

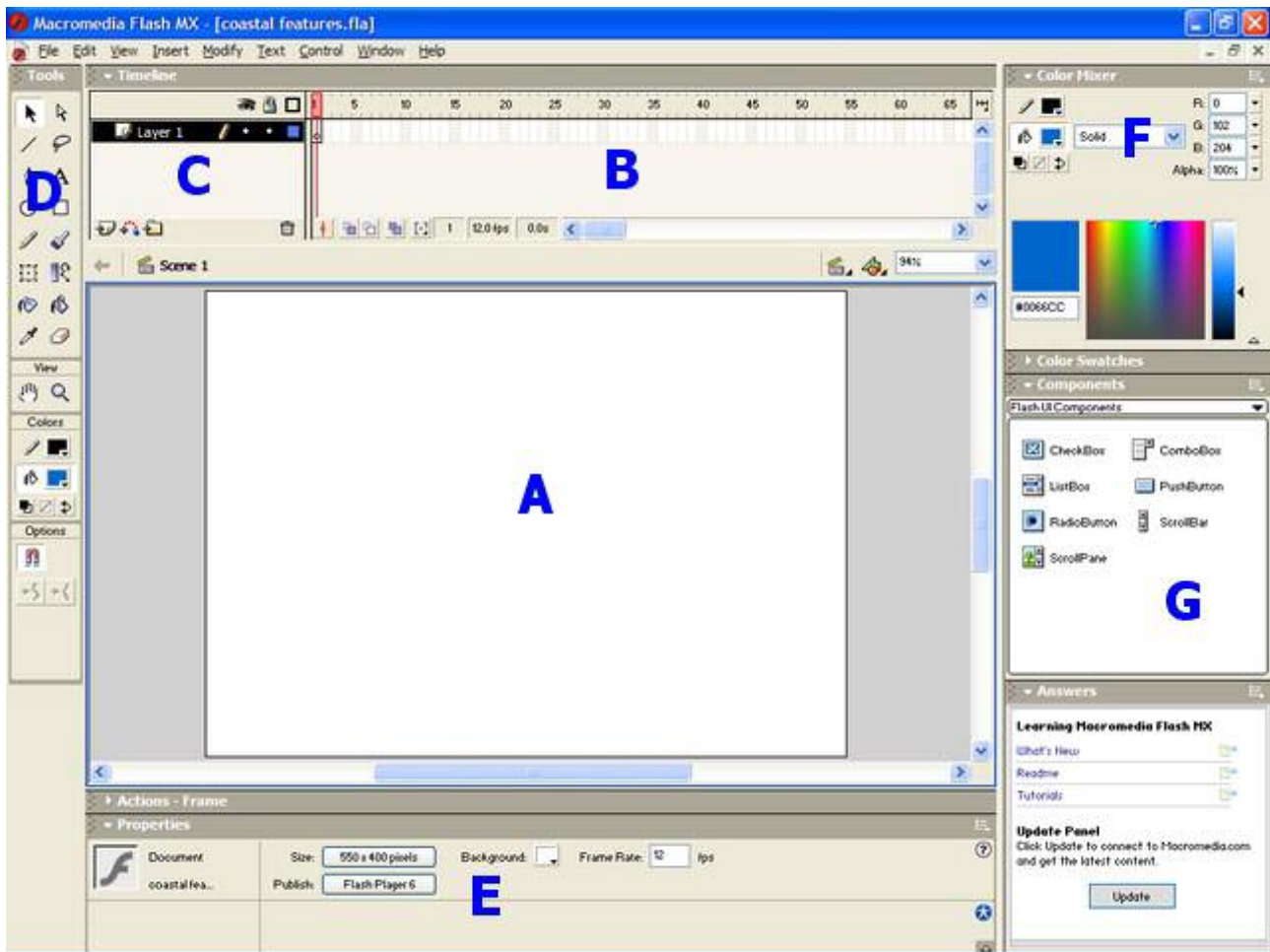
Coastal Features

The objective is to make a simple interactive animation using Flash MX.

Step One – Getting started

Launch Flash MX.

The interface will look something like this.



