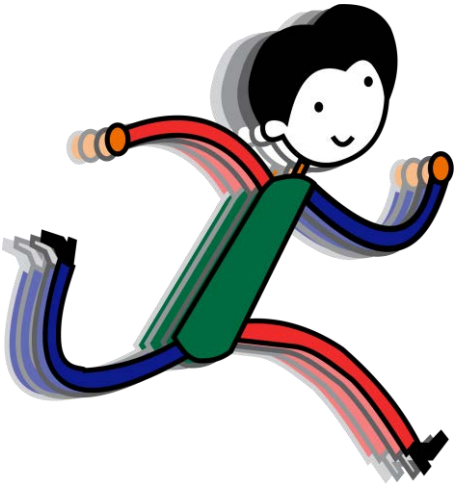
TECHNOAnimate

Teacher Guide

Lessons for Middle & High School Students: Grades 6-12



Technology Project for

Animate 2022

Become an animator.

In this project, students become animators. They learn animation techniques by creating scenes for a graphic story in Animate 2022. By completing a series of activities, they discover how to produce realistic movement using frame by frame, motion tweens, shape tweens, Asset Warp Tool, motion paths, and classic tweens. Once they have mastered the basics of animation, they apply their skills to design a unique project such as a graphic novel, electronic greeting card, or advertisement.

TECHNOKids®

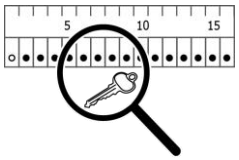
Contents

This is a preview of the teacher guide.
Pages have been omitted.

Session 2
On an Alien Planet

In this session, students continue animating their space adventure. They create two scenes using frame by frame animation. To start, they create the planet surface that shows grass growing and a flower blooming. Afterwards, they apply their new skills to make a hover craft drive over bumpy terrain. The session ends with students selecting an Animation Challenge and creating it using Frame by Frame Animation.

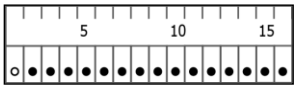
Assignment 11 What Is Frame by Frame Animation?



In this session, you are going to animate using frame by frame animation. Frame by frame animation is used to move an object from one position to another, by creating content in every frame. Although creating this type of animation does take time, it is a great way to gain control over how an object will move across the stage. In this assignment, you will read about frame by frame animation and view sample videos.

What Is Frame by Frame Animation?

Frame by frame animation uses keyframes in EVERY frame of the Timeline. A keyframe copies the content from the previous keyframe. The keyframes in frame by frame animation are placed right beside each other. Slight changes are then made to the objects in each frame. These changes are seen as movement when the animated sequence is played.



In frame by frame animation, a keyframe is placed into every frame of the Timeline.

Frame by frame animation is a lot like what animators used to do in the past. Before there were computers, animators used to draw the character in a new position, one frame at a time. To create animation using this technique is a time-consuming task, however, it does offer lots of control over how the object moves.

Questions about Frame by Frame Animation

1. What is frame by frame animation?

   Animation that is created by placing a keyframe in EVERY frame, with slight changes made to the content of each keyframe.

2. Frame by frame animation uses keyframes. How is a keyframe different from a blank keyframe?

   A blank keyframe is empty, whereas a keyframe copies the content of the previous keyframe.

Study the Frame by Frame Animation Samples

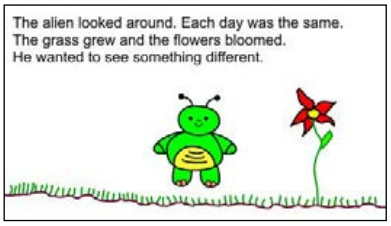
View two sample videos created using frame by frame animation. One is of an alien landscape with an animated planet surface. The second is of a flying hover craft. Afterwards, answer the questions about frame by frame animation.

▷ Access the *Animate* folder. Open the *Scenes* folder.

The Alien

▷ Double click the *Scene 2* file to watch the animated scene.

3. What different events occur in each frame of the animation?



The grass gradually grows and the flower blooms.

▷ Close the file.

The Hover Craft

▷ Double click the *Scene 3* file to watch the animated scene.

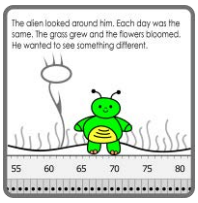
4. How would you describe the animation of the hover craft in this scene?

It is choppy and slow.

▷ Close the file.

