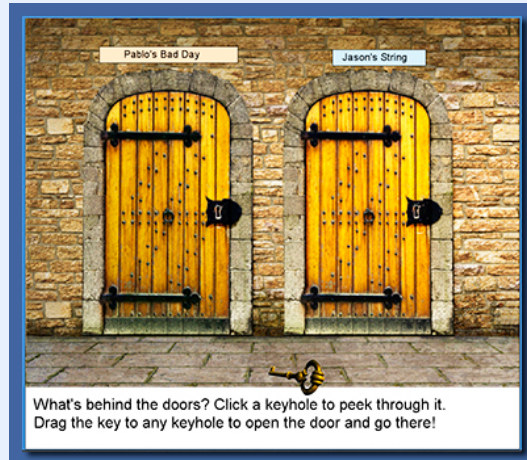


The Magic Doors Launcher Template

Have you ever watched a movie trailer to decide if you want to watch a movie? How about flipping through two books to decide which one to buy? Everyone likes to have a sneak peek before making a choice. This template does just that, letting students see a preview image and hear a related sound before deciding which activity to do next.



The three versions of this template create an animated launcher for two, three, or four activities. Depending on which version is in use, a student is presented with a scene of two, three, or four closed and locked doors in a wall. Clicking on a keyhole gives the user a preview of the activity, as if they had peeked through the keyhole to see what is inside. Dragging the key to a keyhole opens the door and launches the activity.

It isn't really magic! There is both a transparent button and a region on each keyhole, one atop the other. Clicking the button presents a preview by running a short animation of the keyhole getting closer, then showing a picture from the activity and playing a sound from it. Moving the key to the keyhole activates the region, which in turn activates a hidden button to open an activity or other file.

[Finished Sample](#)[Step By Step Instructions](#)[Possibilities](#)[Backstage Tour](#)[Tips And Tricks](#)[Troubleshooting](#)

Want more free activities, tips, and graphics? Look in the Attic!

Explore The Finished Sample

If you haven't already, get IntelliTools Classroom Suite® running, and **install the Magic Doors zip file**. Then open **MagicDoorsSample** to try out a finished version of the template. I have set up the sample with two typical activities linked to the doors. Click the two keyholes to look at the previews. Drag the key to either door's keyhole, and one of the activities will open. Close the activity, and drag to key to the other door to open the second activity. Then follow the instructions to learn to set up the **Magic Doors Launcher Template**.

Overview Of Using The Template

Here's all you have to do to set up the **Magic Doors Launcher** for your students: Choose a background image from a toolbar, insert a picture for each preview that relates to the file that will open, import or record a sound to go with the preview image, and designate the target file for each door. So what you need to provide are:

- ✿ A preview image for each activity you plan to link to this launcher, probably screenshots.
- ✿ A sound for each linked activity, either from the Media Library, recorded, or from a source such as freesound.org
- ✿ Most important, get together the activity choices you want to offer to your students.

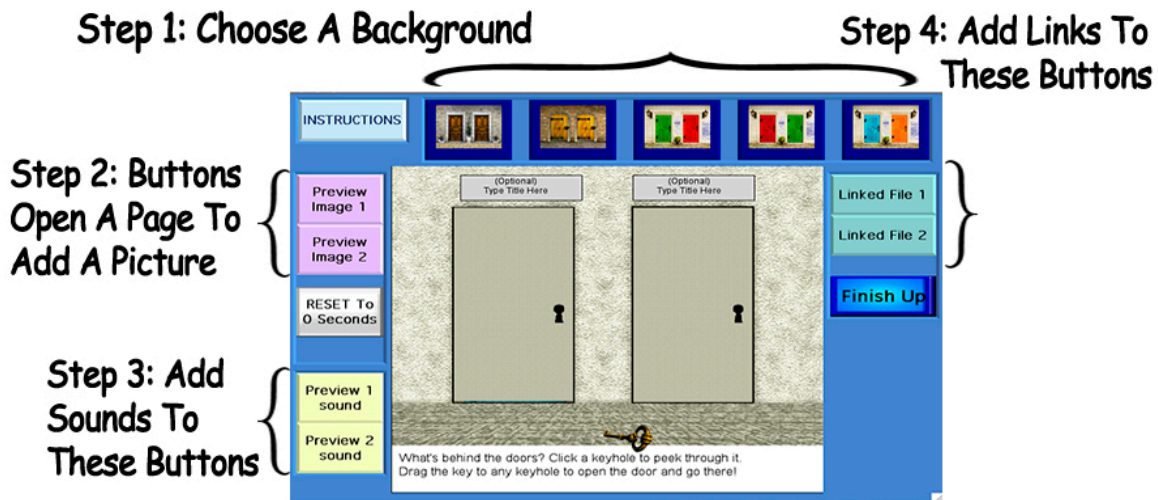
Quick Trick: Open both the launcher template and the files you intend to link to the launcher. You can find and copy preview images and sounds from your files and, via the **Window** menu, move them into the launcher.

