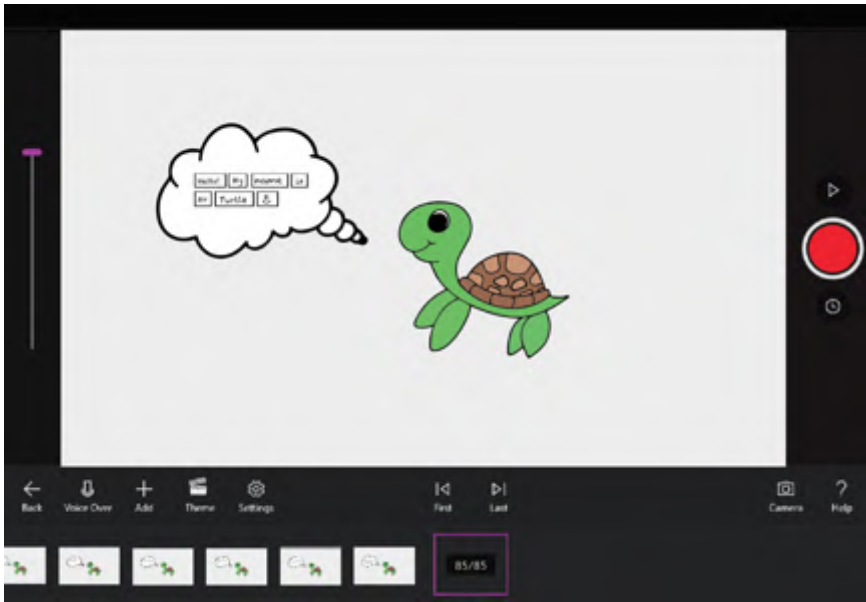
Step 4:

Add the first word.



Step 5:

Continue the process, taking a picture as you add a word.



Adding voice

Use your voice recorder to narrate as you go along

The last thing we need to add is our voice.

End of unit evaluation

After completing unit 4, you should have a better understanding of what animation is.

Write in your own words the meaning of animation.

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From the charters above, which one is your favourite and why?

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Unit 5


| Creating a movie



Overview

Students will focus on creating a short movie using stop frame animation. They will use all the skills they have learned and apply them in their movie. Students will also practise their planning on paper before creating a video. They will draw key frames and add notes on each frame to show what each frame will be about. Students will also add a music and voice-over.

Keywords

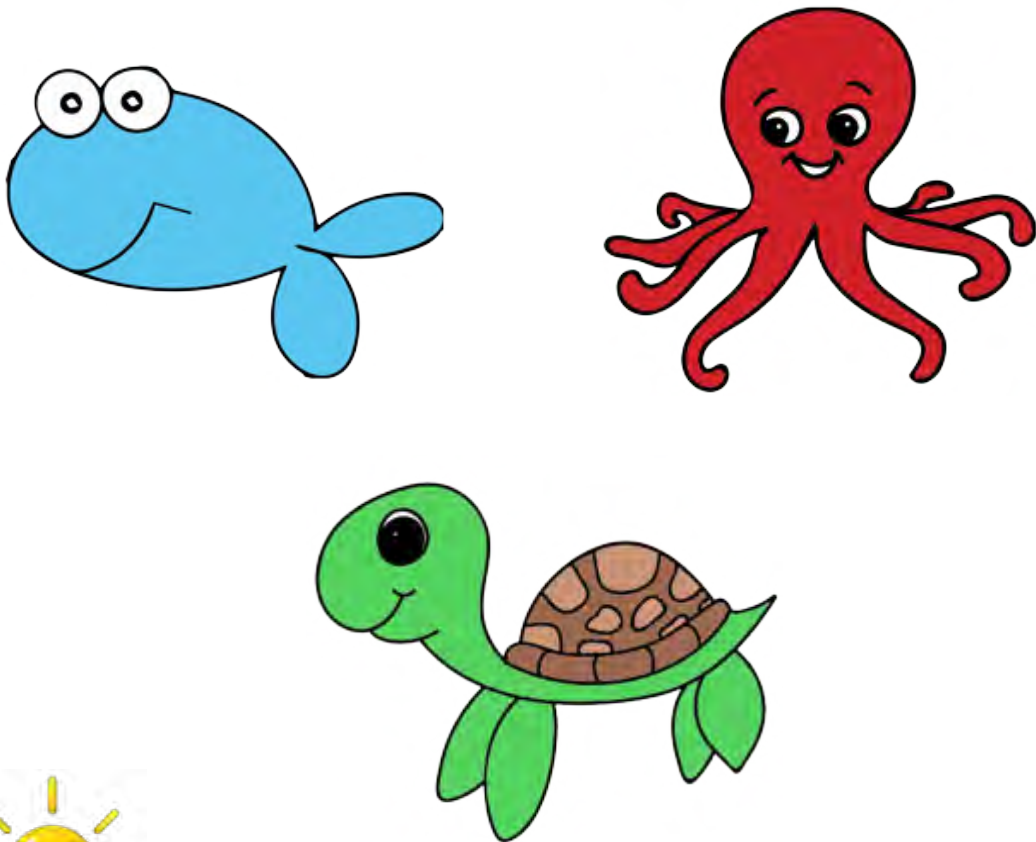
Term	Definition	Image
Voice-over	voice recording to be placed on image	

Learning Outcomes

- DT Plan a movie and sketch it on paper.
- DT Demonstrate the skills learned in previous units and apply them to create a movie.
- DT Use music and add a voice-over to the movie.

Characters

From the characters introduced in Unit 4, choose two characters so that you can begin writing our story.



Think about who your favourite animation characters are. What makes them special?



Activity 1

Which two characters have you chosen for your story and why?

[illegible]

The characters you have chosen will be in your story.

Every animation character should be original and should have their own personality.

Twins should look the same but should have different personalities.



Do you know any twins? They look the same, but are their personalities the same?

.....

.....

Inside out

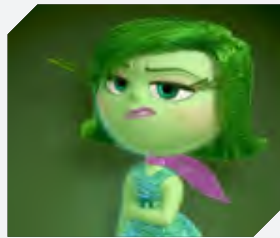
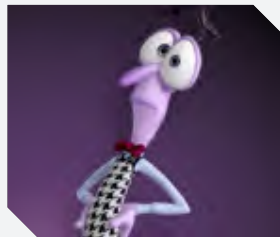
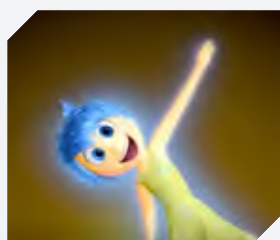
Have you watched the movie inside out?

Each character is different and original because of their emotions.



Activity 2

Link the character with their name.



Sadness

Anger

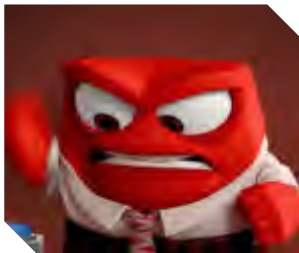
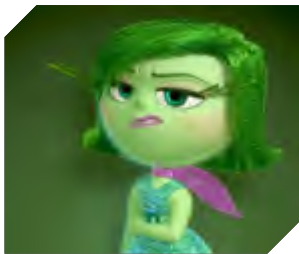
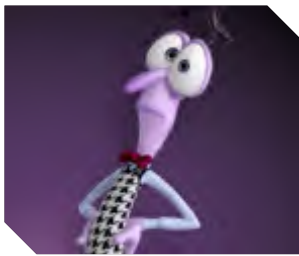
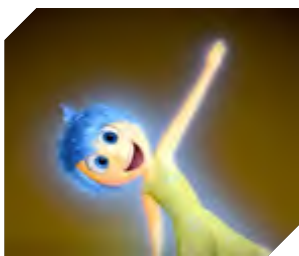
Sadness

Joy

Fear

Teacher answers

Link the character with their name.



Sadness

Anger

Sadness

Joy

Fear

Watch the video below to see if you got them right.



Inside out character video





Making a story

A good story should have the following:



-  Characters
-  Beginning
-  Middle
-  End
-  Setting

All stories use this plan.



Beginning

-  Who are the characters?
-  What is the setting?

Middle

-  What is happening to the characters?
-  What is the problem.

End

-  How did the characters solve the problem?
-  Did the characters change?

Watch the video.



How to write a story

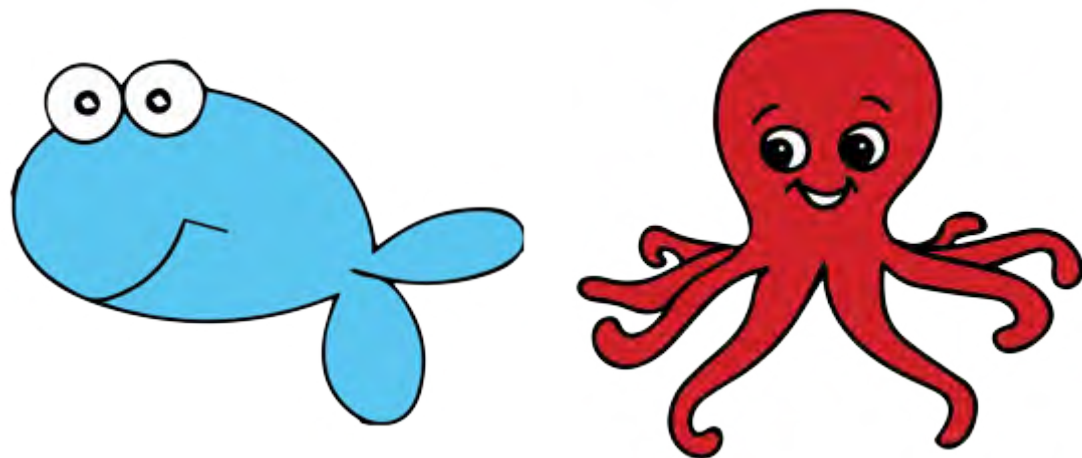


The bright light – an example animation

This story will be about a young fish and octopus **Characters**

The chosen characters for the story are the fish and the octopus.

Beginning



A fish and octopus go swimming one day, until they reach the surface of the sea.

Middle

They see a bright light and swim to the lighthouse..

End

They realise it is the moon and they laugh.



Activity 3

Characters

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Beginning

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Middle

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.....