Each region (A – G) will be referred to in the step-by-step instructions below so you need to know what they are called.

A is the stage. It is where you place objects such as text or images. Everything on the stage will appear in the final movie.

B is the timeline. It is made up of frames. The movie will step through these frames one at a time. If we place an image on the stage in frame 20, it will appear when the movie gets to frame 20.

C shows the layers. It is good practice to put different objects on different layers.

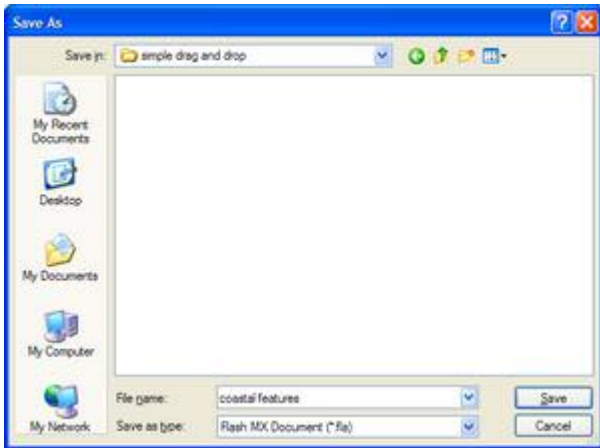
D shows the tools. We will use it to create text, shapes and lines and to select colours of objects.

E shows an object's properties such as its colour and size.

F is an example of a window that provides additional tools; in this case colour options.

G shows more windows that might be used in particular movies. You can remove these by clicking on the icon on the right hand side of each one and selecting **Close Panel** from the menu that appears. Try it now so that you just have the **Color Mixer** visible.

Step Two – Naming (and saving) the file



Click on **File** and then **Save As...** in the top menu and save your file so you don't lose work when it all goes horribly wrong and so that the finished movie is created in the same folder. I suggest you place the file in the "simple drag and drop" folder.

It is also a good idea not to save the work as the same file all the time. You might want to go back to an earlier stage.

I will suggest that you save as a new filename every so often, but it is up to you!

Step Three – Setting the size of the movie

One of the best features of Flash is that it resizes the contents of a movie so that it looks just as good full screen as it does in a small window. However, if you have imported images in a movie, they can sometimes lose clarity when the movie is resized. So, it's always a good idea to set the size that it will generally be used at the start.

Click on the size button in the properties area (**E**).

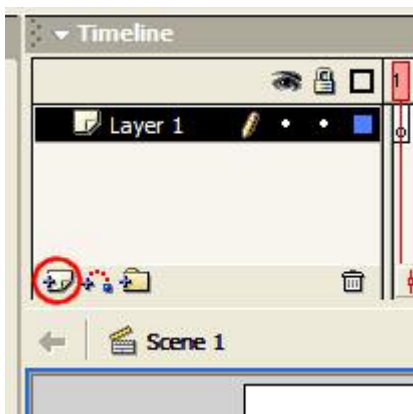
Replace the default size (550 x 400) with **800 x 600** in the **Dimensions** part of the dialog box and then click on **OK**.

Unfortunately, the stage is now partly hidden by the rest of the interface.

Hold down the **Ctrl** key and tap **2** and it will automatically resize so you can see all of it.



Step Four – Adding layers to the movie



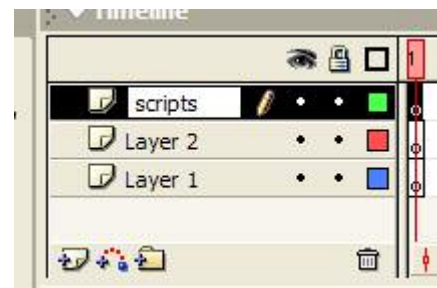
We add layers in region **C** of the interface.

Click on the circled tool (see diagram left) to add a new layer.

Repeat this so that you have **three** layers.

Double-click on the top layer name (Layer 3) and rename it **scripts**.

Rename Layer 2 as **objects** and Layer 1 as **background**.