Another Tip: It's best to move the activities you intend to link all to one folder before linking them to the launcher. Not only does this help keep everything together, but that way a student sees the launcher right away and does not have to guess which is the starting file.

Magic Doors Launcher Step By Step

1. Pick a style for the doors by **inserting one of the backgrounds** from the toolbar at the top of the screen. In each version of the template I have included a door style that looks like it might be in a creepy dungeon, a fancy one, and one with primary colors.

For the two door template there are two extra styles, red and green doors to match the typical switches. Because some users may be in the habit of one or the other always being "Yes", I decided to have the red and green doors both on the left and right. There also is a two door background using neither red nor green.

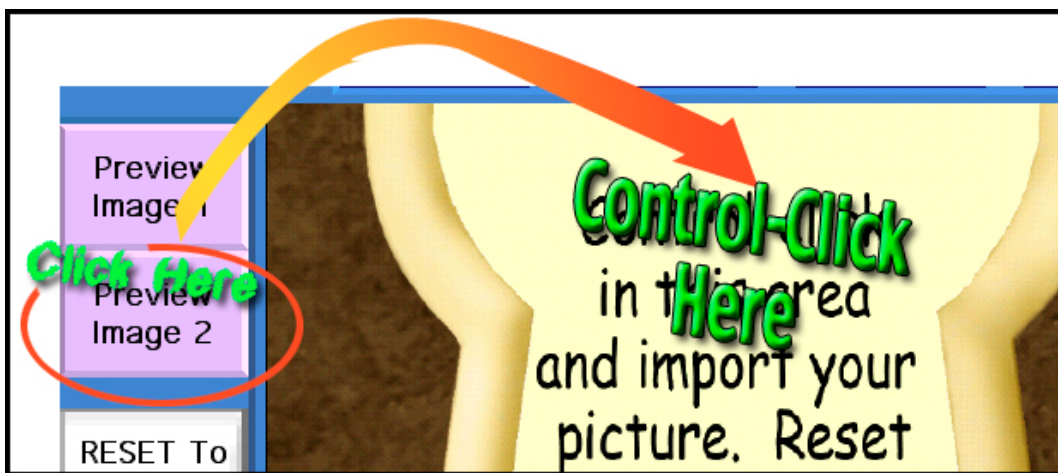


Type the title of the linked activities into the text boxes above the doors. You may want to adjust the positions of the title text boxes or change the background or text color. Be sure to make them **Read Only**!

If you prefer not to have text titles above the doors, perhaps to encourage students to guess what the story might be with the one image and sound for clues, delete those text boxes from the launcher template. In that case, you'll need to also delete the same text boxes and their read out buttons from the overlay.

2. **Preview Images:** Click the purple buttons to jump into the animation at the correct timepoints and insert preview pictures for each door. The instructions you see are part of a floating picture, not in the background. **Control-click** on those instructions to open **Picture Properties**. Substitute your picture for the instructions you see in the keyhole frame by using the **load picture icon** under the **Picture** tab. You may need to adjust the size using the **Vertical** and **Horizontal** settings, and/or move the image a bit so it is centered through the close-up keyhole. Once you are satisfied with the image, **Lock** the picture and set it **not to respond to mouse**, then click **OK**, and go on to the next purple button.

CAUTION: Be sure you bring in the picture by a **Control-click** to open **Picture Properties**! If you used Insert Picture from the menu, it **WOULD MESS UP THE ANIMATION**. Copies of the picture would be inserted at all later timepoints. It's about the only way this template can go wrong.



Quick Trick: Go to your open activity file via the **Window** menu, pick a page with a background you like, copy it in **Page Properties**, then go back to the template. **Click** a purple button to jump into the animation, **control-click** inside the keyhole frame to open **Picture Properties**, and **paste** your background from the clipboard.



Take A Break and Save Your Work So Far!

3. **Preview Sounds:** **Control-click** each yellow button to open its **Properties** and import or record a sound under the **Sound** tab. Don't change the names of these buttons! The invisible buttons that run the preview animations refer to these button names.