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End

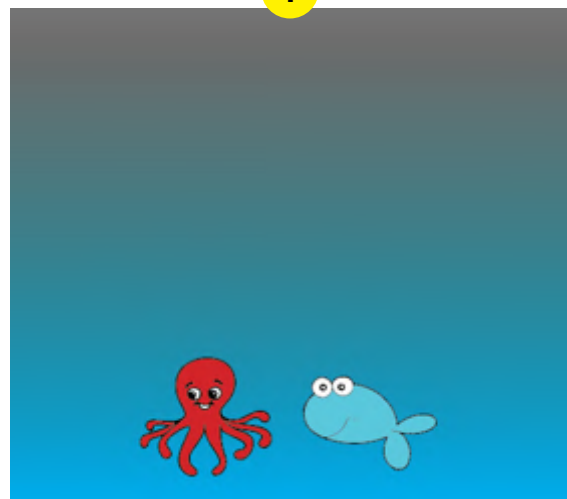
.....

.....

Example storyboard

A storyboard is a plan of what will be included in each scene of the animation. It includes drawings and writing.

1



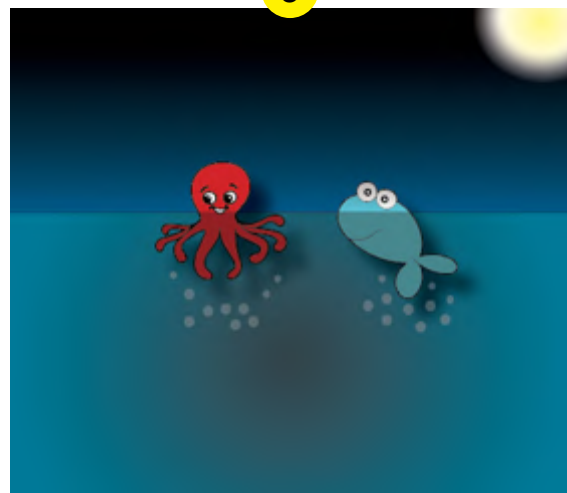
Fish and octopus are talking about swimming to the top of the sea

2



Fish and octopus have a race swimming to the top.

3



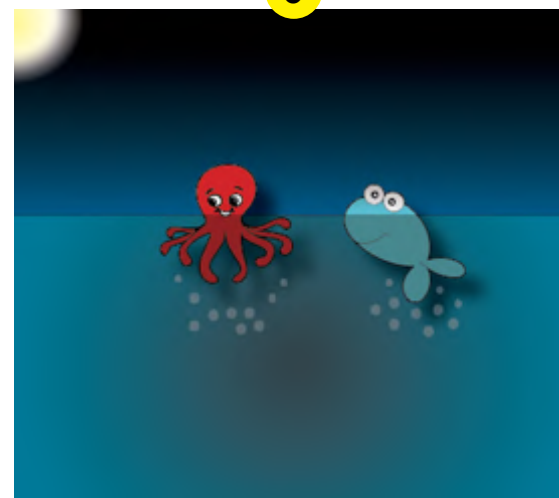
When they reach the top they see a bright light.

4



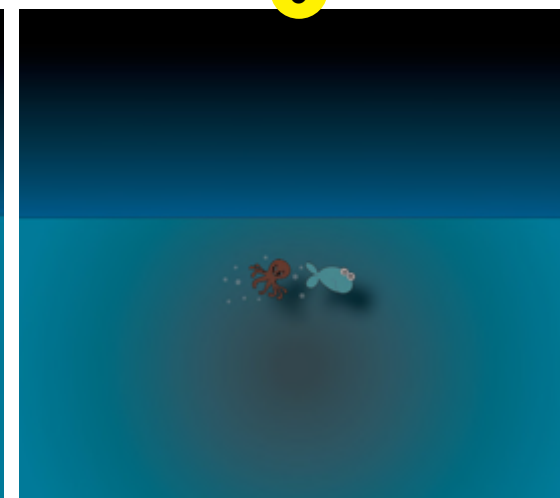
They think it's the lighthouse so they swim towards it.

5



They look around and see the light coming from the other side

6



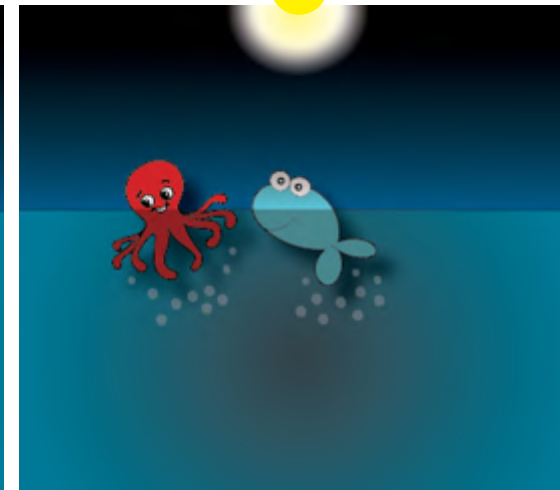
They swim closer to see what it is.

7



They realise it's the moon.

8



They laugh at how silly they were to not know it was the moon.



Activity 5

Now make your own storyboard. Your story can be about whatever you want. Try and be creative:

Think about stop motion while you design your story. Will you be able to make it?

You will need:



Pencils

--	--

--	--

--	--

--	--

--	--

--	--

[illegible]

Animating

Let's start animating!

You will need:



A3 Paper



Pencils



Scissors



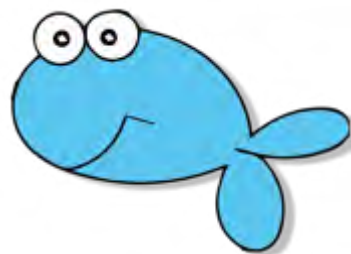
A laptop



Laptop camera

You will also need your cut out characters. Make sure you have the right number of characters.

If you chose a fish:



If you chose an octopus:



Octopus 1



Octopus 2

If you chose a turtle:



Turtle 1



Turtle 2



Turtle 3

The setting

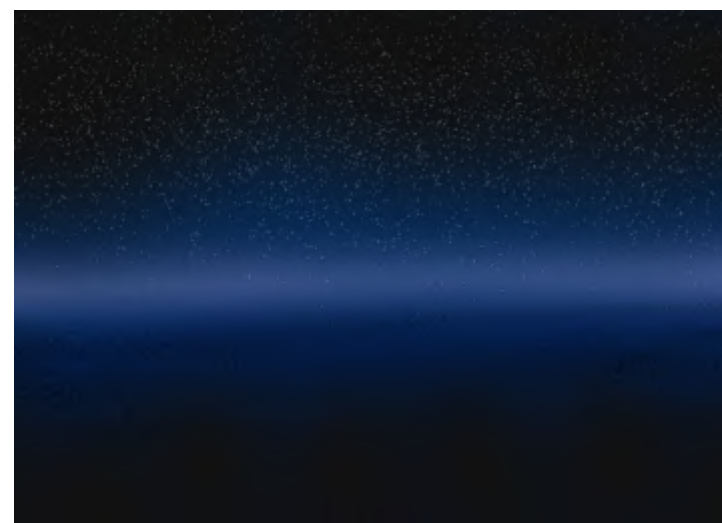
As well as characters, you also need to have images for your setting.

This story has two settings.

This story was set in sea and above the sea. So we need to draw both of these settings.



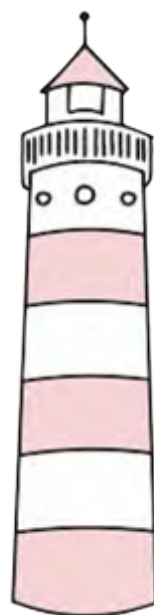
Under the sea



The sea and night sky

Extra images:

These also need to be drawn, coloured and cut out.



Lighthouse



The moon

We also need to include all the speech of the characters.