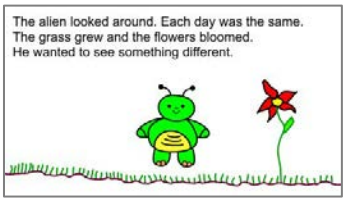
Assignment 12 Create Scene 2 – The Planet

In this assignment, you will create Scene 2 in your space adventure using frame by frame animation. Use your skills to draw the planet surface. Follow the instructions to animate the ground appearing, grass growing, and flower blooming.



View a Sample Scene

- ▷ Access the *Animate* folder. Open the *Scenes* folder.
- ▷ Double click the *Scene 2* file to watch a sample from an animated story.



Please note, the sample includes sound, which is a feature that will be added to the Timeline in Session 6.

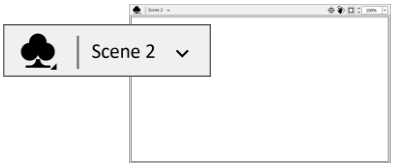
Open the Animate Document

- ▷ Open the document in the Animate program. The document opens to show the last scene you were editing. In this case, the scene in view should be Scene 1.

Insert a New Scene

When making an animated story with the Animate program it is a good idea to divide the events into scenes. Each scene has its own stage, Timeline, and layers.

- ▷ From the Insert menu, select *Scene*.
- ▷ A new stage opens in the window. It has an empty Timeline. You will notice that the Scene Number reads Scene 2.

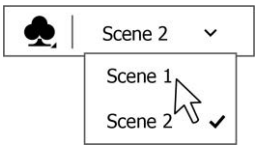


If you cannot see the Scene Number, select *Edit Bar* from the Window menu.

View Each Scene in the Story

Scene 1 has not been deleted. It is still part of the animated story. You can easily switch from Scene 2 to Scene 1 and back again. Try it!

- ▷ Click the *Edit Scene* arrow on the Edit Bar. From the list click *Scene 1*.

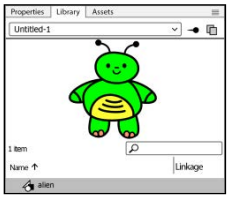


- ▷ Click the *Edit Scene* arrow again and this time select *Scene 2*.

Insert the Alien Symbol from the Library

In the previous session, you created an alien and placed it into the Library. The Library lets you use the same object repeatedly without needing to redraw it. Insert the alien from the Library.

- From the Window menu, select *Library*.
- Click on the alien symbol and drag it onto the stage.

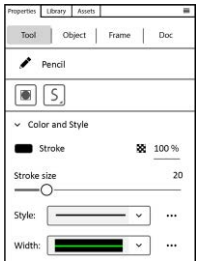


- Deselect the alien by pressing the ESC key on the keyboard.

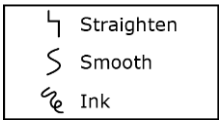
Animate the Ground Using Frame by Frame Animation

You are going to have the ground gradually appear underneath the alien using frame by frame animation. Unlike the previous session when you used blank keyframes, you are going to use keyframes. The difference between the two is that a keyframe copies the content of the previous frames into the new one. This means everything you drew before the keyframe remains on the stage, whereas a blank keyframe is empty.

- From the Tools Panel, select the *Pencil Tool*.
- From the *Properties* tab, select a stroke color, size, and style.

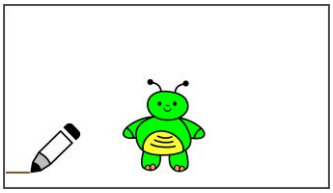


- Turn Object Drawing Mode OFF.
- Click *Pencil Mode* in the Property Inspector or Tools Panel. HINT: Try Smooth.



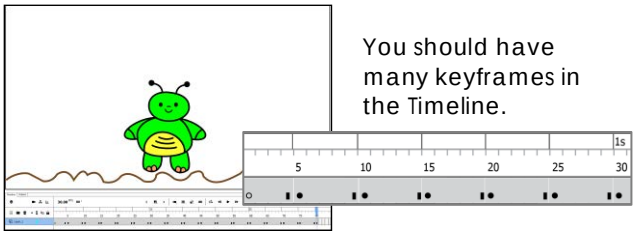
- Starting from the left side of the stage, draw a short line.

Draw a short line for the ground.



- Add a keyframe:
  - Right click on Frame 5 in the Timeline.
  - Select *Insert Keyframe* or press F6 on the keyboard.

- Draw another short line and then add a keyframe:
  - Click the stage to deselect all objects. TIP: CTRL + SHIFT+ A
  - Beginning where the last line ended, draw another short line.
  - Right click Frame 10 in the Timeline. Select *Insert Keyframe* or press F6.
- Select Frame 1. Press the ENTER key to watch the animation. Notice it appears choppy.
- Continue to draw short lines and add keyframes to the Timeline until the ground reaches across the entire stage.