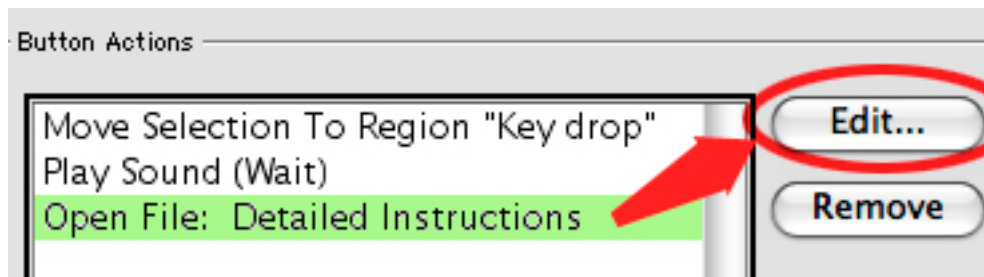


Quick Trick: You can export a sound used in your open activities, and import it as a preview sound. Go to your activity via the **Window** menu, and open **Page Properties**. Under the **Sound** tab you will see all the sounds used in that activity listed. Highlight the one you want, and **Export** it to the **Desktop**. Go back to the **Magic Doors Template** via **Window**, **control-click** a yellow button to open its **Properties**, and click the **Sound** tab. **Import** your exported sound and it will play during the preview for the door that connects to that activity.



Save Again Here. It's More Fun Doing Everything Just Once!

4. **Linked Files:** **Control-click** each blue button to add the links to activities. Under **Actions**, click **Edit** beside the **Open File** action. Navigate to and select the file you want to open to set the link, then click **OK** to close **Properties**. Don't change the names of these buttons! The buttons activated by putting the key into a region refer to these button names.



5. Test out the launcher clicking the invisible keyhole buttons to see the previews, and dragging the key to each keyhole to open the files. During the previews you should see the keyhole expand as it gets closer and hear a sound effects as it does, then you should see your preview picture through the keyhole and hear the preview sound you chose. When you drag the key to a keyhole, you will hear a door-open sound and then the file you linked to that door will open.

Quick Trick: You can add a button to a linked file to close it, or you could close it manually, and you will again see the Magic Doors Launcher with the key back in its place, ready for a student to choose again. I've purposely NOT had the launcher close itself when it opens a linked activity.

6. **Click** the lighted **Finish Up** button to hide toolbars and save as activity. The **Finish** button hides all the construction toolbars so that students only interact with the text boxes, buttons on the keyholes, and the key.

Quick Trick: You can link to files other than ICS activities using this launcher. If the file will open by clicking on it, it should work! Of course, you must make certain the application that runs the file is there. Try linking a PDF file. If you change the action from **Open File** to **Open URL**, you can open a web page...assuming you have an active web connection. How about linking to several YouTube movies?

Special Access

Each version of this template has a custom IntelliKeys® overlay attached. The buttons on the keyholes in the template are invisible because they are set for **Transparent**, but I made visible versions for the overlays, marked to **Take A Peek** through the keyholes. The overlays also include buttons with the content of a set of buttons on a hidden toolbar (Hidden Stuff). Therefore you will see buttons on the overlays that read the main caption, read the signs above the doors, and move the key to each of the keyholes. Dynavox® versions of these three overlays are included with the materials you downloaded.

For switch access, the signs above the doors, the main caption, the two invisible buttons on the keyholes, and the key are set to be part of a scan. Scanners can use directional arrows to move the key to a keyhole.

The toolbars you used in customizing the template are not needed by students using the finished launcher, so those toolbars are hidden and removed from the scan list, and none of those buttons appear on the overlays.

Sharing The Launcher And Linked Sets Of Activities

If you intend to share the launcher, it's best to move the finished launcher and its folder of linked files into an enclosing folder. Then export that outer folder. ICS will export the launcher and all connected files, including movies, overlays, and linked files, to a single zip file. When someone imports that zip file, the enclosing folder will disappear, and both the launcher and its folder of linked activities will be together wherever they were imported.

Not So Quick Trick: More Possibilities

You could also use this launcher as part of an adventure story. Start by deleting the instruction page, since you won't need that. Add pages before the doors page that carry the story up to a branch point, then set up the **Linked Files** buttons to go to other pages instead of opening other files. To do that, edit the actions in the **Linked Files** buttons. Remove **Open File**, and substitute **Go to page (x)**. You also could use a copy of the background of page (x) as the preview image, pasting it in behind the keyhole frame in the animation.