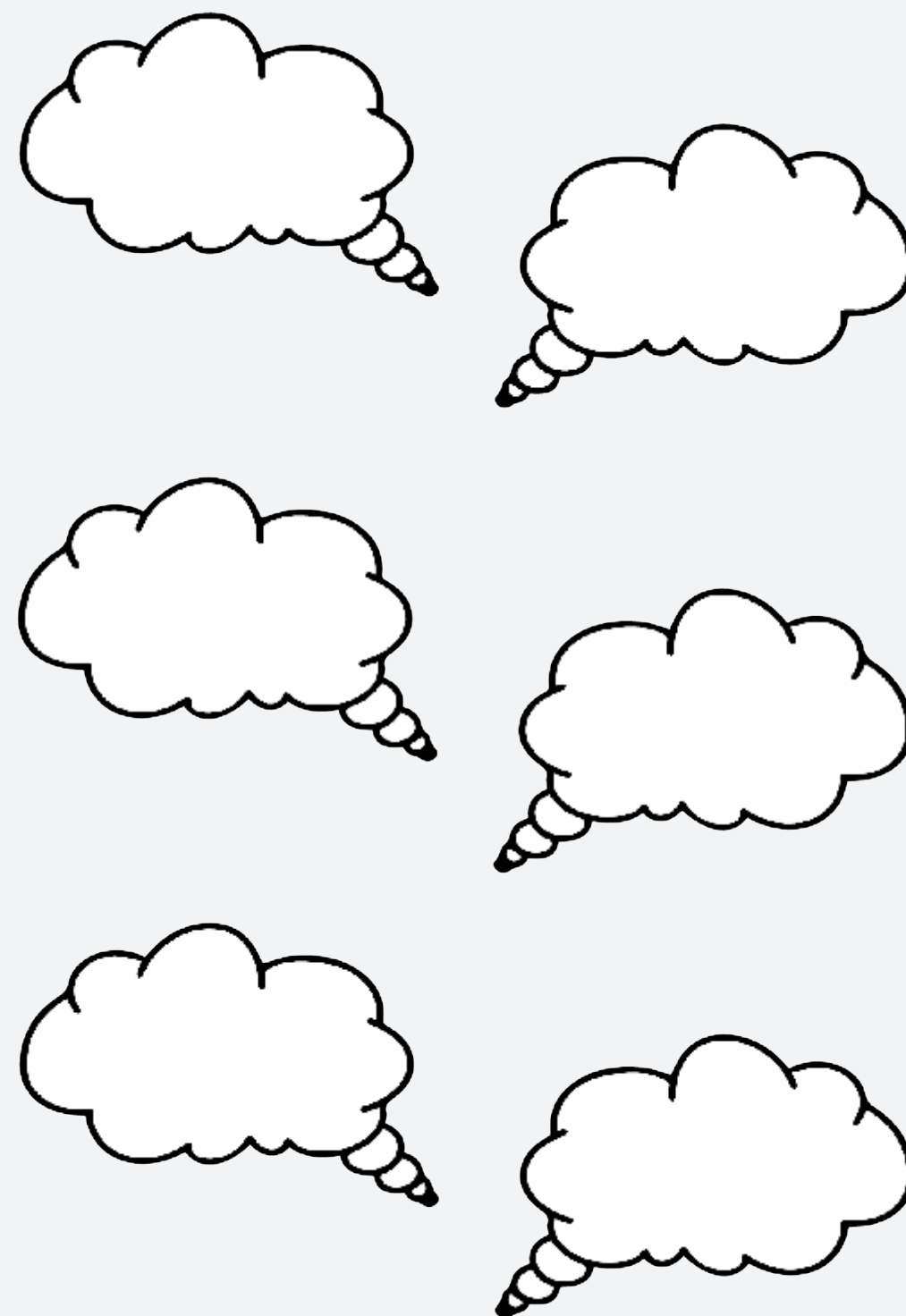
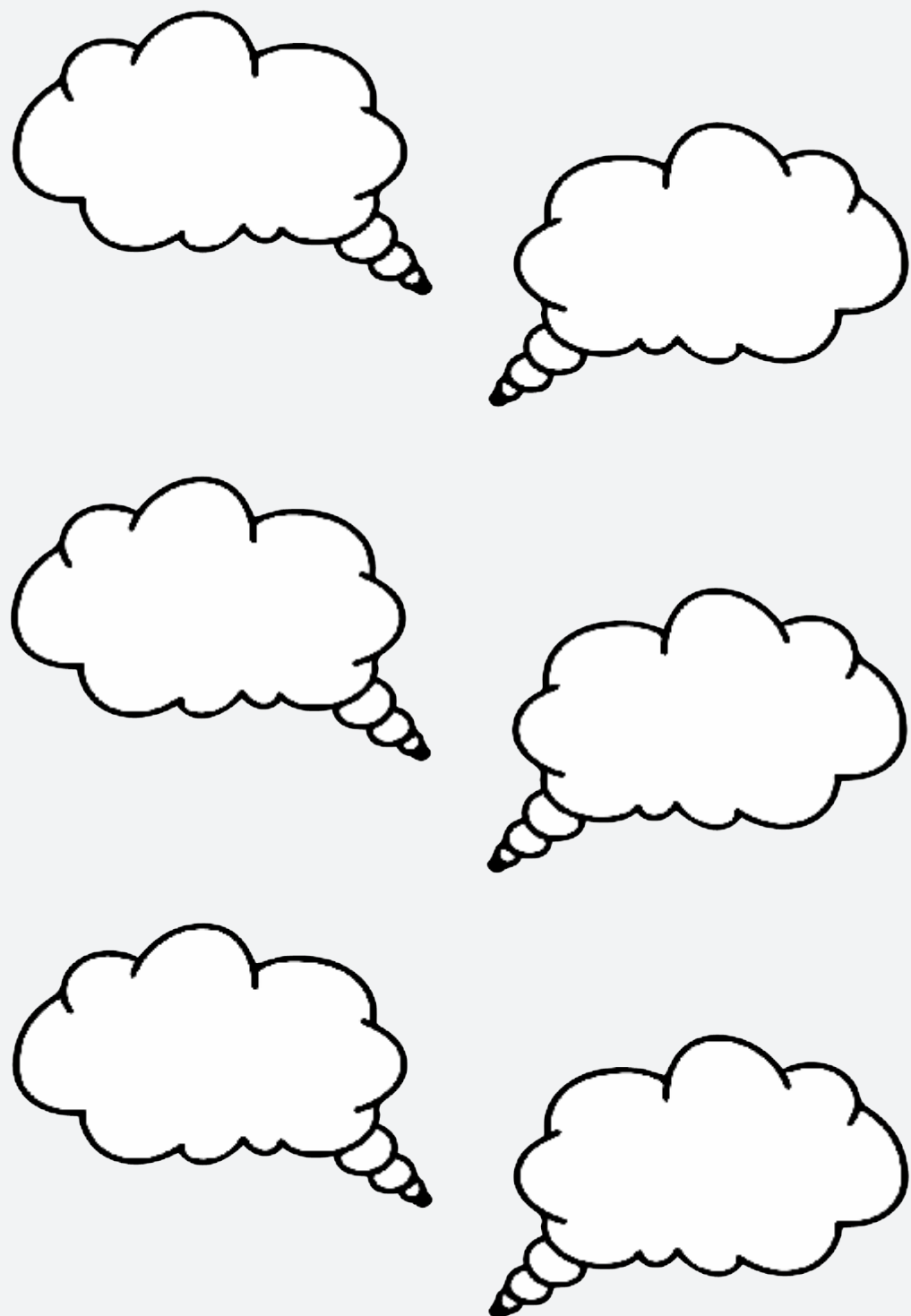




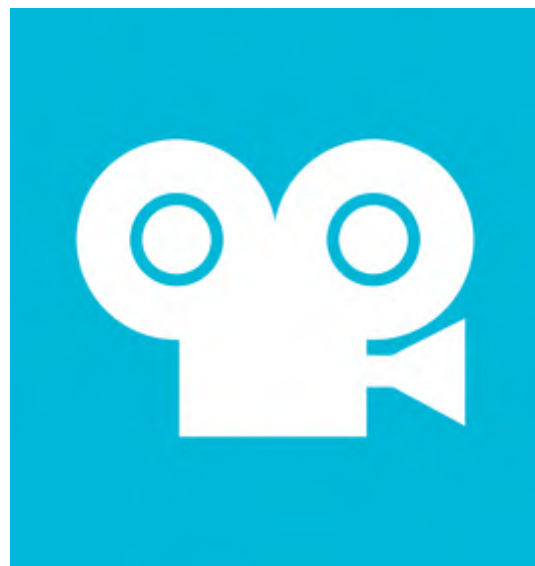


Activity 6

Now put your speech into bubbles, and cut them out.



Stop motion studio.

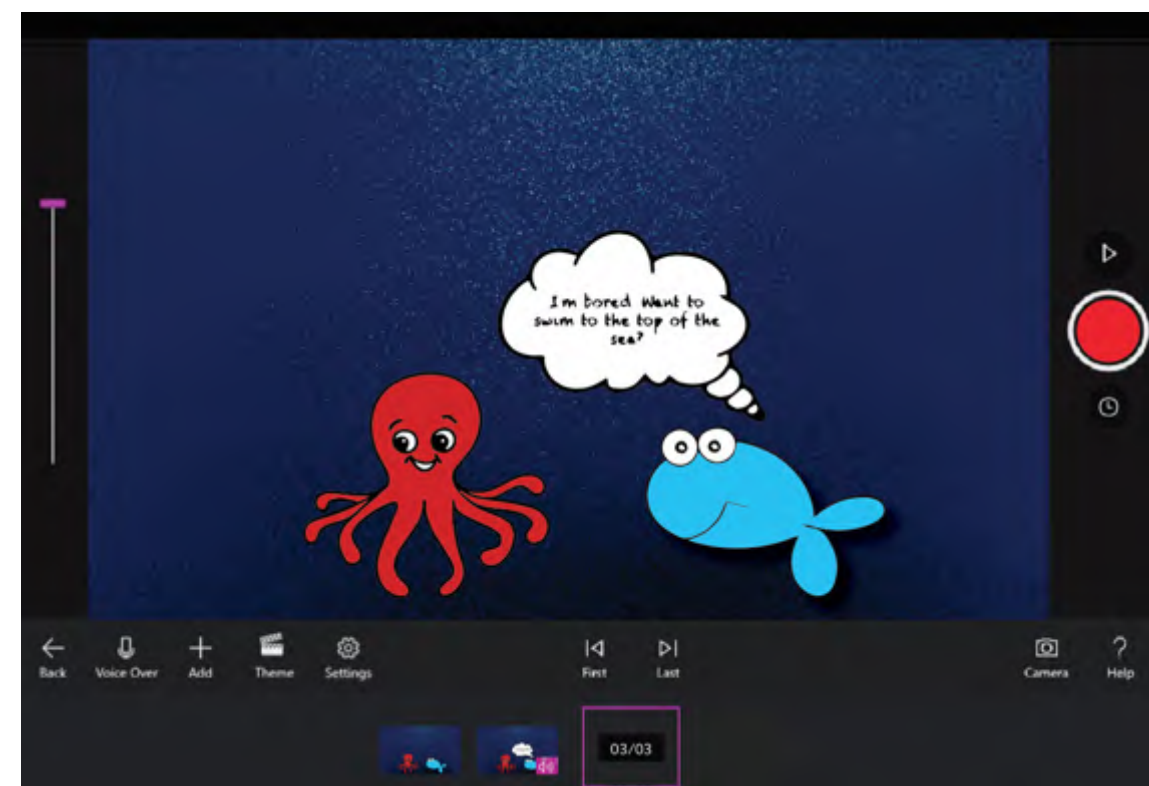
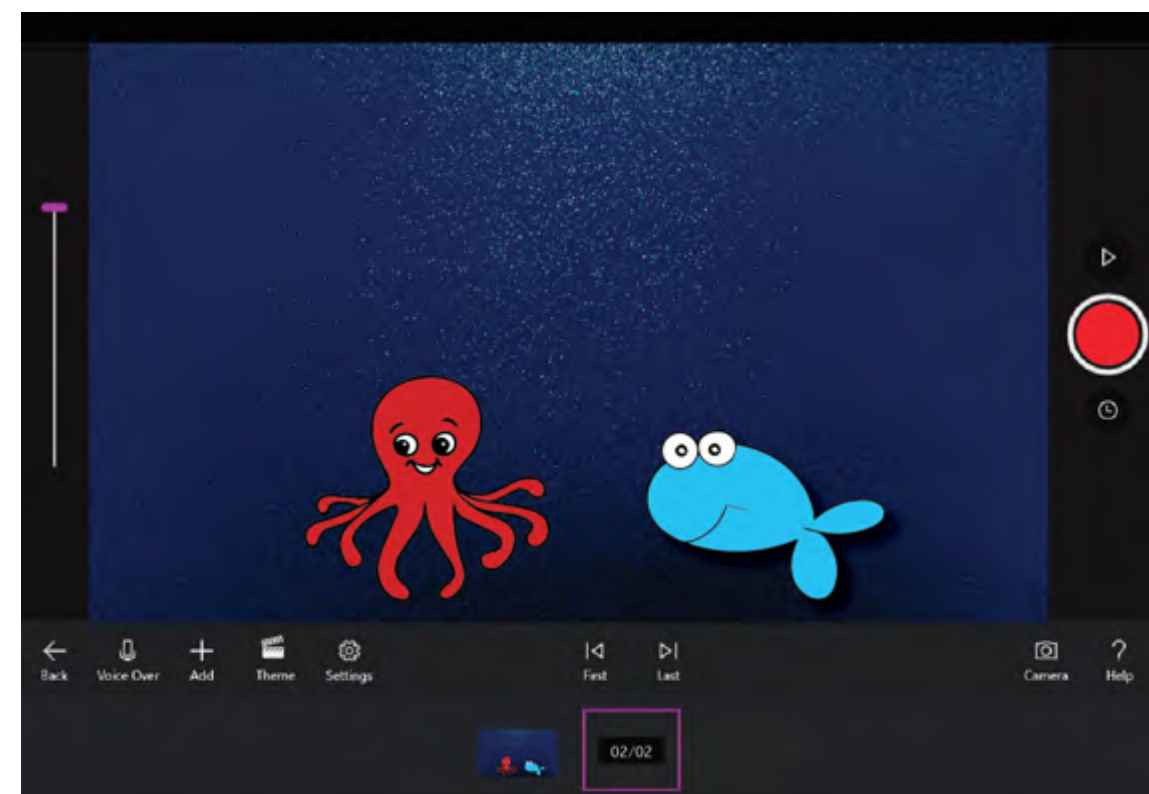