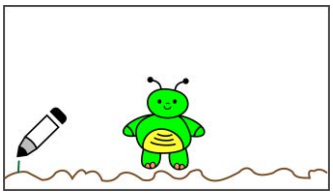


You should have many keyframes in the Timeline.

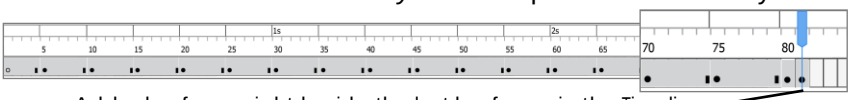
Animate Grass Using Frame by Frame Animation

Frame by frame animation looks the best when there is a new action in EVERY frame. When the ground appears, it looks choppy. This is because there are several frames between keyframes. You are now going to make grass grow. This time there will be a keyframe in each consecutive frame. You will notice a big difference in the smoothness of the animation.

- From the Tools Panel, select the *Pencil Tool*.
- From the *Properties* tab, select a stroke color, size, and style.
- Pick *Pencil Mode* from the Property Inspector or Tools Panel. HINT: Try Smooth.
- Draw a blade of grass near the left side of the stage coming up from the ground.

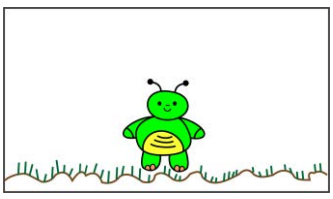


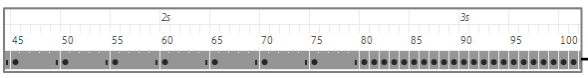
- Click on the frame beside the last keyframe in the Timeline.
  Right click the mouse and select *Insert Keyframe* or press F6 on the keyboard.



Add a keyframe right beside the last keyframe in the Timeline.

- Draw blades of grass:
  - Click the stage to deselect all objects. TIP: CTRL + SHIFT+ A
  - Draw a blade of grass beside the last one you made.
  - Right click the frame beside the last keyframe in the Timeline. Select *Insert Keyframe* or press F6.
  - Repeat until the grass reaches across the stage.

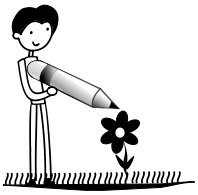




ground appears — grass grows – each frame is a keyframe

- Select Frame 1. Watch the animation by pressing the ENTER key. Notice that the grass grows quickly, and the animation is smooth.

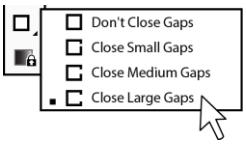
Draw a Flower Blooming Using Frame by Frame Animation



Make a flower grow. To start you will animate the stem and some leaves. After that the center of the flower will appear, with one petal at a time blooming.

- Draw a stem:
  - From the Tools Panel, select the *Pencil Tool*.
  - From the *Properties* tab, select a stroke color, size, and style.
  - Turn Object Drawing Mode OFF.
  - Draw a stem.

- Add a leaf:
  - Click on the frame beside the last keyframe in the Timeline.
    Right click the mouse and select *Insert Keyframe* or press F6 on the keyboard.
  - Click the stage to deselect all objects. TIP: CTRL + SHIFT+ A
  - Draw a leaf onto the stem using the *Pencil Tool*.
  - Select the *Paint Bucket Tool*. Select a fill color.
    HINT: From the Tool Options set the Gap Size to *Close Large Gaps*.

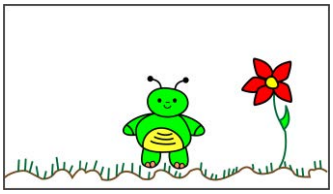


  - Fill the leaf shape with color.

- Complete the flower:
  - Click on the frame beside the last keyframe in the Timeline.
    Right click the mouse and select *Insert Keyframe* or press F6 on the keyboard.
  - Using the *Pencil Tool* draw the center of a flower. Fill it with color.

  - Insert a keyframe into the Timeline.
  - Deselect all objects.
  - Using the *Pencil Tool* draw a petal. Fill it with color.

  - Continue to draw petals and add keyframes until the flower has bloomed.
- Select Frame 1. Watch the animation by pressing the ENTER key.



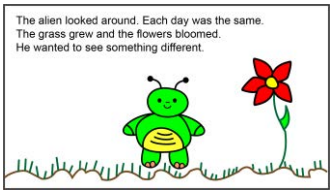
TIP: To delete a keyframe right click on the frame in the Timeline and select *Remove Frames*.