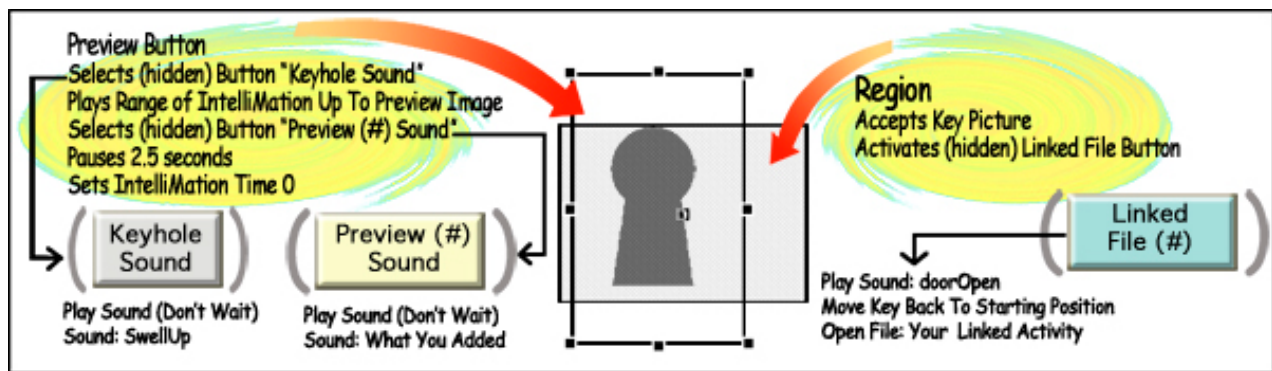
Because the entire set of previews are in an IntelliMation® and a part of the page with the doors, you can add more pages without messing up any actions. You also can add buttons to start the story over from your added pages, or to jump back to the decision point, without causing problems with the previews.

Or, go ahead and link to separate ICS files, if you are building a long story with lots of multimedia. That may be the best solution, especially if you are working from a network. Just keep all the files in one folder, so that it won't

matter where the entire set is moved. This strategy means that you can't get back to the branch point without starting the story over again. It's especially good for leading to different outcomes, from which a student might want to repeat reading the story and trying out the other choice(s).

What if you did a story or exercise that needed more than one branch point? You can't transfer the preview animations to a new page but you **CAN** have one of your linked destinations be a copy of one of the three **Magic Doors Launcher** templates. Just don't let your enthusiasm run away with you. The number of pages increases rapidly with branching stories!

Backstage Tour



This template makes use of several advanced techniques that not everyone knows exist in ICS. Probably it's the only project you'll ever encounter that uses them all at once! But even one at a time, these techniques give you lots of extra options. First, let's look at a diagram of the mostly hidden machinery behind one of the keyholes to understand how all these tricks work together.

The only parts that students interact with are located around the keyholes: the transparent **Preview** button, and a region on which to drop the key. As you can see from the diagram, the **Preview** button has several actions, two of them selecting hidden buttons to play sounds.

One of the hidden buttons, **Keyhole Sound**, has the action **Play Sound (Do Not Wait)** and is located on a toolbar you never see unless you look for it called **Hidden Stuff**. The other hidden button called from the transparent

Preview button is one of the yellow buttons into which you added sounds while setting up the launcher template, but it was hidden once you click **Finish**. The remaining actions of each of the invisible **Preview** buttons are to play a **range of IntelliMation**, **pause** to give the user time to look at the image you added and listen as your sound plays, and finally reset **IntelliMation time back to 0**, returning the user to the doors scene.

The other half of the hidden machinery around the keyhole is a **region**. It accepts the key as if it were a correct answer and activates another hidden button, one of the blue-green **Linked File** buttons you edited. These also became hidden when you clicked **Finish**. The **Linked File** buttons play the sound of the door unlocking, move the key clip art back to its starting point (another region, **Keydrop**), and open whatever file you designated.

Being able to call extra sets of actions stored in hidden toolbar buttons is a very powerful tool in ICS, one that not everyone knows about. Two actions make it work: **Select Button**, and the option to **have a region activate a button**, either hidden or visible. Now that you are aware of this option, you're all ready to use it, because the actions in these hidden buttons are the same ones you've always used.

Quick Tip: Remember that the **Select Button** action only can select toolbar, not Page buttons, but it *CAN* select buttons in **hidden toolbars**. Also, the **Select Button** action is identical to clicking the button, choosing it with a switch, or touching it on **IntelliKeys**: whatever actions are listed in the selected button will activate when it's selected.