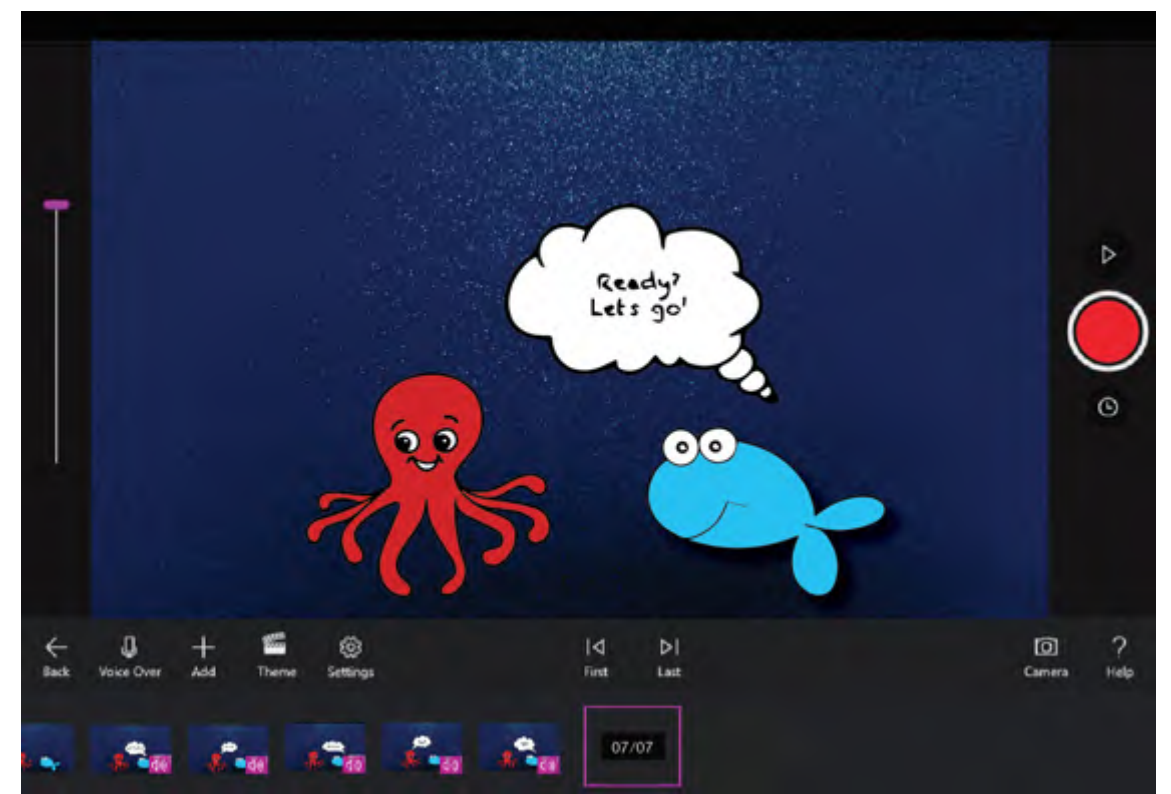
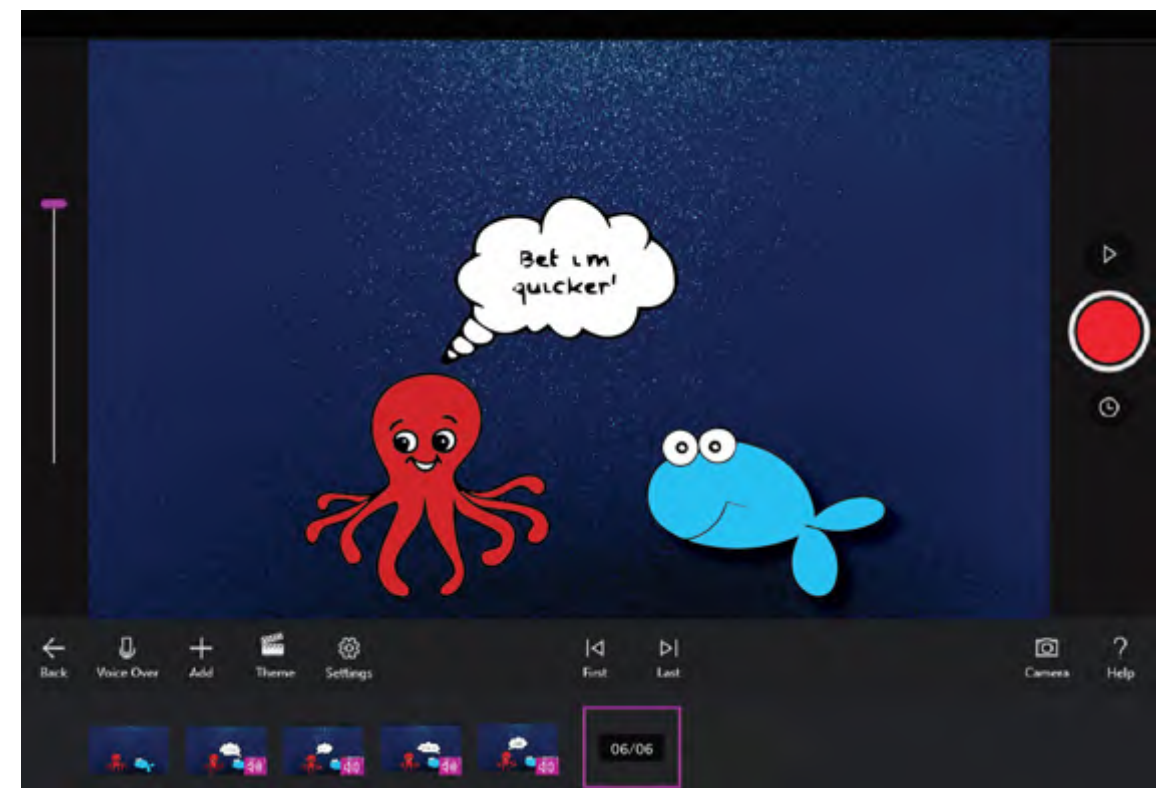
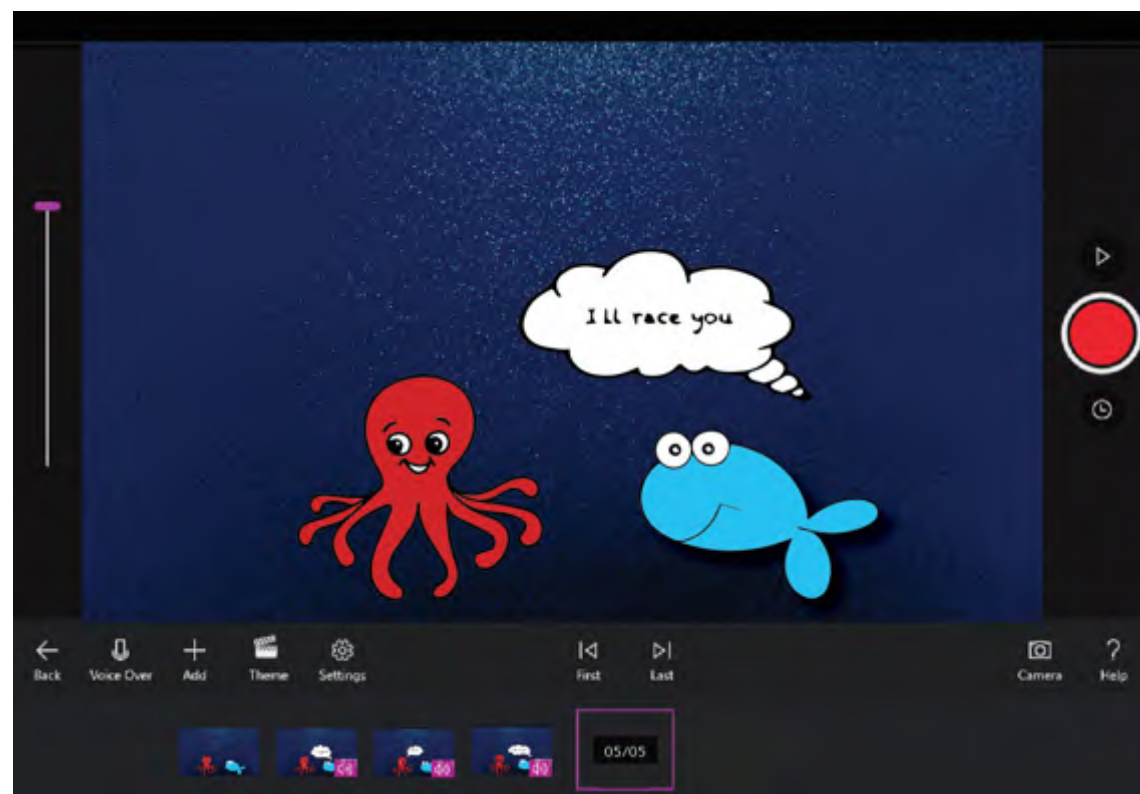
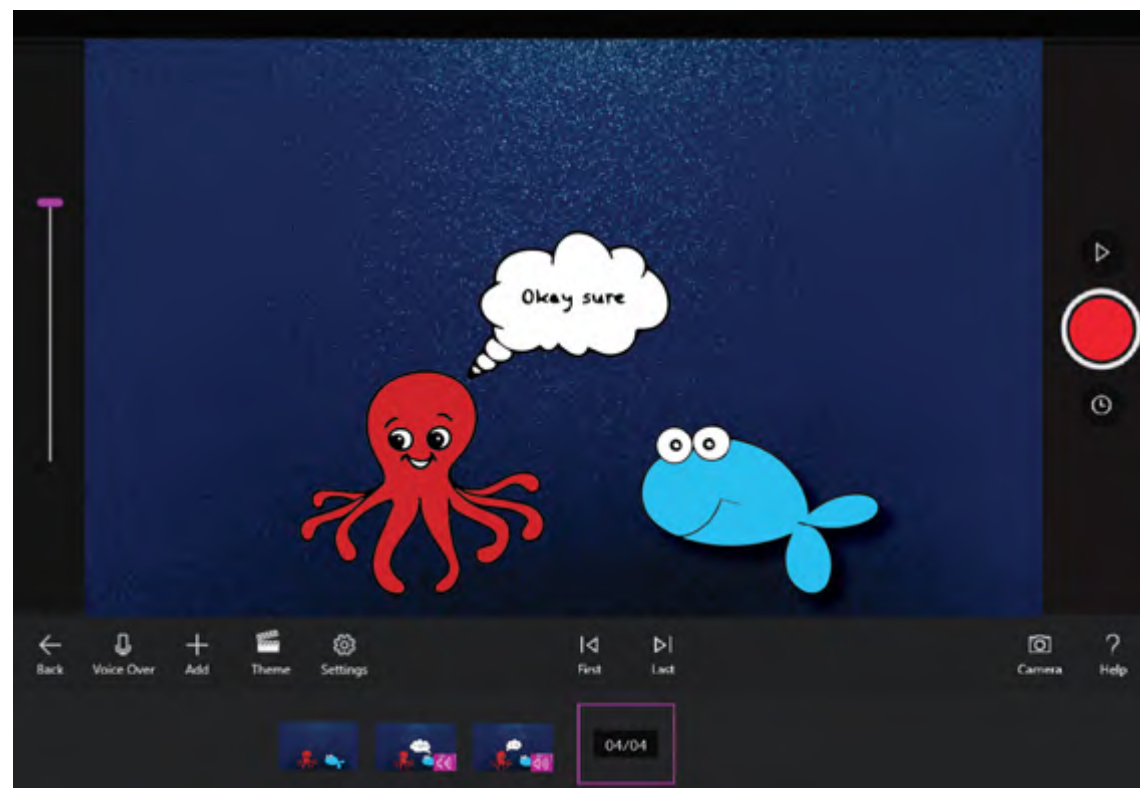
Now that we have our characters, settings, and extra images, we can start animating.