Describe the Scene with Words

Add text to describe the action in Scene 2. The viewer needs to be able to read the words at the SAME TIME as the action is occurring on the screen. Test the scene to discover a problem with the animated sequence and learn how to fix it.

- ▷ Click on Frame 1. Use the *Text Tool* T to type the words:

  The alien looked around. Each day was the same. The grass grew and the flowers bloomed. He wanted to see something different.



The words must be in view for a long time so that they can be read. Discover how to fix the problem!

- ▷ Watch the story using the Test Scene feature:
  - o From the Control menu select *Test Scene*. The movie opens into a preview pane and will continually loop.
  - o *What is the problem?* The words disappear after the first frame. Had the text been added to Frame 1 before all the keyframes were added, it would be on the screen the entire time. This is because a keyframe copies the contents of the previous frame into the new one. However, the text was added later.
- ▷ Click the *Close* button on the Test windowpane to exit the preview.

Solve the Problem by Adding a New Layer

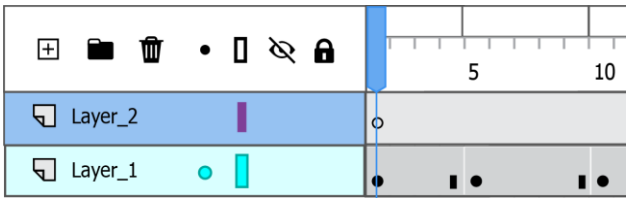
To solve the problem, you need to add a layer to the Timeline. By placing objects on different layers, you can have different events occurring at the same time.

- ▷ Click *New Layer* ⊞ at the bottom of the Layers area of the Timeline.
- ▷ Notice how a new layer has now been added above Layer_1.
  The layer you are currently editing is blue. Study the layer area:

  Show or Hide: Show or hide a layer.

  Lock or Unlock: Set the layer to permit or prevent edits.

  Show Layer as Outline: Display layer as solid or an outline like a coloring book.



Rename a Layer

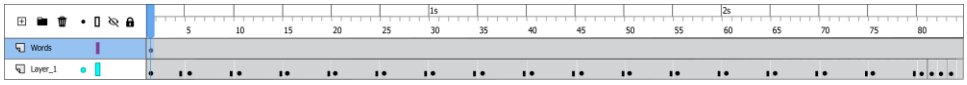
It is a good idea to name a layer to tell about what types of objects are on it. You are going to rename Layer 2 to *Words*.

- ▷ Double click on the text *Layer_2*.
- ▷ Type Words. Press the ENTER key.

Move the Text from Layer_1 onto the Words Layer

You now need to cut the words from Layer_1 and paste them onto the *Words* Layer.

- Click on *Layer_1*.
- Select Frame 1 in the Timeline.
- From the Tools Panel, click the *Selection Tool*.
- Select the text box in Frame 1. From the Edit menu, select *Cut*. Or right click and from the options, select *Cut*.
- Click on the *Words* Layer. From the Edit menu, select *Paste in Place*. Or right click on the stage and select *Paste in Place*.
- Study the Timeline to notice the change:



Make the Words Appear at the Same Time the Action Occurs

- Select Frame 1 in the Timeline.
- Press ENTER to play the scene.
  Notice the text is in view the entire time that the action occurs.

Complete the Scene

- Use your skills to view the animation. Make edits to the scene.

ANIMATION TIPS

Scene Is Too Short: If the scene is too short the words may be difficult to read. If this happens, draw another animated flower on the Layer_1 layer to extend the action.

There Is No Room for an Extra Animated Object: If the scene is too short, but there is no room on the stage to create another object, place another keyframe in the Layer_1 and the Words layers. It should be about 15 frames longer than the last keyframe. This will create a static image which will make the text easy to read.

Words Disappear: If the scene does not play the words for the entire time, add a keyframe to the Timeline in the Words layer that is the same frame number as the keyframe that contains the final action in Layer_1.

Test the Movie to Watch All the Scenes Play

- From the Control menu, select *Test Movie*.
- Select *In Animate*.
- Watch the story.
- When finished, close the Preview window.

Save the Animate Document

- From the File menu, select *Save*.

Close the Animate Program

Assignment 13 Create Scene 3 – The Hover Craft

In this assignment, you will create Scene 3 in your space adventure using frame by frame animation. Use your skills to draw a hover craft. Follow the instructions to animate it driving over bumpy terrain.

View a Sample Scene

- Access the *Animate* folder. Open the *Scenes* folder.
- Double click the *Scene 3* file to watch a sample from an animated story.