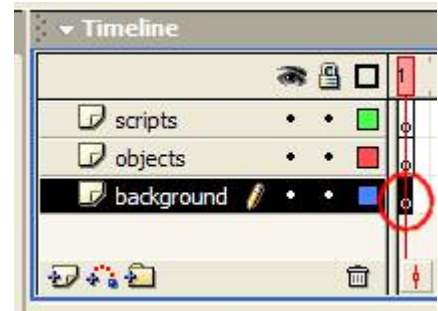


Now save your work as **coastal features 1**. That's the end of the preparatory work; we can now get on with adding content.

Step Five – Adding the first content

The trick to adding content to a flash movie is keeping an eye on which layer is selected before doing anything.

We are going to add the background image to the movie so, click on frame **1** of the **background** layer (circled on the diagram) to make sure that the image ends up in the right place. By the way, **background** is at the bottom of the layers stack so that objects on the other layers will be visible on top of it.

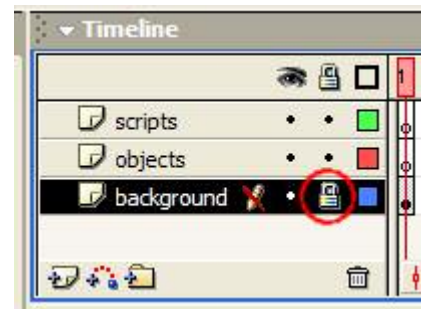


Now Click on **File** and then **Import...** in the top menu bar and use the dialog to find **coastal features.jpg** image and import it by clicking on the **Open** button.

The image will appear in the middle of the stage on frame **1** of the **background** layer.

Now save the file as **coastal features 2** since we have made a fairly major revision.

The background image is going to spend the rest of the movie sitting there doing nothing. We can protect it from being altered by mistake by locking its position.



Click on the dot under the padlock column it will change to a padlock. The image cannot now be altered unless you first click on the padlock to unlock it.

Step Six – Creating an object

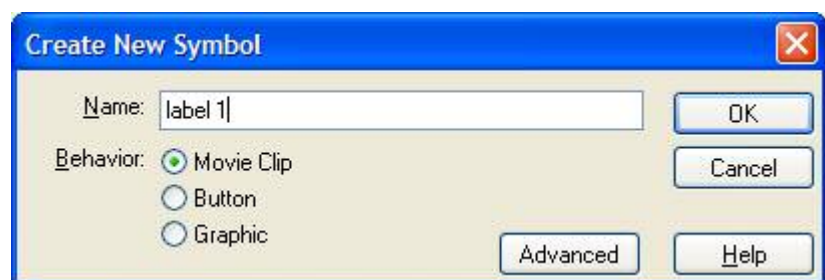
We are going to add some labels to the movie. The user will drag and drop these next to the coastal features shown in the diagram.

Click on frame **1** of the **objects** layer.

Now click on **Insert** and then **New Symbol...**

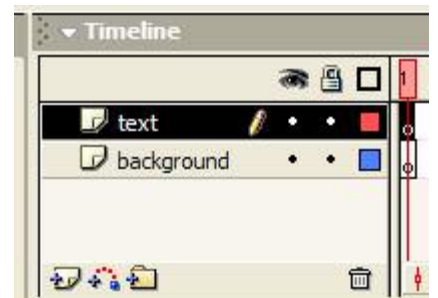
A symbol is Flash speak for an object on the stage that can be manipulated in lots of exciting ways.

Enter a more useful name in the dialog box that appears and then click on **OK**.



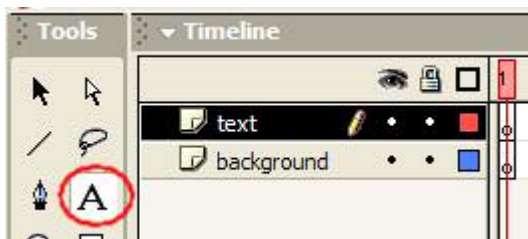
The stage will then appear to go empty but don't worry; you have not lost all the work. You are in an editor that is used to design the symbol. You have a new timeline and a new stage to work on. All the other stuff is still there in the background.

Start by creating an extra layer and give informative names. The label will be a phrase (on the **text** layer) on top of a background (on the **background**) layer.