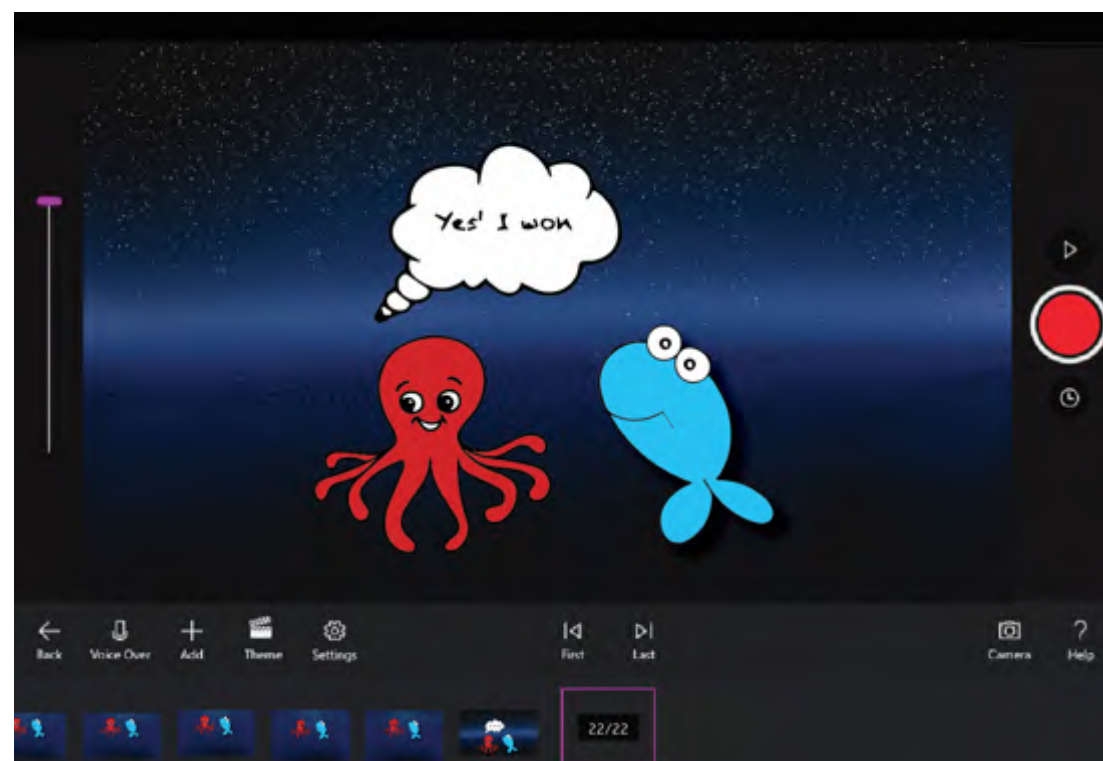
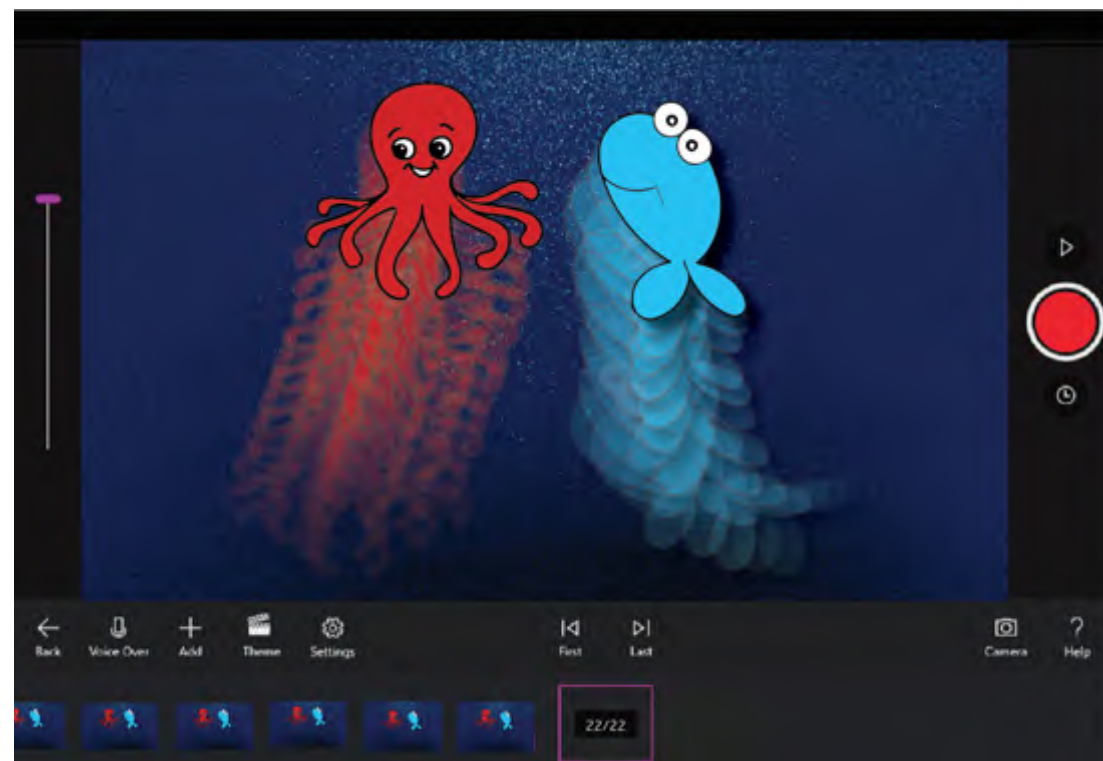
Use the skills you have learnt so far to put your story together.

The first scene of the example story has been done and the first 10 frames are below.

Let's bring the turtle to life in stop motion studio.







The first scene has been done.

Now that you know what the animation will look like, you can begin your own.