Please note, the sample includes sound, which is a feature that will be added to the Timeline in Session 6.

Open the Animate Document

- Open the document in Animate 2022. The document opens to show the last scene you were editing. In this case the scene in view should be Scene 2.

Insert a New Scene and Rename Layer 1

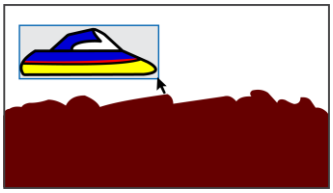
- From the Insert menu, select *Scene*.
- A new stage opens in the window. It has an empty Timeline. You will notice that the Scene Number reads Scene 3.
- Double click Layer_1 and name it Hover_Craft. Press ENTER.

Draw a Bumpy Planet Surface

- On the Hover Craft layer, draw a bumpy planet surface. Be creative! If you need help, follow these instructions:
  - From the Tools Panel, select the *Rectangle Tool*.
  - Turn Object Drawing Mode OFF.
  - Select the SAME stroke and fill color.
  - Draw a rectangle.
  - From the Tools Panel, select the *Pencil Tool*.
  - Turn Object Drawing Mode OFF.
    Change the stroke color to the SAME color as the rectangle.
  - Place the pencil on the edge of the rectangle and start to draw a bumpy line. End the line by touching the edge of the rectangle.
  - From the Tools Panel, select the *Paint Bucket Tool*. Select *Close Large Gaps* as the gap size in the Options Tray. Fill the area with color.

Draw a Hover Craft and Group All the Objects Together

- Use your skills to create a vehicle that drives across the planet surface.
- From the Tools Panel, click the *Selection Tool*.
- Click and drag around the hover craft.



The object must be grouped to move it across the stage.

- From the Modify menu, select *Group*.

Animate the Hover Craft Using Frame by Frame Animation

- Drag the hover craft to its starting point on Frame 1. Put it slightly off the stage.
- Right click on Frame 2 in the Timeline.
  Select *Insert Keyframe* or press F6 on the keyboard.
- Click on the stage to deselect all objects.
- Click on the hover craft to select it. Make sure the terrain is not selected.
- Use the arrow keys on the keyboard to move the hover craft a little up and towards the other edge of the stage.
- Add a keyframe to Frame 3. Click on the hover craft to select it. Move it slightly down and towards the other edge of the stage.
- Continue to add keyframes and move the hover craft slightly until it is off the other side of the stage. It should look as if it is driving over the bumpy terrain.
- Use your skills to view the animation.

Add Words on a New Layer to Describe the Action

- Click *New Layer* ⊞ at the bottom of the Layers area of the Timeline.
  Rename the new layer Words.
- On the Words layer, click on Frame 1.
- Use the *Text Tool* **T** to type the words:

  He got into his hover craft and drove to the launch pad.

Test the Scene

- From the Control menu select *Test Scene*.
  Watch the hover craft fly across the planet surface.
- Click the *Close* button on the Test windowpane to exit the preview.

Save the Animate Document and Close the Program

Assignment 14 Frame by Frame Animation Challenge

You have learned how to animate objects using frame by frame animation. In this assignment are two animation challenges. You can add a flashing sign or a waving rock creature to Scene 3. Pick a challenge to practice your new skills.

Animate a Flashing Sign

1. Access the *Animate* folder. Open the *Challenges* folder. View the *Sign* file to watch a sample video.

The animated sign has letters that change color one letter at a time.

2. Open the space adventure in Animate 2022. View Scene 3.

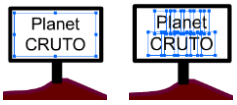
3. Click *New Layer* at the bottom of the Layers area. Rename the layer Sign.

4. Draw a sign using the drawing tools.

TIP: The landscape, hover craft, or words might be in your way. You may want to temporarily hide a layer, such as the Hover Craft or Words layer, while drawing.

5. Use the *Text Tool* to add the planet name to the sign.

6. Right click on the text box. Select *Break Apart* to ungroup the name into individual letters.



7. Place a keyframe in Frame 2 of the Sign layer. Select Frame 2. From the Insert menu, select *Timeline* and then *Keyframe*, or press F6 on the keyboard.

8. Change the first letter to another color:
   a. Click on the stage to deselect all objects.
   b. Select the first letter using the *Selection Tool*.
   c. Select a color from the *Fill Control*.

9. Place a keyframe in Frame 3 of the Sign layer.

10. Deselect all objects. Change the next letter to another color.

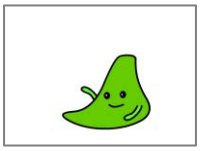
11. Continue to add keyframes and change the letter color until all letters have changed.