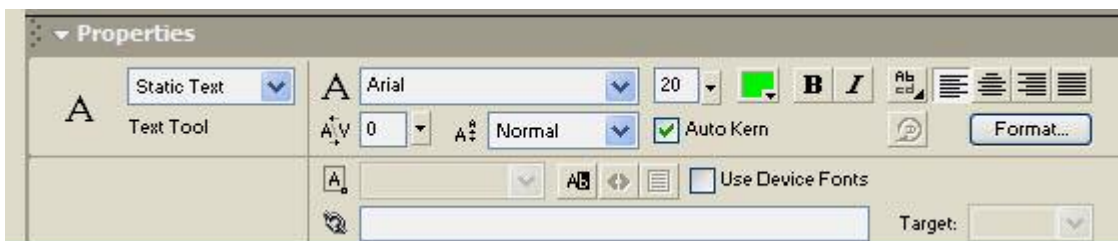
Click on frame **1** of the **text** layer.

Select the **Text** tool from the tools on the left (region **D** on your original diagram).



Two things happen. The tool shows you that it is selected and the properties window changes to show you that you are now controlling text properties.

Use the various properties to alter the **font** (but please do not use Comic Sans), **size** and **colour** of the text. At the same time make sure that the type of text is **Static Text**. The other types of text are used to help the movie allow users to enter text and to show text that the movie changes.



You may notice that the cursor has changed to a text tool cursor when you take it over the stage. Click once on the middle of the stage to create a text box and then type the first label into the box. It will resize automatically.



If you now select the **Arrow tool** from the tools on the left, the text becomes an object (surrounded by a blue box).



If like me you decided that green text isn't very nice. As long as the object is selected using the **arrow tool**, the properties at the bottom can be used to alter it. Have a play with using the **properties** to alter the text size, font or colour.

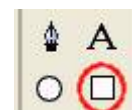


If you want to edit the content of the object, say to correct a spelling, double-click on it and it will become an editable text box again.

Now you will add a background to the text. This gives a bigger area for the user to drag it and could be used to improve the contrast so that the text is easier to read.

Click on frame **1** of the **background** layer (you should be getting to be an expert on this by now).

Select the **rectangle** tool from the tools on the left.



Use the **properties** at the bottom to select **border colour**, **background fill colour** and the **width** of the border.



Use the tool to draw a rectangle around the text on the stage.