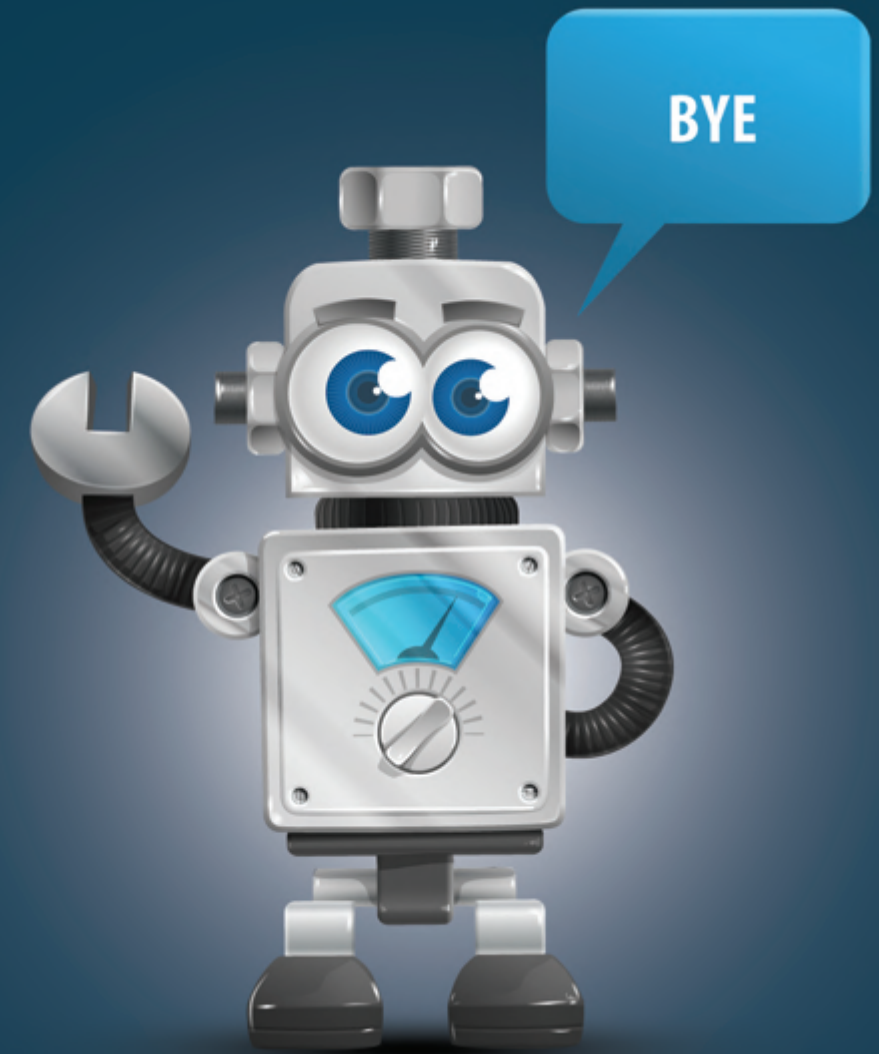
Activity 6

Students use Stop Motion Pro to make their animation.

Make sure students position the camera in such a way that the whole setting is in the shot and none of the table comes inside the shot.

Unit 6



| End of Unit Project






Overview

Students are to work on their own project by using Stop Motion Studio. They will create a movie about the UAE. Students will use the skills they have learnt to make their movie. Students will plan their movie on paper. They will then create a storyboard to show each frame of their movie. Students will also add music and a voice-over on the video..

Keywords

Term	Definition	Images
UAE	United Arab Emirates	
Stop motion studio	animating software	

Learning Outcomes




-  Plan a movie about the UAE and sketch the plan on paper
-  Use the skills learned in previous units to create the movie
-  Add music and voice over to the movie

Project overview

Now that you know how to use Stop Motion Studio, you will make a video on your own.

We will start by planning the video on paper, and then make it on Stop Motion Studio by adding voice and music..

Think about...

-  How you will put your country in a video?
-  What is the UAE known for?
-  What are the most exciting things about the UAE?





The video below talks about the 7 emirates of the UAE.



Activity 1

What are the 7 emirates of the UAE?

1.
2.
3.
4.
5.
6.
7.



Activity 2

Make a note of the most important things about the UAE after watching the video. Can you think of anything that was missing?

Buildings

Buildings

Buildings

Buildings



Activity 3

Match the picture of the emirate with the name.



Fujairah



Dubai



Sharjah



Fujairah



Activity 4

What is your favourite emirate?

.....

Give 3 reasons for why is it your favourite emirate?

1.

2.



3.





Assessment criteria

The project will be assessed through an assessment criterion. The total marks of the project are 50. The breakdown is below:



Storyboard (10 marks)

-  A detailed storyboard which covers the plan of the movie
-  Shows a breakdown of movie



Informative – (10 marks)

-  Has useful facts on the UAE
-  Covers a range of areas, e.g. main attractions, culture etc.



Movement of characters and movie (10 marks)

-  Characters show smooth movements
-  The overall flow of the movie is smooth

Speech of characters (10 marks)

-  Speech bubbles are used for character speech
-  Voice over is used to narrate the characters

Overall presentation (10 marks)

-  Good drawings and colourings
-  Neat and well presented



Stop motion final project

Every story has a narrator who tells the story.

Our story will use a character to narrate the story - a camel.

Students can use the camel as they are shown how to create it step-by-step. They are free to create anything else they would like to create, but ensure they understand that to show movement. A few images need to be created with the legs in different positions so once put into stop motion, it will show movement.

As the UAE has a lot of camels, we will draw a camel.

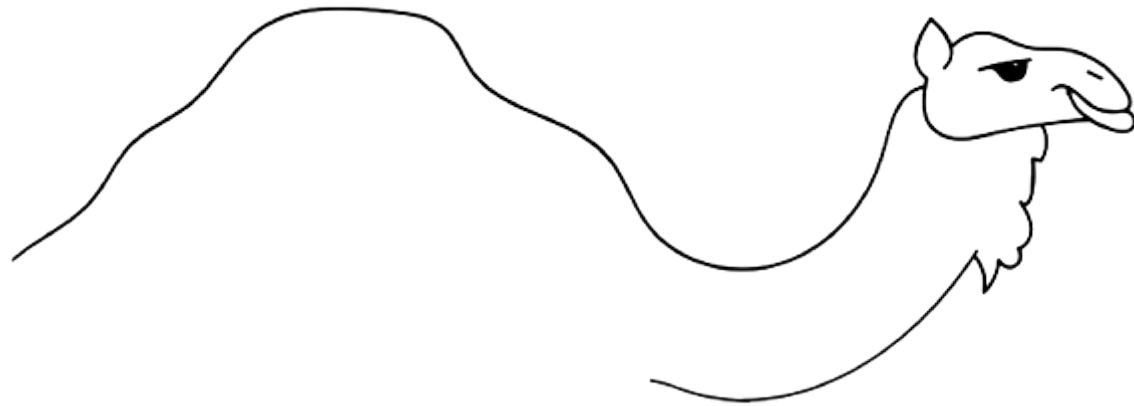
Step 1

Draw the head of the camel

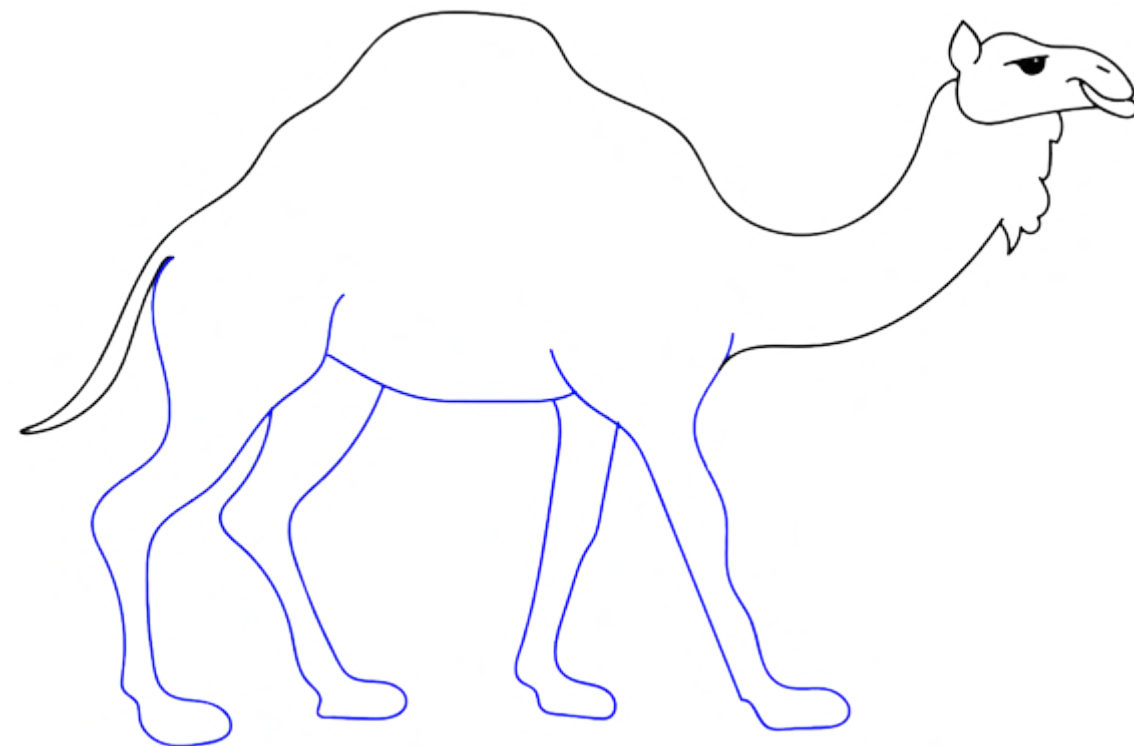


Step 2

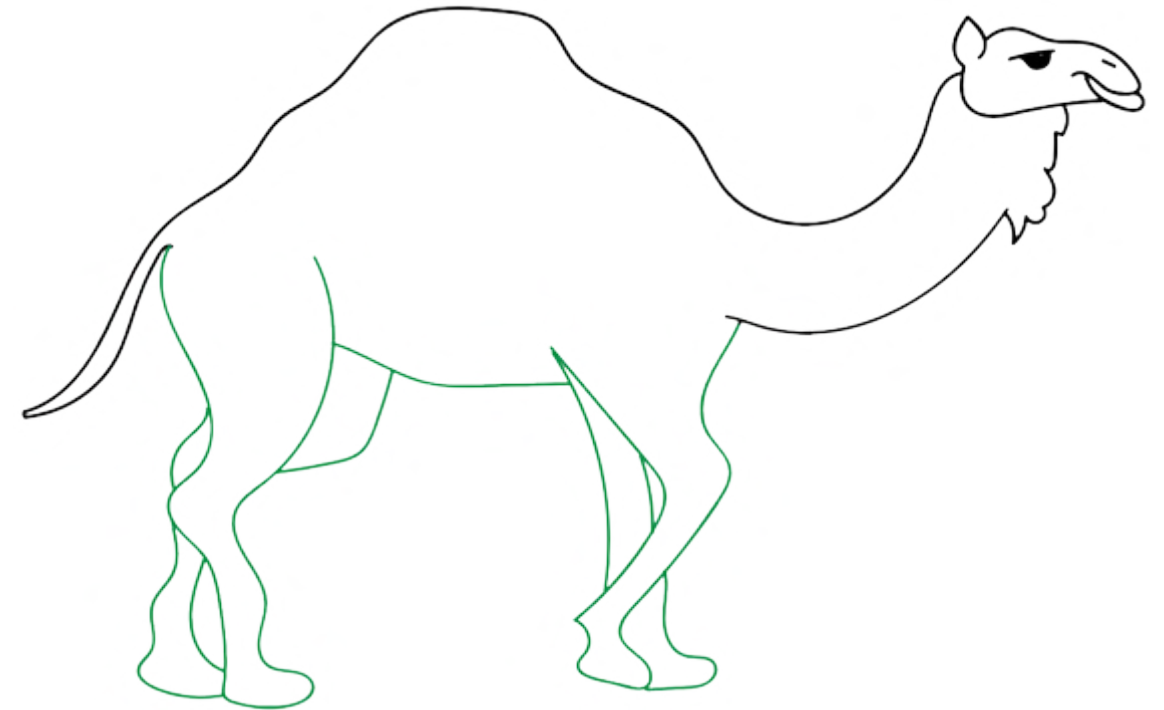
Draw the body of the camel.