12. Copy the animation you have just created to have it repeat itself:
   a. Click on the last keyframe in the Sign layer. Hold the SHIFT key and click Frame 1.
   b. Right click on the selected frames and select *Copy Frames*.
   c. Right click inside the next blank frame in the Sign layer. Select *Paste Frames*. Click away from the frame or timeline to see the pasted frames.
   d. You can keep pasting the frames, by right clicking on the next blank frame and then selecting *Paste Frames*.

TIP: Does the sign display longer than the Hover Craft and Word layers? To solve this problem, select the frames in the Sign layer. Right click on the selection and select *Remove Frames*.

Animate a Waving Rock Creature

1. Access the *Animate* folder. Open the *Challenges* folder. View the *Wave* file to watch a sample video.



The waving rock creature has an arm that moves up and down to wave goodbye to the alien in the hover craft.

2. Open the space adventure in Animate 2022. View Scene 3.

3. Click *New Layer* at the bottom of the Layers area. Rename the layer Wave.

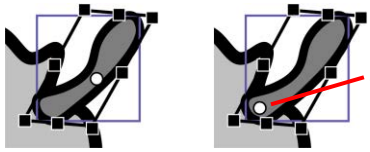
4. Draw a rock creature using the drawing tools. Draw the body and add a face. Draw the arm with Object Drawing Mode ON.

TIP: The landscape, hover craft, or words might be in your way. You may want to temporarily hide a layer, such as the Hover Craft or Words layer, while drawing.

5. If the arm and hand are not grouped together, group them.

6. Place a keyframe in Frame 2 of the Wave layer. Select Frame 2. From the Insert menu, select *Timeline* and then *Keyframe*, or press F6 on the keyboard.

7. Move the registration point to set how the arm pivots:
   a. Click the *Free Transform Tool*.
   b. If necessary, click on a blank area of the stage to deselect all objects.
   c. Click on the arm to select it. Click on the registration point - it is the round circle inside the bounding box.
   d. Drag it to the point where you want the arm to pivot (at the body).



Move the registration point to the body. This will create realistic movement.

8. Rotate the arm slightly (up or down).
9. Place a keyframe in Frame 3.
10. Deselect all objects. Rotate the arm (in the same direction as step 8).
11. Continue to add keyframes until the arm has moved all the way up or down.
12. Copy the animation you have just created to have it repeat itself:
    a. Click on the last keyframe in the Wave layer. Hold the SHIFT key and click Frame 1.
    b. Right click on the selected frames and select *Copy Frames*.
    c. Right click inside the next blank frame in the Wave layer. Select *Paste Frames*. Click away from the frame or timeline to see the pasted frames.
    d. You can keep pasting the frames, by right clicking on the next blank frame and then selecting *Paste Frames*.

TIP: Does the rock display longer than the Hover Craft and Word layers? To solve this problem, select the frames in the Wave layer. Right click on the selection and select *Remove Frames*.

Save the Animate Document and Close the Program

Session 2 Review: About Frame by Frame Animation

Match the tool to its function.

1.	D		A. Display objects on a layer as solid or an outline.
2.	A		B. Add a layer.
3.	E		C. Select a scene to edit.
4.	C		D. Show or hide a layer.
5.	B		E. Lock or unlock a layer.

/5

Match the term to its definition.

6.	B	frame by frame animation	A. A gallery of stored objects
7.	C	scene	B. Animation that has a keyframe in every frame
8.	E	Timeline	C. A part of an Animate document that contains its own stage, Timeline, and layers
9.	D	keyframe	D. A frame in an animated sequence that contains drawn objects
10.	A	Library	E. Made up of layers and frames, it organizes and controls a document's content over time
11.	F	frame	F. A single unit in a Timeline
12.	G	layer	G. A division of the Timeline into parts that allow objects to be stacked on top of each other

/7

Write a short answer for each question.

13. What is the difference between a keyframe and a blank keyframe?
A blank keyframe is empty, whereas a keyframe copies the content of the previous frames.

14. What keyboard key will add a keyframe to the Timeline? F6

15. What keyboard key will play the Timeline? ENTER

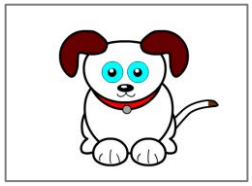
/3

TOTAL: /15

Session 2 Skill Review: Animate a Dog's Tail Wagging

Frame by frame animation can be used to animate objects one frame at a time using keyframes. In this assignment, you apply your knowledge to create a dog with a wagging tail.

1. View the *Tail* file to watch a sample video. *Ask your teacher for the file.*



The tail wags up and down using frame by frame animation.