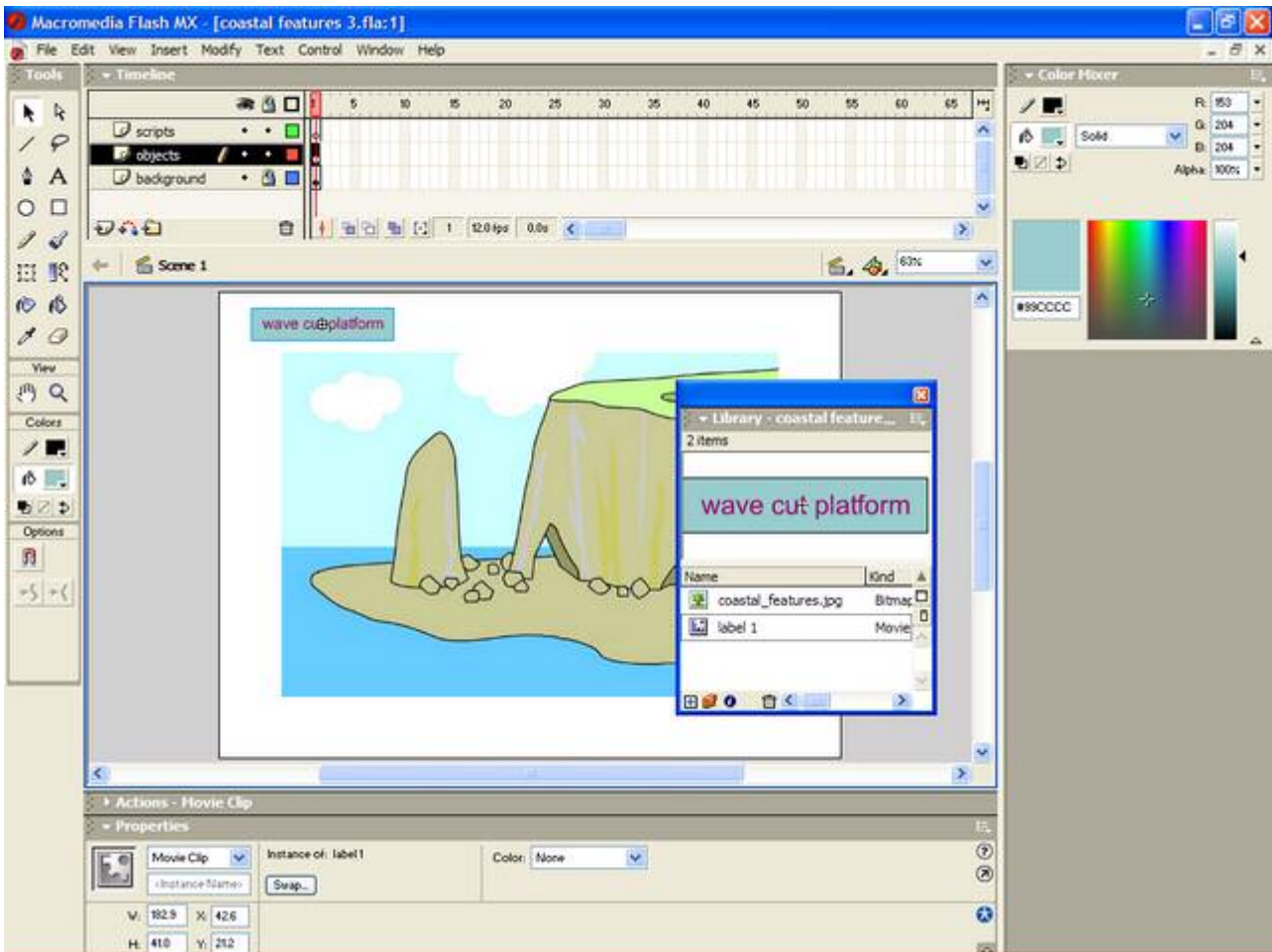
Finally, hold down the **Ctrl** key and tap **E** to leave the editor and return to the main stage. Save the file as **coastal features 3**.

Step Seven – Placing a new object on the stage

You might be a bit concerned that you have done all that hard work and the label is nowhere to be seen.

Tap the **F11** key and a library of objects in your movie appears. Hopefully, you should see **label 1** in the list as well as the image you put on the **background** layer. The library looks after all your objects but better than this, it allows you to use them as many times as you like and to duplicate them so that all you have to do is adapt a previously created object rather than start from scratch.

Click on frame **1** of the objects layer and then use the mouse to drag **label 1** from the **library** to the stage. Place it somewhere near the edge so the user can pick it up to label the picture.



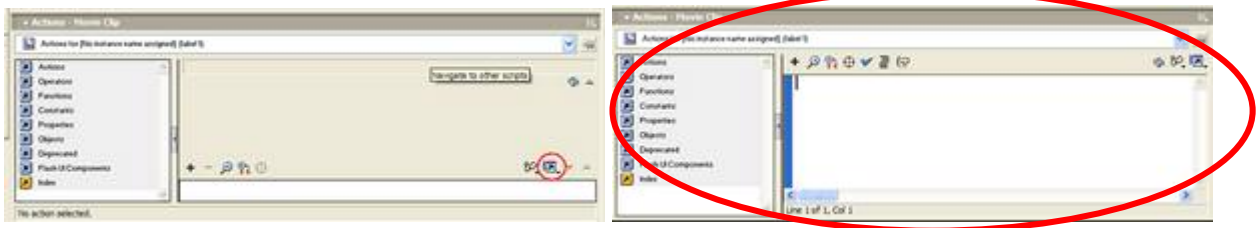
Step Eight – Allowing an object to be dragged and dropped by the user

This is the bit where you become a programmer. It involved adding some code to the label. This code acts as a rule that will operate when the movie is run. It tells the object how it must respond to the mouse.