**Step 3**

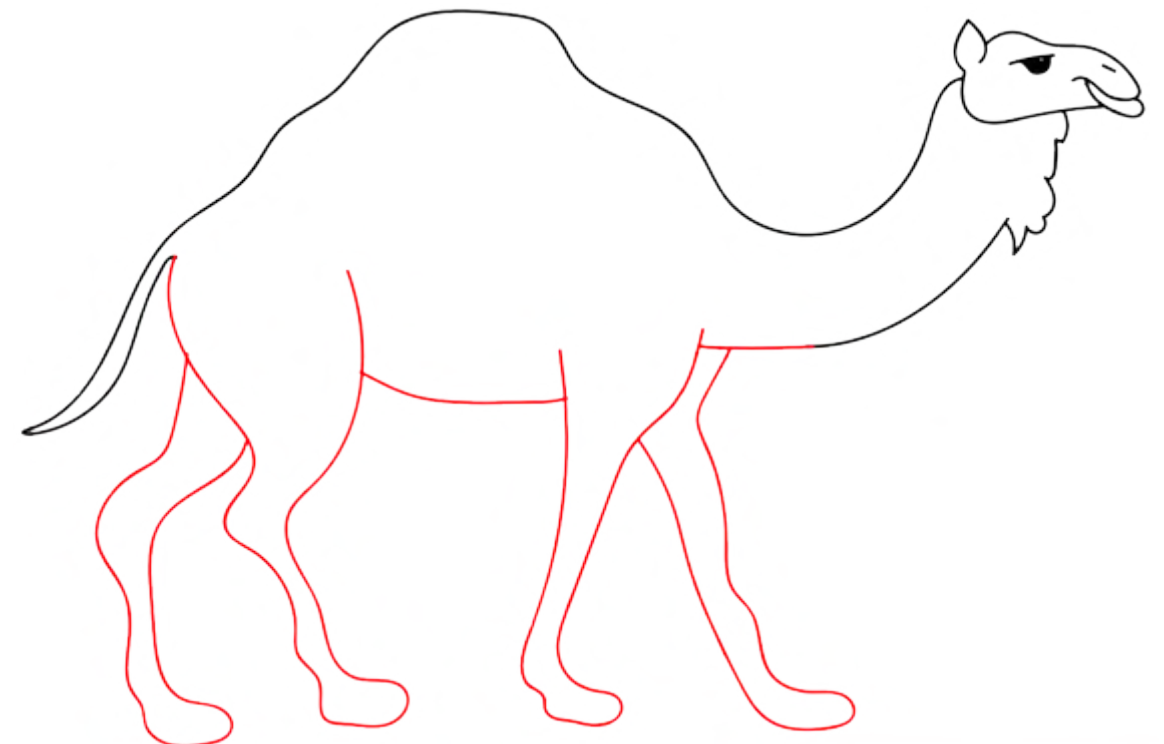
Draw the legs of the camel.

**Step 4**

Using the same body, draw the legs moving.

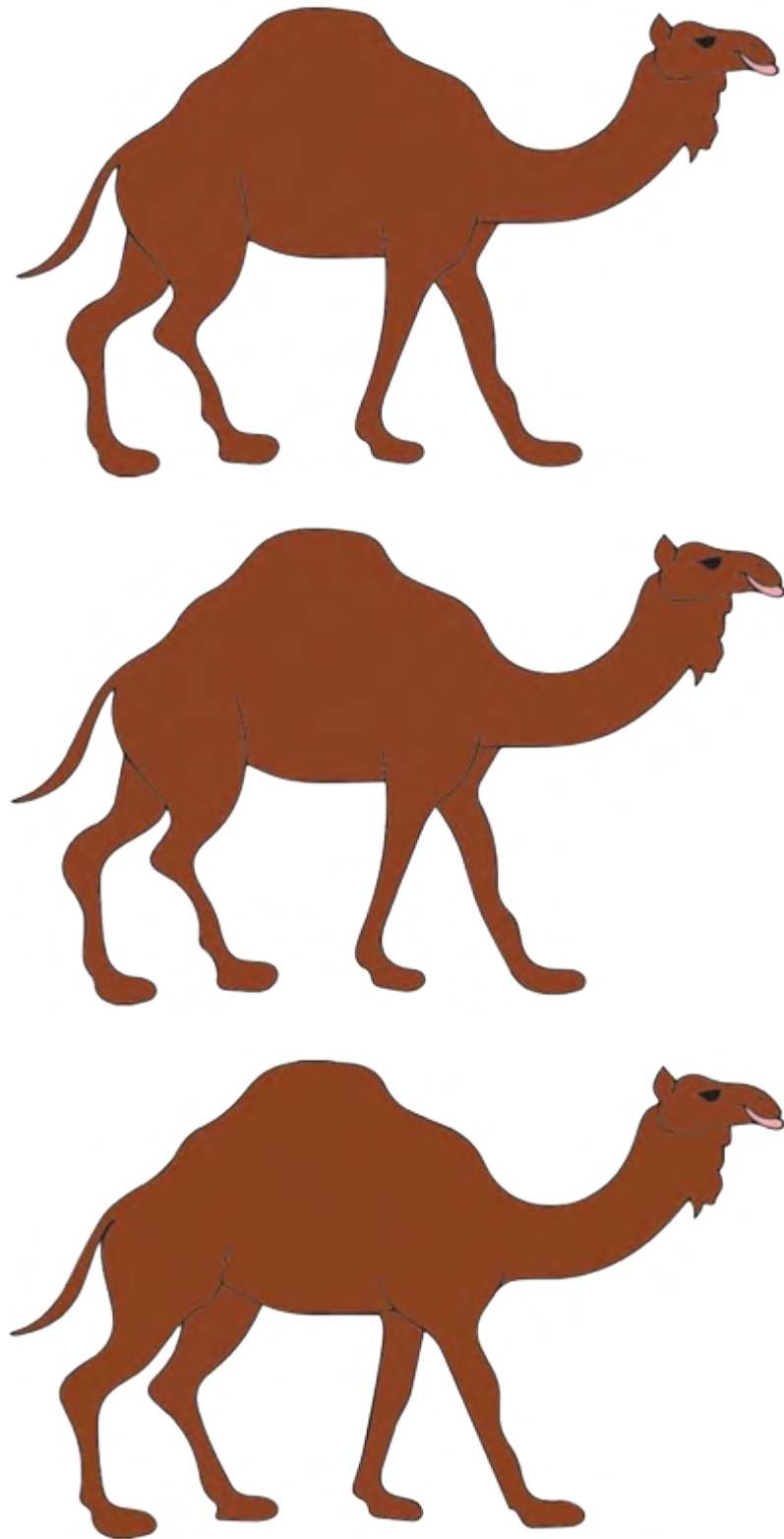
**Step 5**

Draw the legs that have moved.

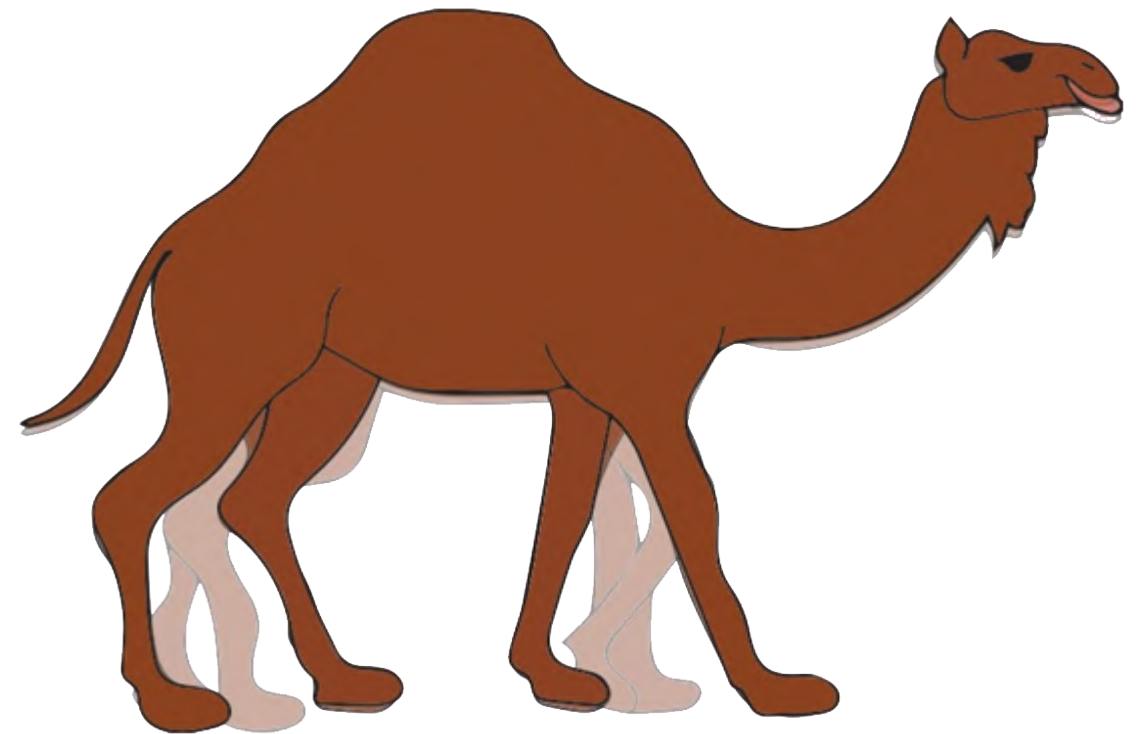


Step 6

Colour in each camel and cut them out. You should have 3 camels.



When used in stop motion studio, the 3 pictures will give the illusion that the camel is walking.





Activity 5

Now make your own storyboard. Decide what you want to include in each part of the story.