2. Open Animate. From the File menu select *New*.
   a. Select *Education*. Pick *Standard Video*.
   b. Select *ActionScript 3.0* as the Platform Type.
3. Rename Layer_1 to Dog.
4. Draw a creature using the drawing tools. DO NOT INCLUDE A TAIL.

5. Group the creature:
   a. Select the *Selection Tool*. Click and drag to draw a box around the dog.
   b. From the Modify menu, click *Group*.
6. Position the dog on the stage.
7. Draw a tail. If the parts of the tail are not grouped, group them.
8. Position the tail so it looks like it is attached to the creature. If necessary, change the object order. Right click the tail. Select *Arrange*. Click *Send to Back*.
9. Place a keyframe in Frame 2 of the Dog layer.
10. Move the registration point to set how the tail pivots:
    a. Click the *Free Transform Tool*.
    b. If necessary, click on a blank area of the stage to deselect all objects.
    c. Click on the tail to select it. Click on the registration point - it is the round circle inside the bounding box.
    d. Drag it to the point where the tail should pivot. (at the body)
    e. Rotate the tail a small amount to look like it is wagging.

11. Animate the tail:
    a. Click the *Free Transform Tool*.
    b. If necessary, click on a blank area of the stage to deselect all objects.
    c. Place a keyframe in Frame 3.
    d. Deselect all objects. Rotate the tail a bit more.
    e. Continue to add keyframes until the tail has moved in one direction.
12. Copy the animation you have just created to have it repeat itself:
    a. Click on the last keyframe in the Dog layer. Hold the SHIFT key and click Frame 1.
    b. Right click on the selected frames and select *Copy Frames*.
    c. Right click inside the next blank frame in the Dog layer. Select *Paste Frames*.
    d. Keep pasting frames. Right click on the next blank frame and select *Paste Frames*.
13. View the animation. IF you find the tail moves too fast, adjust the frames per second. Click on the stage. In the Properties panel, on the Docs tab, edit FPS. Change to 12 FPS.
14. Save the file as tail. Close the Animate Program.

Session 2 Extension Activity: Using Layers

In this extension activity, you will explore the Layers area. Learn how to insert, rename, move, hide, lock, view, and delete layers.

What Is a Layer?

The Layers panel is part of the Timeline. A layer is a row in a Timeline. It is used to organize parts of a scene. By placing objects on different layers, it is possible to have several animations appear at the same time.

Layers are used to:

- organize a scene into manageable parts
- adjust the stacking order of objects on the stage
- display objects as outlines
- temporarily hide objects to declutter the stage
- structure animated sequences
- navigate to a keyframe quickly
- add a camera view
- create depth on the stage

About the Layers Panel

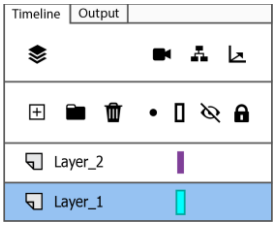
The layer area of the Timeline has tools for managing layers. Read to learn about each part:

View Only Active Layer: Temporarily hide inactive layers.

Add Camera: Add a camera layer to pan and zoom the stage.

Show Parenting View: Connect layers or objects to control movement.

Invoke Layer Depth Panel: Create depth on the stage.



New Layer: Insert a new layer on the Timeline.

New Folder: Create a folder to group layers.

Delete: Remove a layer from the Timeline.

Highlight Layers: Color code layers to easily identify each row.

Show Layer as Outline: Display objects as solid or black and white line drawings.

Show or Hide Layers: Display or temporarily remove a layer from view.

Lock or Unlock Layers: Permit or prevent edits to a layer.

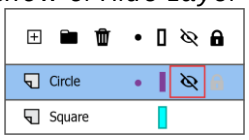
1. Create a new file in Animate.
2. Rename a layer:
   a. Double click on Layer _1.
   b. Type Circle. Press the ENTER key.

3. Add an object to a layer:
   a. From the Tools Panel, select the *Oval Tool*.
   b. From the Properties panel, set the color and style.
   c. Draw a circle.

4. Insert a new layer to organize objects:
   a. Add a layer by clicking *New Layer*.
   b. Double click on Layer _2.
   c. Type Square. Press the ENTER key.
   d. From the Tools Panel, select the *Rectangle Tool*.
   e. Use your skills to place the rectangle directly over top of the circle.

5. Adjust the stacking order of objects:
   a. Click on the *Square* layer to select it. It turns blue to show it is active.
   b. Drag it down below the *Circle* layer.