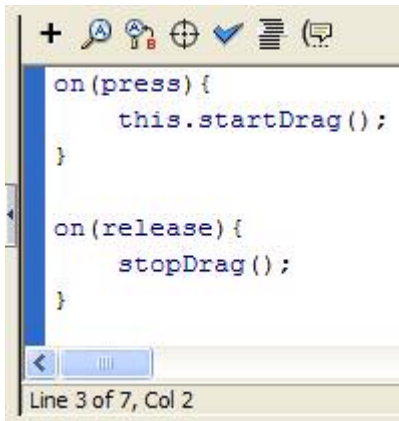
Click on the label so that it is selected (remember blue box = selected).

Press **F9** and a new window – the **Actions** window will appear.

If the window looks like the image on the left, click on the circled button and select **Expert Mode** from the menu that appears so that it looks like the image on the right.



Click into the main text box and type in the following code exactly as shown here. Be warned, Flash cares even more about grammar, spelling and case than a form tutor checking reports.



The code editor will pop up useful hints as you type but ignore its suggestions and keep going.

The first rule (called a function) tells the label to allow it to be dragged if the left mouse button is pressed over it.

The second rule tells the label to allow it to be dropped wherever on the stage it has ended up when the mouse button is released.

Tap **F9** to hide the **actions** window. Save the file as **coastal features 4**.

Step Nine – Creating the movie and testing it out

Although we haven't finished, now seems a good time to test the movie and see if the label will indeed allow itself to be dragged around.

Click on **Control** and then **Test Movie** using the top menu bar.

The file is converted into a Flash movie file and shown on the screen so that you can test it. At the same time, the Flash movie file is saved in the same folder as the file you have been editing.

Close the movie using the lower close button and you will be returned to the editor to add some more content. The top (red) close button will close everything and you will have to open it again.



Step Ten – Adapting a symbol to add more content

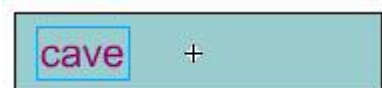
Tap **F11** again if the library has disappeared.

Right-click on **label 1** in the list of objects and select **Duplicate** from the list that appears.

Use the dialog box that appears to name the copy **label 2** instead of the suggested default and click on **OK**.

Double-click on **Label 2** in the library list and it will appear in the editor so that you can use it to create another label.

Click on frame **1** in the **text** layer and then double-click on the text on the editing stage. You can then edit the text.



If the text is a different length to the original, it may not be centred. Click on the **arrow** tool so that a blue selection box surrounds it. Use the arrow keys to **nudge** the text to the position you want it.



You might want to leave the **background** as it is so that all the labels are the same size. However, if you want to alter its size, click on frame **1** of the **background** layer to select the border and background.

This next bit is a bit tricky because the border and background are really five objects (four lines and a rectangle) and they are very easy to mess up. So, hold down the **Ctrl** key and tap **G** to group them all together into one object. They will then have a blue selection border showing that you can deal with them all at once.

Now click on the **Free Transform Tool** on the left of the screen and a set of handles (black squares) appear on the object.



They let you drag to resize, rotate and skew the object.



Remember that **Ctrl** and **Z** will undo any mistakes!

Select the **arrow** tool when you have finished and you can nudge the box back around the text.



Ctrl and **E** will end editing the label and you can then drag it onto the stage to give the user a second label to drag.

To finish the job, click on the new label to select it on the stage and press **F9** to bring up the **actions** window.

Add the same code to it just as with label 1 and it will allow itself to be dragged. You could copy the code from label 1 and paste into the actions window for label 2 to save time.

Don't forget to save the file as **coastal features 5** and then test the movie with **Control** and **Test Movie**.

Finally...

Use the skills you have learnt to complete the job.

You will need to add labels for the stack, limestone cliff and arch.

You could improve the appearance by adding boxes to drop the labels onto, perhaps with labelling lines. Create a new layer (e.g. boxes) above the background layer and then use the drawing tools to create the boxes and lines.

The animation requires the input of someone to provide feedback to the user. Think about what needs to be added to make it a standalone activity.