Take The Next Step

Now that you see how these advanced techniques work together in this particular template, let's look at them individually to see how you might use them to build new activities. Maybe "advanced" is the wrong word to use for these, as most of them are easy, just things you hadn't tried before.

1. Toolbar full of background choices for IntelliMation —This works by default, but be certain **NOT** to check **Allow Multiple Backgrounds** in the **Document** settings, if you want the same background throughout an animation. Of course, you still can use a different background on different pages. In the **Magic Doors Launcher**, the choice of backgrounds lets you change the entire look of the activity without affecting any of the animations. There are no right or wrong choices in the Magic Doors, but you could use similar machinery to ask a question and let one of the doors lead to positive feedback, while the incorrect choices might add a clue and then, by returning to 0 seconds, let a student have another try.

Here is another idea for using choices for backgrounds, in which the student does the choosing. Set up a writing activity for students, with an empty text box and a character moving across the page. You could use one of the frame animations—the eagle flying, a baby crawling, the boy or girl walking or in a wheelchair wheeling across. The animations can be just two points, the first point at 0 seconds with the actor on one side of the page and the second, probably at 5 seconds, all the way across.

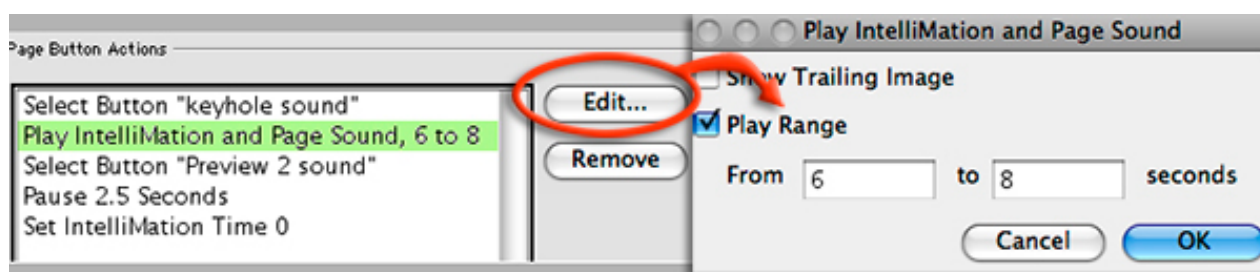
Duplicate that page however many times you want, and add a **Backgrounds** toolbar, or maybe several, with a variety of backgrounds. With the **Page Action Hide All Custom Toolbars**, followed by **Show (toolbar for this page)**, it's easy to have the appropriate Backgrounds toolbar display on each page. Each button in those toolbars should have the action **Insert As Background**.

Students can make up a story and write on each page about what the actor experiences. It's easiest to let the animation run, then write at the end of the animation on each page. This could be a wildly creative exercise, depending on what background choices you supply. Or, with a more focused set of background choices, the activity could be a review of a history or science lesson.

2. Play Range Allows Multiple Animations on the same page. First thing to remember: **REMOVE** default page action, **Play Animation And Page Sound**, if you intend to use **Play Range**. Instead of using a page action that plays

automatically, you activate each animation segment from a button, either toolbar or **Page Buttons**.

If you've never used **Play Range**, take a moment to see how it works. The illustration shows the actions in one of the invisible **Preview** buttons that sits over one of the keyholes. Instead of the default, the IntelliMation action designates a range, **Play IntelliMation And Page Sound, 6 to 8**.



Notice there is an active **Edit** button with this action. That's a clue that you have some advanced options available. If the action you highlighted had no extra options, that **Edit** button would be grayed. Click the **Edit** button, and look at the advanced options for IntelliMation. The one we are using is **Play Range**, so there is a check in the box beside it. Below that there are spaces to type in the beginning and ending points you want to play for this range.

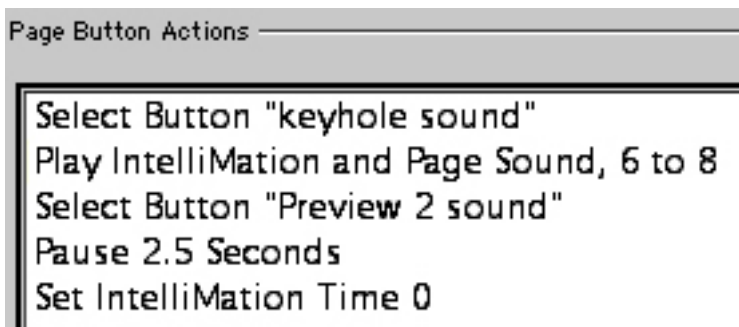
For the **Magic Doors Launcher**, I made a short animation that finished with the big keyhole view for each door. That means on the 4 doors versions, there are four separate ranges to play, not counting the opening scene at 0 seconds. There is no set limit to the number of sub-animations you can set up using **Play Range**. You simply set up a separate button to activate each one individually, preferably in the context of the story or lesson so that the action happens naturally as the result of a student's choice or action.