6. Hide or show a layer:
   a. Click on the *Circle* layer.
   b. Hide it from view by clicking on *Show or Hide Layer*.

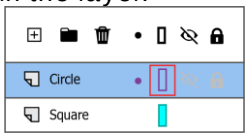


   c. Click to show the layer again.

7. Lock and unlock a layer:
   a. Click on the *Circle* layer.
   b. Lock it so that no changes can be made, by clicking on the *Lock or Unlock Layer* dot. Now try to draw something on the layer – you cannot!

   c. Click the lock symbol to unlock the layer.

8. Change the view of a layer from an outline to solid:
   a. Click on the *Circle* layer.
   b. Change the objects on each layer to an outline of the shape by clicking on the *Show Layer as Outlines* square in the layer.



   c. Click it again to return it to a solid.

9. Delete a layer:
   a. Click on the *Square* layer.
   b. Click *Delete* to remove it.

This is a preview of the teacher guide.
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Name:

TechnoAnimate Checklist

	✓
Content	
The events in the movie are logically sequenced.	
The action is told using well drawn characters or objects.	
The words explain the action in the story and are easy to read.	
The words are spelled correctly.	
Animation	
The animation clearly illustrates the action in the story.	
The animation is well-selected for the purpose.	
There is a variety of animation to add interest to the story.	
There is enough time to read the words.	
There is enough time to view the action.	
Sound	
The sound enhances the story.	
The sound is synchronized with the action.	
Originality and Creativity	
The movie holds viewer interest.	
The content of the movie is unique.	

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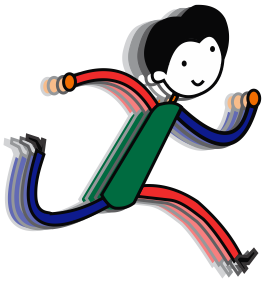

Session 8

Review

Review the learning objectives addressed in the TechnoAnimate project.

- Reflection
- Skill Summary
- Animate Marking Sheet
- Animate Rubric

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Name:

Animate Marking Sheet

Content	
The events in the movie are logically sequenced. The action is told using well drawn characters or objects. The words explain the action in the story and are easy to read. The words are spelled correctly.	/10
Animation	
The animation clearly illustrates the action in the story. The animation is well-selected for the purpose. There is a variety of animation to add interest to the story. There is enough time to read the words. There is enough time to view the action.	/10
Sound	
The sound enhances the story. The sound is synchronized with the action.	/5
Originality and Creativity	
The movie holds viewer interest. The content of the movie is unique.	/5
TOTAL:	**/30**

Name:

	Excellent - Wow!	Competent - Great Work!	Emerging - Getting There!	Incomplete - Keep Trying!
Story Content	• tells a story convincingly with all elements: characters, objects, text, and background	• tells a story accurately with most elements: characters, objects, text, and background	• tells a story with some elements: characters, objects, text, and background	• tells a story with few elements: characters, objects, text, and background but plot is missing key parts
Drawing Skills	• demonstrates an exceptional understanding of drawing tools	• demonstrates a strong understanding of drawing tools	• demonstrates a basic understanding of drawing tools	• demonstrates an incomplete understanding of drawing tools
Animation	• illustrates the story action highly effectively using a variety of animation types (frame by frame, motion tween, shape tween, and/or motion path) • flows smoothly and action is well-paced • uses calculated and accurate timing to read words and view the action	• illustrates the story action accurately using a variety of animation types (frame by frame, motion tween, shape tween, and/or motion path) • flows smoothly • uses appropriate timing to read words and view the action	• illustrates the story action using limited animation types (frame by frame, motion tween, shape tween, and/or motion path) • plays with some pauses or breaks • uses some suitable timing to read words and view the action	• illustrates the story action using minimal animation types (frame by frame, motion tween, shape tween, and/or motion path) • plays in a disjointed way • uses inadequate or prolonged timing to read words and view the action
Organization	• sequences all events logically • labels all scenes and layers clearly • stores all graphic elements in a Library	• sequences most events logically • labels most scenes and layers • stores most graphic elements in a Library	• sequences some events logically • labels some scenes and layers • stores some graphic elements in a Library	• sequences events in a confusing order • labels few or no scenes and layers • stores few or no graphic elements in a Library
Sound	• fits the story line and mood very effectively • synchronizes precisely with the action	• fits the story line and mood • synchronizes with the action	• fits the story line somewhat • matches the action moderately	• does not fit the story line • does not match the action
Originality and Creativity	• applies a very unique approach that enhances the project and thoroughly engages the viewer	• applies a thoughtful approach to engage the viewer	• applies some original touches	• applies few or no unique ideas