Think about stop motion while you design your story. Will you be able to make it?

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Stop Motion Studio

Now you are ready to begin your animation.

Think about stop motion while you design your story. Will you be able to make it?

You will need:



A3 Paper



Pencils



Scissors



A laptop



Laptop camera

Open stop motion studio and check the camera is on and ready.



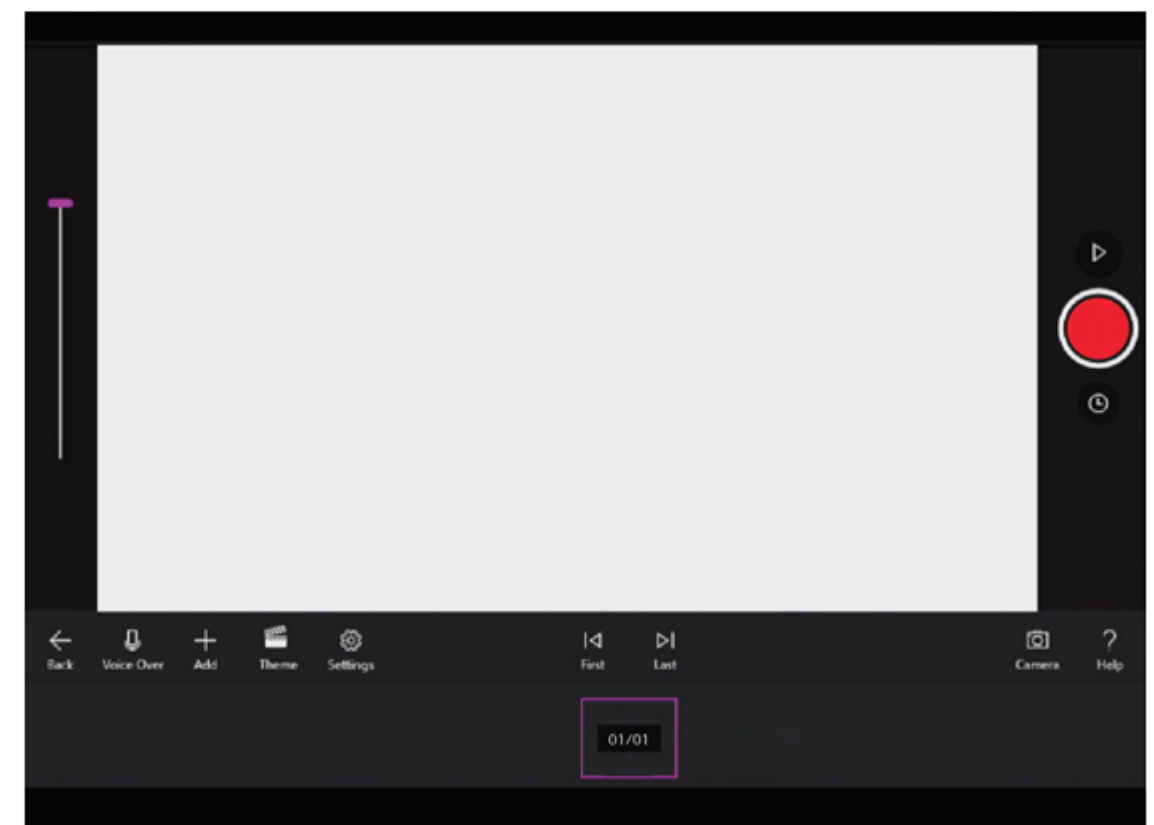
Now that you have your narrator, you can start putting together your video.

Use the skills you have learnt so far to put your video together.

The first 15 shots of the example film have been done.

You can use pictures and music from the internet

Open stop motion studio and check if the camera is connected and ready and the button is red.



The first few shots have been done as an example to give you an idea of what to include in your stop motion animation.

Example stop motion

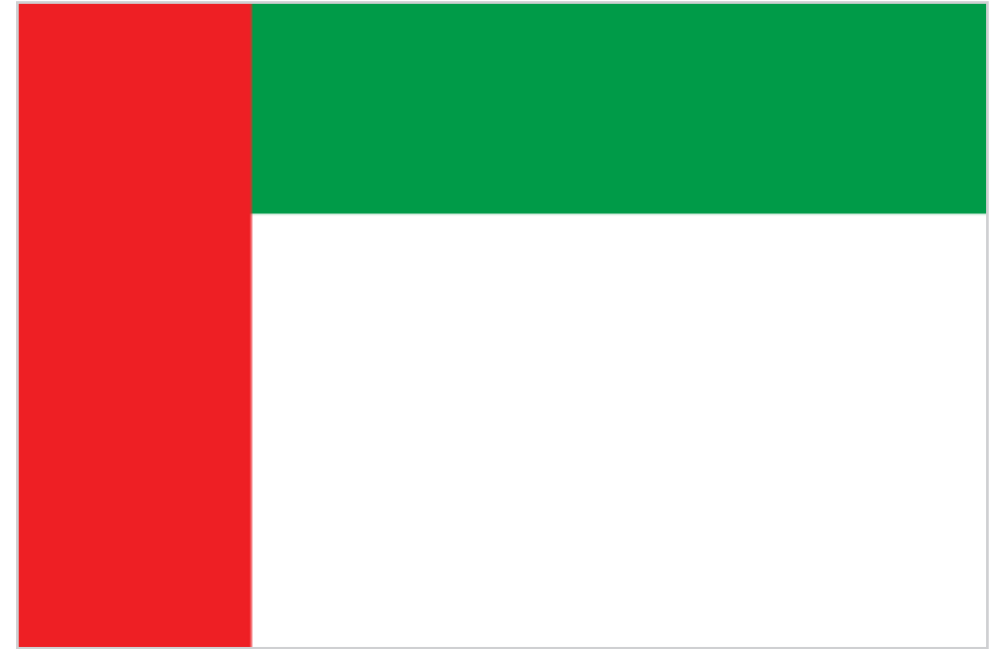
Shot 1 – UAE flag



Shot 2 – United



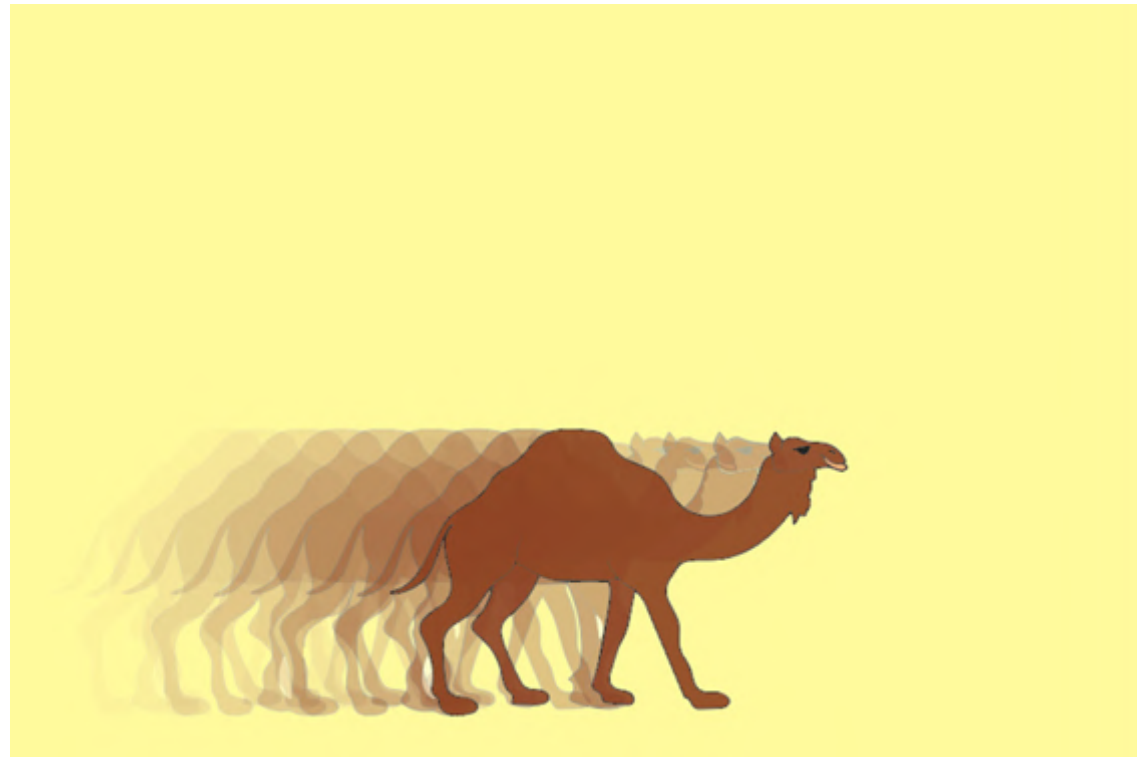
Shot 3: Arab



Shot 4: Emirates



Shots 5, 6, 7, 8, 9, 10, 11, 12, 13: Camel walking along the screen



Shot 14: Camel talking



Shot 15: Camel talking



Activity 6

Using the example above, create your own movie with the camel explaining what the UAE is and all about.

You can use the camel above or any other animal or character.

Students can use the camel as a narrator or anything else they wish to use. Ensure they know that for their character to move they need to draw the different versions that show the leg/arm movements.

As well as drawing their own characters and doing their own writing, encourage students to take pictures off the internet of building and places.



Review the marking criteria and ensure that you follow the assessment guidelines.



Student evaluation

Briefly describe what your video was about.

What did you enjoy the most about making this video?

What didn't you enjoy?

What would you do differently next time?



Peer evaluation

Name of reviewer

What do you like about the video?

What can be improved?



Teacher evaluation

	Mark	Overall
Storyboard		
A storyboard was made	/5	/10
Shows a clear breakdown of the movie	/5	
Informative		
Contains useful facts about the UAE	/5	/10
Covers a range of areas, e.g. culture, buildings, food, etc.	/5	
Flow of movement of characters		
Characters show smooth movement	/5	/10
The flow of the movie is smooth	/5	
Dialogue of characters		
A good use of speech is used	/5	/10
Voice-over is used for each character	/5	
Overall presentation		
Good drawings and colorings	/5	/10
Neat and well-presented video	/5	
		/50

What was particularly good?

What could have been improved?

Ministry of Education - Call Centre

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Email: ccc.moe@moe.gov.ae

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DESIGN AND TECHNOLOGY