The only disadvantage to using **Play Range** is that you need to do more planning ahead. I usually make notes as to what the beginning and end points of each range will be, and also think about what needs to be added to the page within each one. If you later realize you forgot to add something in the first range, it's a bit of trouble going in and deleting that item from all the later timepoints where you don't want it.

There is one more quirk: If you use the triangle on the IntelliMation timeline to check out your animation, it will pay no attention to any of the **Play Range** instructions, and you see a really crazy story as the entire thing plays.

3. Apparently 2 Or More Sounds In 1 Animation. Did you notice that for each door, you hear a sound effect as the keyhole expands or gets closer, followed by whatever preview sound you set up? The magic trick there is, button control rather than relying on automatic **Page Actions**. Like the previous tip on using Play Range, you must first REMOVE default page action, **Play Animation And Page Sound**. In fact, you don't choose a **Page Sound**.

Instead, you set up a way for the user to start the action, typically by clicking a button, perhaps as an answer response. The button can have a list of actions, including playing one or more ranges of IntelliMation and activating one or more hidden buttons that play sounds. For example, clicking the invisible buttons on the doors sets off the following set of actions:



As you can see, a single button activates another (hidden) button that plays a sound, next plays animation, at the end of the animation activates a second (hidden) sound button, pauses, and finally resets to 0 seconds.

Notice that it doesn't matter where the hidden buttons are located, just so they are toolbar, not page, buttons. In this list, "**keyhole sound**" is on one toolbar, **Hidden Stuff**, while "**Preview Sound 2**" is on another, the one with the yellow buttons you used while setting up the launcher.

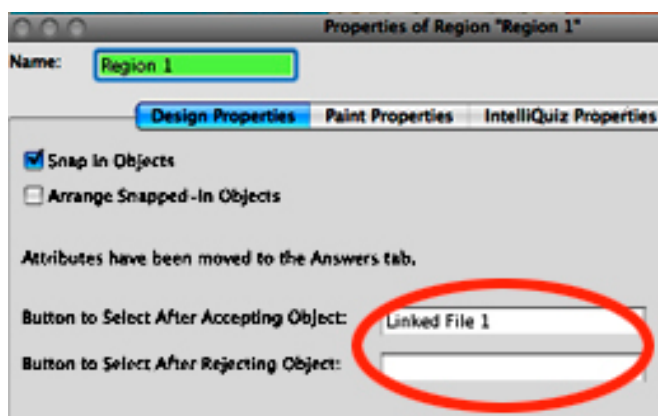
Of course you can use this trick any time you need several sounds on a page, even if you are not using any animation. Here's a twist: You could have a button pick randomly from a hidden toolbar of buttons, each of which plays a different sound.

4. Stacking Regions And Buttons It's not obvious, but it's possible to have more than one thing happen when interacting with the same location on the page, by stacking a region and a button. It works because a user activates a button by clicking it or scanning to and selecting it, while a region is activated by having something moved or dropped into it.

Of course this is most convincing if you set the button's appearance to **Transparent**, so that it will be as invisible as the region. The experience of a student working an exercise using this trick is of interacting with real objects, in this case keyholes and a key.

You also can stack regions, and have each one accept a different item, so that different items placed in the area of the regions cause different things to happen. Each region should be set up to accept one of the possible items, and to bounce things out immediately. To explore that possibility in detail, download the tip **Vending Machine** from Annie's Resource Attic. In this example three stacked regions are used to detect and identify three different coins, and dispense the proper snack food depending on which coin is placed in the slot.

5. Activate Buttons From A Region When the key is placed in the region surrounding one of the keyholes in the **Magic Doors Launcher**, a whole string of actions begin to happen. Yet a region can't have actions, so how is this possible?



There is a very powerful option in regions that many people overlook: the ability to activate a button when the region accepts a correct item, and to activate another button if it rejects an incorrect item. Of course you can choose actions for those buttons from the usual button actions list, and the buttons can be on a hidden

toolbar. That opens up a whole new world of ways to use regions!

To set up this option in a region, open its **Properties** and under the **Design Properties** tab, fill in the name(s) of one or both buttons to activate. You don't have to use both slots. For example, in **Magic Doors** there was no incorrect answer, so I simply filled in the name of the button to activate after accepting an item. Then when the key is placed in one of the keyhole regions, a button is activated with the actions to play the door opening sound and to open the linked activity or other file.

Caution: Fill in the names carefully! The names have to match exactly, and they are case-sensitive.

How can you use this option in activities? The simplest way is to activate a hidden button to give positive feedback for a correct answer when the region accepts an item, and to go to the next page. Next, you could have a second hidden button activated when an item is rejected that says, "Try again!" You could go one step further by having the second button give a clue. Alternately, the second button might tell the student to read part of the activity again before having another try, and would then go to a previous page to let the student review. Those are just right-wrong type ways to use this handy option.

As you see from **Magic Doors**, the region could activate a button to go somewhere, to another page or to another activity. Since the student has to put something into the region, this can be part of a story and require some kind of matching. The reward is for something to open up--a door, a drawer, a treasure chest--which you can depict in going to another page or activity. The possibilities are endless, and I really like the way you can simulate real world experience here.

6. **Open File** attempts to open any kind of file. Make sure the application is available, or this fails. You could even have two Open File actions in the same button, and maybe open an exercise and an instructions PDF.

Open URL attempts to open a web page. You might use this action to set up a quick browser for students using switches. Clicking a button with that action will attempt to launch the default browser, and go directly to the URL page.

Troubleshooting

I hope I have caught all the potential problems you might have with this template, and that you will enjoy using it to create a very special menu for your projects. But just in case, here are solutions to all the difficulties I can imagine you might encounter. If you have a problem not covered here, contact me (abrundige@annbrundigestudio.com) and I'll be glad to help you!

1. **Mea culpa. I forgot and used Insert Picture From File. My animation is a mess now! What do I do?**

Answer: I feel your pain! The easiest, least-time-lost fix is to trash the messed up template and start anew. Be sure you have easy-to-access copies of any preview pictures and sounds before you ditch the messed up template.

If you recorded a preview sound, export it, then trash the mess. You even can copy one preview picture onto the clipboard, ready to paste in when you have **control-clicked** the instructions inside the giant keyhole in the new copy of the template. If you don't have to spend time re-making either preview pictures or sounds, it won't take long to fill in a fresh template.

2. **The preview image displays too long, and kids start clicking randomly. Can I adjust the pause there?**

Answer: Yes! The **Pause** action is in an invisible, transparent button around the keyhole. There's also a region there, so it is tricky to select with the cursor. Instead, select the button using the **Edit** menu.

First, make sure you are at **0 seconds**. If you just opened your finished launcher, or you just saw a preview finish, pause (too long) and return to the doors, you are at 0.

Under **Edit**, notice the words **Properties...** and **Lock Position** which are grayed, and under that hold down **Select Object>** to open the drop-down

menu to its right. All the items on the page, many of them hidden, are listed in that drop-down.

The button you want is labeled to correspond to its door: **Preview 1 Button**, **Preview 2 Button**, etc. where **Preview 1 Button** is the one on the keyhole of the first, leftmost door. When you select the button you want to change, the **Edit** menu closes, and you won't see anything different. Immediately, without clicking anything else, open the **Edit** menu again, and choose **Properties**, which is no longer grayed out. The **Properties** of your selected button will open.

In **Properties**, under **Actions**, click the **Edit** button beside the **Pause** action, which initially I set to 2.5 seconds. Change that to fewer seconds, click **OK** to close **Properties**, and save your template with the change.

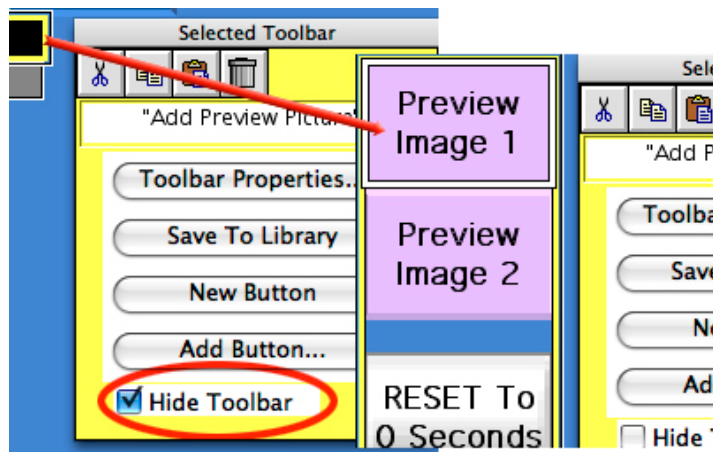
3. Can I change the words in the main caption without affecting the animation?

Answer: Yes! That text box, the ones above the doors, and the invisible buttons and regions were deleted at .5 seconds on the timeline, before making the remainder of the animation. Therefore, they are non-existent anywhere in the animation, and you can move them, change the text, change the backgrounds and text colors in the text boxes. Just don't cut and paste anything! That would echo all through the animation.

4. I have used a finished template for awhile, and it seems like the big keyhole opening is shifting. I now can see the edge of my preview picture on the bottom and right. Can I fix that?

Answer: Yes! But not easily. There is something in Classroom Suite that causes text boxes and pictures to shift a little, even if locked, when an activity is saved repeatedly. The complication here is that the screen you need to work on is inside the animation, and the toolbars you used to create that preview screen are now hidden. Also, the giant keyhole picture is locked and not responding to the mouse. But here goes!

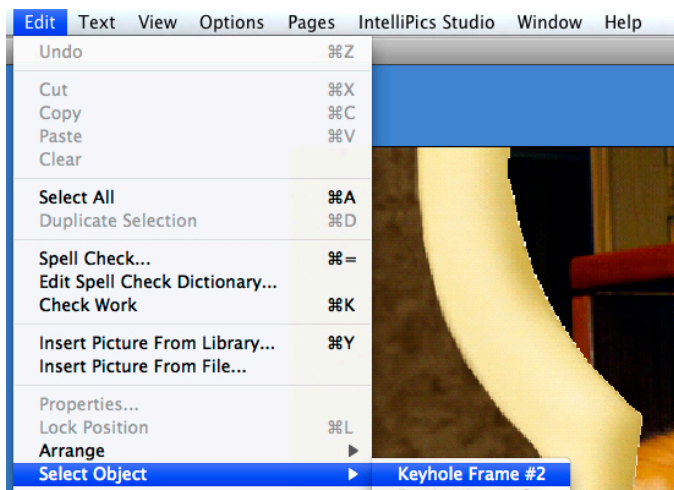
Under the **Edit** menu, choose **Custom Toolbars And Buttons...** You will see



a green bar across the top of the screen, all the hidden toolbars probably appear as little gray squares, and a yellow **Toolbar** palette and a blue **Button** palette appear. Also, notice that the menus across the top of the page change. Now there is one called **Toolbar**.

Pull down **Toolbar**, and at the bottom of it there is a list of the custom toolbars in this template. Choose the first one, **Add Preview Picture**.

Since this toolbar is hidden in the finished template, you see it as a small black square with a yellow outline to indicate that it is selected. On the yellow floating palette (**Selected Toolbar** palette) uncheck the box beside **Hide Toolbar**, and the small square will expand so that you can see the purple buttons on the **Add Preview Picture** toolbar. Click **Done** in the upper right to close toolbar editing mode.



Click the purple button that leads to the big keyhole image you have noticed shifting. The button names correspond to the doors, with **Preview Image 1** leading to the preview animation and picture attached to the leftmost door. Clicking the button will take you into the preview animation, to the timepoint where the keyhole

image you need to move is located.

While you are looking at the screen with the large keyhole, go to the top menu bar and pull down **Edit->Select Object**. To the right you see a list of all objects on the page. Choose **Keyhole Frame**. The name you see may have a number suffix, such as **Keyhole Frame #2**, depending on which door's animation you are editing. Let the **Edit** menu close, and immediately open it again and choose **Properties...**

The **Properties** dialog of the **Keyhole Frame** will open. This image is locked in place, and set to ignore the mouse. You'll need to reverse those settings to move it, so uncheck **Locked** and check **Respond To Mouse Clicks**. Close **Properties**, and with the **Keyhole Frame** selected, use the keypad arrows to nudge the keyhole frame into its correct position, hiding your preview image.

Control-click the Keyhole Frame to open its **Properties** again. This time uncheck **Respond To Mouse Clicks** and put a check beside **Locked**. Save your launcher again. Hopefully, the changes will last a long time! Unfortunately, I don't know any way to prevent objects from shifting over time.

Credits

Artwork in the Magic Doors Launcher is original by Ann Brundige and was created in the 3D CAD application Vue using photo textures downloaded from textures.com. The doors you see in the backgrounds are from all over the world, and none of them were originally in the walls in the finished backgrounds. Blank stage sets with two, three, and four doors were created in Vue and textured with portions of the photos, then extensively edited in PhotoShop® to make several background choices for each template that can be used interchangeably.

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